

## TECH.SIGHT

### Yellow Fluorescent Protein

Enhanced Yellow Fluorescent Protein (EYFP) is a yellow-green variant of the *Aequorea victoria* green fluorescent protein. EYFP contains four amino acid substitutions that shift emission from green (~509 nm) toward yellow (527 nm). Yellow- and green-expressing cells can be separated easily by flow cytometry using standard argon laser excitation at 488 nm. The brightness of the yellow protein is roughly equivalent to the green protein. **Clontech Laboratories.** For information call 800-662-2566 or circle 143 on the Reader Service Card.

### PRODUCTS

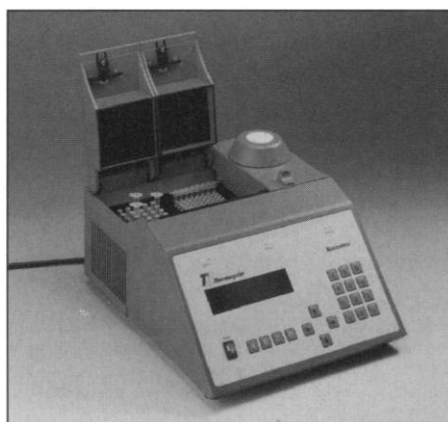
### Nucleic Acid Decontamination

DNAZap consists of two solutions that are innocuous when separate but that become a potent degrader of nucleic acids when mixed. Unlike other solutions that act as detergents to wash equipment, DNAZap actually degrades high levels of contaminating DNA and RNA to free nucleotides, thus assuring no background contamination, even at the level of detection based on polymerase

chain reaction. It provides a convenient method to decontaminate a variety of surfaces, including pipettors, lab benches, and lab equipment. **Ambion.** For information call 512-445-6979 or circle 144 on the Reader Service Card.

### Thermocycler

The T3 Thermocycler can be used simultaneously by up to three users. Three sample blocks for different tube formats (0.5-ml or 0.2-ml tubes and 48-well microtiter plates) can be



freely combined to run samples with different reaction volumes side by side under identical conditions. The unit can also cut working time by replacing sequential runs with the processing of multiple samples in parallel under reproducible conditions. **Biometra.** For information call 0551/50 68 6-0 or circle 145 on the Reader Service Card.

### Protein Expression Vector

The pDual expression vector is for high-level expression of heterologous genes in both eukaryotic and prokaryotic systems. The vector contains the promoter and enhancer region of the human cytomegalovirus immediate early gene for constitutive expression in mammalian cells. **Stratagene.** For information call 800-424-5444 or circle 146 on the Reader Service Card.

### Disposable Filtration Capsules

Polycap TC (tissue culture) disposable filter capsules with polyethersulfone (PES) membranes are a series of different-sized

(continued on page 587)

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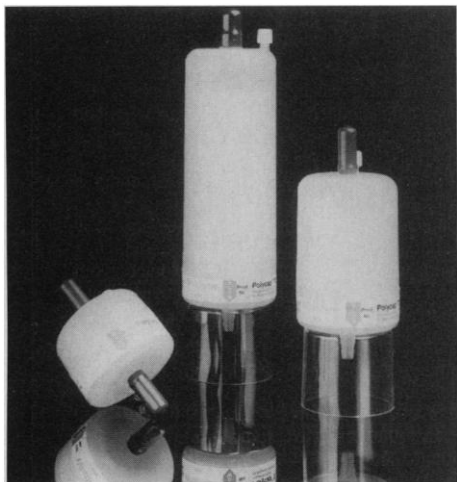
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(continued from page 586)

disposable filter capsules that can be directly scaled up without revalidation. The capsules are designed for the sterile filtration of critical cell and tissue cultures, fer-



mentation broths, and other solutions and fluids. They make use of two layers of microporous, hydrophilic PES membranes heat-sealed inside a polypropylene housing. This gives researchers a high flow-rate

filter capsule with inherently low protein-binding membranes and low levels of extractables. The filter capsules can be used with a vacuum filtration apparatus, peristaltic pump, or pressurized fluid reservoir. **Whatman.** For information call 888-WHATMAN or circle 147 on the Reader Service Card.

### pH and Conductivity Meter

Model 442 is a benchtop meter that can simultaneously measure pH and conductivity. It features three probes for a wide range of measurement, including ultrapure water measurement. The pH range is 0.00 to 14.00 and the conductivity range is 0.00 to 1000 mS. **Corning.** For information call 800-222-7740 or circle 148 on the Reader Service Card.

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used for nuclear magnetic resonance measurements, energy level studies, and dislocation density studies; in optics, for ultraviolet and infrared transmitting windows, prisms and lenses, and crystal field and laser studies; in electronics, for x-ray monochromators and satellite radiation detectors. **Aremco Products.** For information call 914-762-0685 or circle 149 on the Reader Service Card.

### Literature

*Pike Reflections* is a quarterly newsletter with information on advances and trends in the area of Fourier transform infrared sampling technology. **Pike Technologies.** For information call 608-274-2721 or circle 150 on the Reader Service Card.

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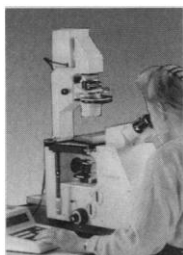
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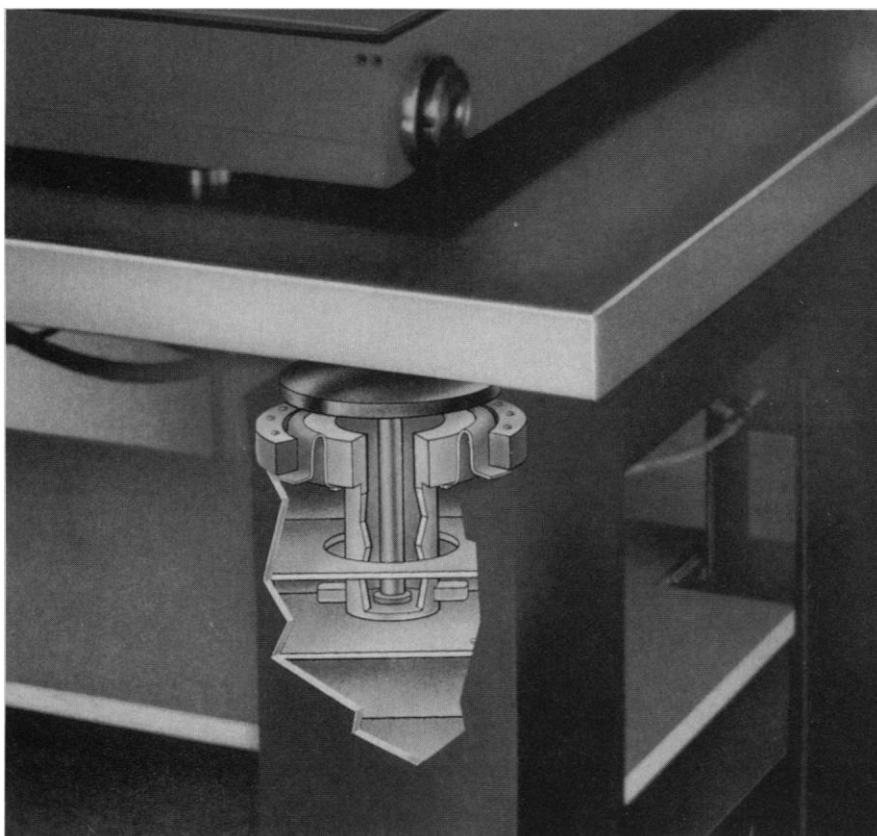
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## POSITIONS OPEN



## WEST VIRGINIA UNIVERSITY

### CHAIR, DEPARTMENT OF PHYSIOLOGY Robert C. Byrd Health Sciences Center

The West Virginia University School of Medicine invites applications for Chair of the Department of Physiology. The successful applicant must have a doctoral degree, an established research program, and a commitment to teaching and academic excellence. Demonstration of strong interpersonal and administrative skills will be important criteria in the review process. This position provides an opportunity to provide leadership in an ongoing process of curriculum change enhancement.

West Virginia University (website: <http://www.wvu.edu>) is a comprehensive land grant university and a Carnegie Foundation Research I institution. Excellent opportunity exists for collaborative research endeavor with doctoral-level scientists at the National Institute of Occupational Safety and Health lead facility located on the Health Sciences campus. The School of Medicine and Department of Physiology homepage addresses are website: <http://www.hsc.wvu.edu/som> and website: <http://www.hsc.wvu.edu/som/physio/phys.html> respectively.

The search will continue until the position is filled, but review of applications will begin on March 15, 1998. Applicants should send a curriculum vitae and the names of three references to:

William A. Neal, M.D., Chairman  
Physiology Search Committee  
Professor and Chair, Department of Pediatrics  
West Virginia University School of Medicine  
P.O. Box 9214  
Morgantown, WV 26506-9214

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

**FACULTY POSITIONS** in molecular neurobiology. The Ohio State University is in the midst of a major initiative in the molecular life sciences that will include at least thirty new faculty positions. The University has made a major commitment to develop an outstanding interdisciplinary program in the molecular neurosciences. Applications are invited for two tenure-track faculty positions at the ASSISTANT or ASSOCIATE PROFESSOR level. The new faculty members will be expected to develop independent research programs using molecular approaches to areas such as sensory systems, neuroimmunology, injury, degeneration, and regeneration in the nervous system. The successful candidates will hold positions in either the College of Medicine or Dentistry, with a joint appointment in the Neurobiotechnology Center. A transgenic mouse facility and other excellent support and instrumentation facilities are available. Applicants should submit a curriculum vitae, statement of research plans, and arrange to have three letters of reference sent to: Dr. Caroline Whitacre, Chair, Molecular Neurobiology Search Committee, 2078 Graves Hall, 333 West Tenth Avenue, Columbus, OH 43210-1239. Review will begin on March 1, 1998. *The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, Vietnam-era veterans, disabled veterans, and individuals with disability are encouraged to apply.*

### TENURE-TRACK FACULTY POSITION CELL SIGNALING

The Department of Pharmacology at the SUNY Health Science Center at Syracuse invites applications for a tenure-track, full-time position at the ASSISTANT PROFESSOR level. The candidate will be expected to develop an independent research program focusing on signal transduction/intracellular signaling and complement existing strengths of the Department (cardiovascular electrophysiology and molecular biology, cellular and molecular neurobiology, molecular pharmacology, and membrane transport; for details see website: <http://www.hscsy.edu/-pharm>). A Ph.D. degree or equivalent, postdoctoral experience, and an excellent record of research productivity are required. Salary, space, and start-up funds are competitive with national levels. Send applications, including a statement of research interests and goals, a curriculum vitae, and three letters of reference to: Richard J. H. Wojcikiewicz, Ph.D., Search Committee Chair, Department of Pharmacology, SUNY Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210. Resumes accepted until the position is filled. *An Affirmative Action/Equal Employment Opportunity/ADA Employer, committed to excellence through diversity.*

## POSITIONS OPEN

### TWO FACULTY POSITIONS IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

The Department of Biochemistry and Molecular Biology is seeking to fill two tenure-track positions at the level of ASSISTANT PROFESSOR. The first position is for an individual with experience and potential in the area of protein biochemistry/biophysics. The successful candidate should have an earned Ph.D., demonstrated expertise in protein biophysics, and be able to interact with other scientists interested in protein structure-function. The second position is for an individual with experience in the area of biochemistry/molecular genetics of eukaryotic systems. The successful candidate should have demonstrated research strengths in an area of signal transduction, regulation of gene expression, or gene targeting and be willing to interact with scientists from many departments interested in plant and animal molecular genetics. The Department is located in a modern research building with well-equipped laboratories and a stimulating scientific environment. A state-of-the-art "core facility" is available to support research and teaching activities in recombinant DNA and proteins. A 600 MHz NMR spectrometer was recently installed in a nearby facility and will be available to those having need of high resolution NMR spectroscopy. Both positions are eleven-month appointments and carry approximately 75 percent research appointment and 25 percent teaching appointment. Successful candidates will be expected to have a commitment to research and teaching and to contribute to our graduate and undergraduate teaching programs. In addition, the successful candidates will be expected to develop independent, extramurally funded research programs. A competitive salary with adequate start-up funds and generous laboratory space are available. Review of applications will begin March 1, 1998, and continue until the positions are filled. Interested individuals should provide a letter of application, a current curriculum vitae, a statement of research interests, two representative reprints of past work, and three letters of recommendation to:

Dr. Chang-An Yu  
Chairman of the Search Committee  
Department of Biochemistry and Molecular Biology  
246 Noble Research Center  
Oklahoma State University  
Stillwater, OK 74078-3035  
E-mail: [shel@bioch.okstate.edu](mailto:shel@bioch.okstate.edu)

*Oklahoma State University is an Equal Opportunity/Affirmative Action Employer.*

### PROFESSOR AND CHAIR OF BIOLOGY

The Department of Biology at the University of South Florida (USF) seeks an internationally recognized scholar to fill the position of Department Chair, to begin in August, 1998. Appointment as Chair is a twelve-month appointment for a four-year renewable term; the successful applicant will be eligible for tenure. USF is a large and dynamic institution, with five campuses and 35,000 students, that is located in the vibrant, multicultural Tampa Bay region. USF is a Carnegie Institute Research Level Two Institution which, together with affiliated institutions, offers extensive opportunities for collaborations in basic and applied research. The Department consists of 32 faculty members, three full-time instructors, 1,800 undergraduate majors, and over 100 graduate students pursuing Master's or Ph.D. degrees. Department faculty are active in attracting extramural research funding. We seek an individual who will provide academic and administrative leadership to this broad and diverse department. Candidates must have an earned doctorate in one of the biological sciences, an outstanding record of extramurally funded research, and extensive teaching experience at the undergraduate and graduate level. Administrative experience is preferred. To apply, submit curriculum vitae, names, addresses, and telephone numbers of three references, and statements of research interests and administrative philosophy to the address below. Completed applications should be received by February 27, 1998. Applications or nominations should be sent to: Chair Search Committee, Department of Biology, SCB 110, University of South Florida, 4202 East Fowler Avenue, Tampa, FL 33620-5150. Further information on the department and this position can be found at website: <http://www.cas.usf.edu/biology/chair.html>. *The University of South Florida is an Equal Opportunity/Affirmative Action/Equal Access Institution. For disability accommodations, please Telephone: 813-974-3250.*



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## Cambridge, MA RESEARCH SCIENTISTS, DNA/PEPTIDE SYNTHESIS

Multiple positions/levels exist to put your experience, laboratory skills, and supervisory skills to excellent use to synthesize DNA and peptides in support of discovery research and genomics-related projects. Qualified candidates will possess a BS/MS in Chemistry or Biochemistry, plus several years of experience in DNA/Peptide synthesis or automated chemistry lab. (SCI198-MN-HS)

## ANALYST/PROGRAMMER, BIOINFORMATICS

Excellent opportunity for Bioinformatics professional to set up and maintain GCG and associated databases. Qualified candidate will possess BS/MS, and demonstrated experience with GCG, Perl, and UNIX. Experience with C/C++ and Java is a plus. (SCI198-MN-GM)

## Andover, MA STAFF SCIENTIST, BONE BIOLOGY AND APPLICATIONS

Excellent opportunity exists within the Bone Biology and Applications Group for a scientist to be responsible for the identification and characterization of new delivery systems and matrices for BMPs. The Bone Biology and Applications Group is a multi-functional, highly interactive group of scientists who develop and test (preclinical) various BMP-containing articles for tissue repair. Activities would focus on research into systems appropriate for bone repair using rhBMP-2, including injectable formats as well as those which would be surgically implanted. Responsibilities include identification of appropriate materials, studies of the interactions between the materials and rhBMP-2, and leading the effort to do preliminary in vivo testing. Qualified candidates will possess a Ph.D. in Pharmaceutical Sciences, Chemical Engineering, or similar, plus a minimum of 4 years of experience with drug delivery and/or biomaterials research. Experience with polypeptide growth factors, bone biology, and/or regulatory requirements would be beneficial. (SCI198-LL-JW)



## STAFF SCIENTIST, DRUG PRODUCT DEVELOPMENT

Exciting opportunity for an individual to lead a group responsible for development and characterization of Bone Morphogenetic Protein (BMP) delivery matrices. This includes matrices based on collagen and hydroxyapatite, as well as other materials. Responsibilities will include determining critical features of the matrices with regard to biological efficacy, understanding the nature of the interaction of BMP with the matrices, and helping to develop manufacturing processes for the matrices that reproducibly yield material with the desired properties. Qualified candidates will possess a Ph.D. in Pharmaceuticals, Biochemistry or a related field, with relevant postdoctoral experience (industrial or academic). Experience with collagen characterization as well as with characterization of drug delivery matrices is highly desirable. **Additional openings exist in this area for individuals with BS/MS degrees and relevant experience. (SCI198-LL-GA)**

## STAFF SCIENTIST, MOLECULAR BIOLOGY

Unique opportunity to participate in the generation and characterization of cell lines for the production of recombinant protein therapeutics, and contribute to technology development efforts towards improved expression systems and host cells. The successful candidate will have a Ph.D. with a broad background in Cell and Molecular Biology, and proven expertise in the regulation of eukaryotic gene expression, cell cycle control or apoptosis. Experience with advanced nucleic acid analysis, fluorescence microscopy or FACS analysis is desirable, as are relevant bioinformatics skills. **(SCI198-LL-TC)**

## STAFF SCIENTIST/ENGINEER II, PURIFICATION PROCESS DEVELOPMENT

Seeking an individual with interest and expertise in the areas of protein biochemistry and Separations Science. This individual will participate in the development, optimization, and troubleshooting of purification processes for recombinant therapeutic proteins from both mammalian cell culture and bacterial expression systems. The ideal candidate will demonstrate a strong understanding of protein separations with additional expertise in areas such as advanced protein analytical methodologies, protein structural analysis, protein refolding pathways, and/or emerging technologies for protein purification. The successful candidate will be part of an interdisciplinary team where the ability to work well with others in a fast-paced environment is essential. Qualified candidates should have a Ph.D. degree in Biochemistry, Biochemical Engineering, or related discipline, with a minimum of 3 years of related industrial experience. Previous managerial experience is also desirable. **(SCI198-LL-BH1)**

## RESEARCH STAFF

Assist in the implementation of the receptor biology program within Preclinical Research and Development. Requires a BS in a life sciences discipline; 5+ years of experience in Cell Biology, Biochemistry or Immunology research; and experience with tissue culture, ELISA, SDS-PAGE, and Western Blots. Experience with flow cytometry is a plus. **(SCI198-LL-MK)**

## STAFF SCIENTIST/ENGINEER I, PURIFICATION PROCESS DEVELOPMENT

Seeking an individual with interest and expertise in the areas of Protein Biochemistry and Separations Science. This individual will participate in the development, optimization, and troubleshooting of purification processes for recombinant therapeutic proteins from both mammalian cell culture and bacterial expression systems. The ideal candidate will demonstrate a strong understanding of protein separations with additional expertise in areas such as advanced protein analytical methodologies, protein structural analysis, protein refolding pathways, and/or emerging technologies for protein purification. The successful candidate will be part of an interdisciplinary team where the ability to work well with others in a fast-paced environment is essential. Qualified candidates should have a Ph.D. degree in Biochemistry, Biochemical Engineering, or related discipline, with 0-2 years of related postgraduate experience. **(SCI198-LL-BH2)**

## STAFF SCIENTIST

Carry out gene expression monitoring to evaluate the activities of novel genes in animal models. Responsibilities will include monitoring gene expression using Affimatrix, Northern analysis, RT-PCR and RNAase protection and the analysis and integration of the data. Requires a Ph.D. in Molecular Biology, Cell Biology, or related field; 3+ years of demonstrated work experience in gene expression; RNA isolation and analysis; strong molecular biology skills; work with animals; and computer database experience. **(SCI198-LL-DP)**

## DEVELOPMENT STAFF, BIOPHARMACEUTICAL CHARACTERIZATION AND ANALYSIS

A position is available at the Development Associate level. Responsibilities involve development, validation, and application of various biochemical methods in support of process/product development. Additional support activities include characterization and analysis of biopharmaceutical materials destined for clinical and preclinical use. Position requires BS and 2-5 years of laboratory experience with standard protein analytical techniques, including HPLC and Gel Electrophoresis. Experience with cGMPs, GLPs, coagulation assays, and familiarity with computers and data analysis techniques is a plus. **(SCI198-LL-BL)**

**T**o be considered for current or future job openings, please mail or fax your resume, indicating job code, to: Genetics Institute, Inc., Resume Processing Center, Job Code \_\_\_\_\_, P.O. Box 385, Burlington, MA 01803. Fax: (508) 623-2607.

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## DEFINING SUCCESS IN BIOTECHNOLOGY

### SR. SCIENTIST - IMMUNOLOGY

In this new position you will investigate activity and dissect mechanisms of action of therapeutic cytokines. The successful candidate will possess a Ph.D. with 3 years of postdoctoral experience using both *in vitro* mammalian culture systems and *in vivo* systems for analysis of mechanisms of interferon activity. A strong background in cell biology, cytokine pathways, and the study of soluble proteins and their receptors is also necessary. Application of this knowledge to settings of inflammation in murine models of disease using immunohistochemical techniques, biochemical and molecular biology skills to address biological questions is highly desirable. An Associate Scientist will report to this position. **Code RC-SSI**

### SENIOR SCIENTIST - ANALYTICAL CHEMISTRY

This leadership position will be responsible for analytical development, release and stability testing of active pharmaceutical ingredients and finished products in development. The successful candidate will also provide technical leadership and manage Chemistry, Characterization and Quality aspects of small molecule pharmaceutical products at different phases of development. The ideal candidate will possess a Ph.D. in Analytical Chemistry and 8-10 years of experience in analytical development (chromatography), physico-chemical characterization (FTIR, NMR, DSC, X-ray diffraction) and quality control. In addition, this individual will have a thorough understanding of the Drug Development process for small molecules, knowledge of regulatory requirements and excellent interpersonal, verbal and written communication skills. **Code: RC-SSAC**

### SCIENTISTS - BIO-CHEMISTRY/PROTEIN CHEMISTRY

We are seeking two Ph.D. level Scientists. One candidate is sought to investigate receptor-ligand binding interactions on cells and in solution, to elucidate mechanisms of receptor activation and inhibition, and to use the information obtained to develop assays for the identification of novel receptor agonists and antagonists. The successful candidate will possess a Ph.D. in Biochemistry or related biological discipline with 2-4 years' of postdoctoral or equivalent experience. Excellent protein chemistry skills and a thorough knowledge of cell Biology, together with prior experience with assay development or other quantitative experimental work, are required.

The second position is available to explore the potential therapeutic targets among members of the TNF receptor and ligand family. Primary responsibilities will include isolation and characterization of the TNF family proteins, developing purification schemes, engineering analytical reagents, designing assay methods and preparation of small quantities of recombinant proteins. The ideal candidate will have a Ph.D. or equivalent degree in biochemistry and 2-4 years' post-doctoral experience related to the study of biochemistry of TNF receptor/ligand family. In addition, the individual should have an extensive background with protein-protein interaction and the routine use of protein chemistry. A broad interest in the regulation of the immune system with an emphasis on the structure and function of receptors and/or ligands is highly desirable. **Code: RC-SBC/PC**

### RESEARCH ASSOCIATE/ASSOCIATE SCIENTIST

We seek a highly motivated molecular biologist to join our group investigating integrin structure and function. This individual will work closely with both senior and technical staff to design expression vectors, analyze gene expression, and develop high through-put screening assays. The position requires a BA/BS or MS in a biotechnology-related field (Molecular Biology, Cell Biology, Biochemistry) and 2-4 years of experience in an academic or industrial setting. **Code: RC-RA/AS**

Biogen offers what few companies in our industry can - Professional Challenge, Stability, Growth, and one of the strongest financial profiles in the industry. In addition, our compensation and benefits package, including equity participation, is one of the best in the industry, and is designed to attract and retain the finest talent available. Please forward your resume, indicating appropriate job code, to: Biogen, Inc., 14 Cambridge Center, Cambridge, MA 02142; Fax: (617) 679-2546. E-mail: [resumes@biogen.com](mailto:resumes@biogen.com). Biogen is an Equal Opportunity Employer.

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## The Science of Agricultural Genetics

### RESEARCH COORDINATOR (Job #SB-801)

#### Oilseeds Technology Integration

Pioneer Hi-Bred International, Inc. is seeking applicants for a Coordinator Position located in Johnston, IA. The coordinator will search for and evaluate opportunities for new traits and technologies that have potential to add value to soybean, sunflower and canola product lines. This position will do the initial investigation of technical factors and will work with other internal groups for initial assessments of freedom to operate issues. Must have Ph.D. in plant genetics, plant breeding, plant sciences or equivalent work experience plus 5+ years of plant genetics related research. Demonstrated success in plant genetics related science is needed.

Pioneer offers an opportunity to interact among hundreds of scientists with diverse backgrounds. We offer competitive salaries and excellent, comprehensive benefits. Des Moines is a prospering heartland city that ranks well above the national averages in affordability and education. Our location provides a mix of beautiful open spaces and city life advantages. For confidential consideration send 3 copies of cover letter, current resume, transcripts, publications, copy of thesis abstract, and references, indicating job number, to: Pioneer Hi-Bred International, Inc., Attn: PERSONNEL (Job #SB-801), P.O. Box 1004, Johnston, IA 50131-1004. Applications received by February 16, 1998 will be assured of consideration; however, applications will be considered until the position is filled.

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



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INTERNATIONAL, INC.  
An Equal Opportunity Employer





## GRANTS FOR INTERNATIONAL JOINT RESEARCH IN THE AREAS OF MATERIALS, ENERGY, EFFICIENT ENERGY USE, AND GLOBAL ENVIRONMENT

The New Energy and Industrial Technology Development Organization (NEDO), a Japanese governmental implementing agency supervised by the Ministry of International Trade and Industry (MITI) of Japan, has been carrying out an International Joint Research Program since 1988.

This program aims to contribute to the enhancement of the international level of industrial technology as well as to the advancement of international exchange by supporting international joint research teams which conduct superior research.

In addition to supporting international joint research teams which conduct original and innovative basic research in the Materials area, international joint research teams which conduct research in the Energy, Efficient Energy Use, and Global Environment area will be provided with grants in FY 1998. The Efficient Energy Use area will be newly established in order to not only promote energy efficiency but also contribute to global environment. The program in the Global Environment area will be conducted jointly with the Research Institute of Innovative Technology for the Earth (RITE).

**Research Grants will be provided to "International Joint Research Teams" which fulfill the following main requirements:**

1. Each team, in principle, must be composed of four or more researchers;
2. Each team must consist of researchers of two or more different nationalities;
3. The research organizations where the team members' major activities take place must be located in two or more countries.
4. Each team must appoint a research coordinator and an accounting coordinator. The accounting coordinator must be responsible for accounting matters and function as the liaison between the team and NEDO.

The accounting coordinator's organization and research site must be located in Japan, and he/she must be able to communicate with NEDO in Japanese about all accounting matters. The research coordinator can also hold the post of accounting coordinator.

Research Area	Field of Research	Amount of Each Grant	Number of Themes to be Adopted	Recipients of Applications
Materials	1) <b>Basic Research</b> concerning the investigation and elucidation of materials 2) <b>Basic Research</b> concerning the practical use of materials	about 30,000,000 yen in FY 1998	5 themes	NEDO (Note a.)
Energy	<b>Practical Research</b> on electric power generation technologies using oil-alternative energy, on load-leveling technologies and on global environment conservation related to those technologies	about 30,000,000 yen in FY 1998	4 themes	
Efficient Energy Use	<b>Practical research</b> on technologies concerning the efficient use of energy (excluding electric power generation technologies)	about 30,000,000 yen in FY 1998	2 themes	
Global Environment	(Basic research) <b>Basic Research</b> on conservation and improvement of the global environment	about 24,000,000 yen in FY 1998	2 themes	RITE (Note b.)
	(Practice research) <b>Practical research</b> concerning the production, generation, and use of oil-alternative energy (excluding electric power generation technologies) which contributes to the conservation and improvement of the global environment	about 30,000,000 yen in FY 1998	1 theme	

(Recipients of applications)

Note a. Materials, Energy, Efficient Energy Use area

**International Joint Research Division,  
Industrial Technology Department  
New Energy and Industrial Technology  
Development Organization (NEDO)**

**Address:** P.O. Box 1151, 29F, Sunshine 60 Bldg.  
3-1-1 Higashi-Ikebukuro, Toshima-ku,  
Tokyo, 170 Japan

**Phone No:** 81-3-3987-9357

**Telefax No:** 81-3-3981-1536

**E-mail:** nedogrant@nedo.go.jp

**Homepage:** <http://www.nedo.go.jp>

Note b. Global Environment area

**Research Proposals Reception Section,  
Research Planning Department  
Research Institute of Innovative Technology for the  
Earth (RITE)**

**Address:** 9-2 Kizugawadai Kizu-cho Soraku-gun,  
Kyoto, 619-02 Japan

**Phone:** 81-774-75-2302

**Telefax No:** 81-774-75-2314

**Homepage:** <http://www.rite.or.jp>

**Please be informed that the amount of each grant and the number of themes to be adopted may be changed, and that this grant program is subject to government budget approval.**

**A research team may submit an application a maximum of two times for a grant on the same subject.**

The application period is from January 22nd, 1998, to March 25th, 1998.

No application will be accepted after March 25th.

**Attention:** If there are any discrepancies in a submitted applications—for example, it does not follow the Application Guidebook or the research contents are different from the proposed research area—it will be considered invalid.

# INNOVATIONS FOR LIFE.

## CELL/MOLECULAR BIOLOGIST

We are seeking an individual with a BS/MS degree in Molecular Virology or a related area and 3+ years experience on HIV tissue culture. The successful candidate will have a broad-based knowledge of molecular biology including cloning, sequencing, RT-PCR, HIV isolation from HIV infected patients as well as substantial experience culturing HIV in tissue culture. This position offers an excellent opportunity for a self-motivated individual to interact with a variety of Scientists from a variety of disciplines in an exciting team environment that is directly linked to our clinical development program. (Job Code: 97-LAM-4467)

## MOLECULAR NEUROBIOLOGIST

The Exploratory Neuroscience group is seeking a research scientist to join its efforts in finding new drug targets. The ideal candidate will have a Ph.D and at least 3 years postdoctoral experience in molecular biology with an interest in neuroscience. Individuals must be skilled in the areas of cloning and expression as well as the use of genomic information to aid in the process of target discovery and development. Excellent communication skills and a good publication record are essential for effective functioning as part of an interdisciplinary team. (Job Code: 97-LAM-1770)

## TOXICOLOGIST

The professional we seek will be responsible for the preparation of toxicology study protocols and study reports as well as the supervision of studies, acting as study director on in-house studies, and monitoring contract lab studies. Additional responsibilities will include writing literature reviews and IND and NDA overviews as well as representing toxicology at project team meetings. The qualified individual must possess a Ph.D in Pharmacology or Toxicology along with 3+ years of toxicology experience. (Job Code: 97-WKB-3358)

We are located just 40 miles north of Chicago, in North Chicago, Illinois. In return for your expertise, we offer a competitive compensation package, including full benefits. For confidential consideration, please send your resume, indicating position of interest by Job Code, with salary history to: Job Code \_\_\_\_\_, Dept. 0583, Bldg. AP9A, Abbott Laboratories, 100 Abbott Park Rd., Abbott Park, IL 60064. An EOE, we are as committed to employee diversity as we are to our broad range of products and services.

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

ALSBAC • Danny Thomas, Founder

## ASSISTANT/ ASSOCIATE MEMBER

### Department of Infectious Diseases

St. Jude Children's Research Hospital offers a position as Assistant and Associate Member in the Department of Infectious Diseases. M.D. or Ph.D. degree and a thorough knowledge of gram positive bacterial pathogenesis is required. The candidate should have specific expertise in basic research utilizing techniques in molecular biology, cell culture, animal models, and biochemistry. A very generous recruitment package commensurate with experience is available. Recruiting deadline is March 1, 1998. Please reply with curriculum vitae to: **Elaine I. Tuomanen, M.D., Chair, Department of Infectious Diseases, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105.** St. Jude Children's Research Hospital is an equal opportunity employer.

## MOLECULAR BIOLOGY AND GENETICS *Molecular Geneticist*

The Department of Molecular Biology and Genetics at the University of Guelph is seeking applications from qualified candidates for a tenure-track faculty position in the area of Eukaryotic Molecular Genetics. The appointment will be made at the Assistant Professor level with a start date of July 31, 1998 (negotiable).

We require a Ph.D and appropriate postdoctoral training, a proven research record including publications of high quality, the ability to work well with others, and enthusiasm and ideas that will inspire both undergraduate and graduate students. The successful candidate will be expected to establish an innovative and competitive research program, supported by external funding, and to contribute to the department's excellence in graduate and undergraduate teaching.

The Department of Molecular Biology and Genetics has ten faculty, with active research programs in animal and plant molecular genetics. In addition, the University of Guelph has excellent facilities and expertise in the applied animal and plant sciences in the Ontario Agricultural College and Ontario Veterinary College, affording many opportunities for collaboration in the biotechnology area.

Applicants should send, no later than March 15, 1998, a curriculum vitae, and the names, addresses and phone numbers of three referees to: Dr. Steven J. Rothstein, Department of Molecular Biology and Genetics, College of Biological Science, University of Guelph, Guelph, ON, Canada, N1G 2W1.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. This appointment is subject to final budgetary approval.

*The University of Guelph is committed to an employment equity program that includes special measures to achieve diversity among its faculty and staff. We therefore particularly encourage applications from qualified aboriginal Canadians, persons with disabilities, members of visible minorities and women.*

**UNIVERSITY  
OF GUELPH**



# Research and communication with global impact.

ZENECA is a global bioscience firm with interests in the pharmaceutical, agrochemical and specialty chemical fields. Our Ag Products business, one of the top three global agrochemical companies, is engaged in the research, development and manufacture of products safe to people and the environment. Products include biotechnology and chemistry to protect crops from weeds, insects, and diseases and to enhance crop performance.

As an industry leader in the area of dietary exposure, we are looking for highly motivated and innovative professionals at our Western Research Centre in Richmond, California.

#### *To lead the team:*

#### **Manager, Environmental Sciences - Dietary Exposure**

You'll effectively blend the wide range of scientific disciplines to provide advocacy internally and externally, as well as to network with food industry and regulatory agencies. We seek success in people management within line and matrix structures, and efficient delivery of work programs resulting in significant scientific or financial benefits. This position demands a dynamic individual, one who as a member of the Senior Management team, can effectively resolve people and project conflicts, and integrate new thinking and approaches. Excellent leadership skills are mandatory, as the group has 50+ metabolism and residue chemists. Food industry experience is preferred. **JOB CODE: SO-MDE**

#### *To join the team:*

#### **Food Industry Consultant**

Provide advocacy internally and externally, as well as network with food industry and regulatory agencies. The ability to grasp the essence of complex techno-commercial issues within chemical and biotechnological crop protection and to give an understanding of regulatory issues in debate with the food industry, is essential. A background in the food industry and related science are also requisites. **JOB CODE: SO-FIC**

#### **Environmental Monitoring Specialist**

The selected candidate will travel across the U.S. to participate in a number of major environmental monitoring projects. Requires Ph.D. in Environmental Analysis/Chemistry. Experience must include work in sampling industrial sites, environmental samples analysis and industrial hygiene monitoring. Knowledge of GC/HPLC/GC-MS, familiarity with EPA analytical methods and the ability to work on multiple projects of varying priorities are a must. GLP experience desired. **JOB CODE: SO-EMS**

#### **Residue Chemist**

You'll conduct residue studies and analysis, and formulate reports for study directors. This involves both autonomous work, as well as collaboration with technicians. In addition, you'll handle GC/HPLC troubleshooting and problem solving, and participate in projects to automate analytical studies. Minimum MS with 3+ years' experience essential, PhD preferred. Background must include work in environmental toxicology/pesticide analysis, and experience in food, environmental or pharmaceutical analysis. **JOB CODE: SO-RC**

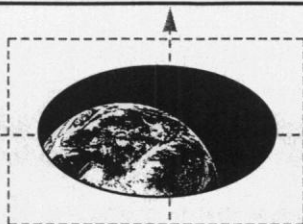
We offer a competitive salary, relocation assistance and excellent benefits including a 401 (k) plan. Send resume and cover letter, indicating position of interest and JOB CODE, in confidence, to: Human Resources Dept, 1200 S. 47th St., Richmond, CA 94804. E-mail: [Zeneca@sf.hodes.com](mailto:Zeneca@sf.hodes.com). Equal Opportunity Employer. Closing date for resumes is 2/5/98.

For further information about Zeneca, please visit these positions at [www.careermosaic.com](http://www.careermosaic.com)

# ZENECA

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**We're redefining the way the world looks at life sciences.**

**We're the new life sciences company at Monsanto.**

And we're even more focused on the future. That's why our entire organization, from agricultural biotechnology to pharmaceuticals to food ingredients, is dedicated to life sciences. Now, we can answer the questions, needs and demands of our ever-changing planet. After all, the world's resources are finite, but our vision for the future is limitless. Currently, we have the following positions available in our Corporate Research, Life Sciences Center in St. Louis:

## **PROTEOMICS OPPORTUNITIES**

### **Biochemist**

The selected candidate will develop methodologies for separation and quantification of proteins from complex biological systems in support of product development in agricultural, pharmaceutical, and food products. Candidates must have a Ph.D. or equivalent experience in biochemistry, protein chemistry, analytical chemistry or related field along with a strong background in proteomics, protein characterization, 2D gel electrophoresis, and HPLC. Self-motivation and resourcefulness are essential, as are excellent verbal and written communication skills and the ability to work in a team environment. The ability to quickly develop and apply new methods for protein separations and structural characterization is desired. (Job Code: Biochemist)

### **Bioinformaticist**

The selected candidate will develop and implement software tools for comparing protein proteomes separated by 2D gel electrophoresis, quantifying protein changes, and determining protein identities. Additionally, this individual will work closely with researchers in genomics to develop software tools for searching protein cDNA and EST databases to determine protein identities from available mass spectrometry and analytical data, determine protein functions and intracellular locations through software searches or sequence homology to proteins with known function. Candidates must have a Ph.D. or a Master's degree with equivalent experience. Experience in proteomics/genomics database searching capabilities is required. Experience in software development is preferred. Candidates must be self-motivated, possess excellent verbal and written communication skills, and work well in a team environment. (Job Code: Bioinformaticist)

## **BIOANALYTICAL OPPORTUNITY**

### **Biophysical/Bioanalytical Chemist**

The selected candidate will be responsible for developing methodologies using biophysical/bioanalytical techniques to study biomolecular interaction as well as the physical properties of biological molecules/products in support of product discovery and development in agricultural, pharmaceutical, and food products. Candidates must have a Ph.D. or equivalent experience in biological sciences with an emphasis on development and application of the state-of-the-art biophysical/bioanalytical technology for understanding biomolecular interaction as well as the physical properties of biological molecules/products. Self-motivation, resourcefulness, and the ability to quickly develop and apply new methods is strongly preferred. Excellent verbal and written communication skills, along with the ability to work well in a team environment are essential. (Job Code: Biophysical Chemist)

For consideration, please submit your resume and the names of three references and position of interest to: **The Monsanto Company, Attn: Staffing, Job Code: \_\_\_\_\_** (insert from above), Mail Zone: S3C, 800 N. Lindbergh Blvd., St. Louis, MO 63167. EEO/AA Employer M/F/D/V. Please visit our website at [www.monsanto.com](http://www.monsanto.com).

# **Monsanto**

## **NATIONAL SCIENCE FOUNDATION (NSF)**

### **DIVISION OF EARTH SCIENCES**

#### **PROGRAM DIRECTOR FOR GEOLOGY & PALEONTOLOGY**

NSF's Division of Earth Sciences is seeking qualified candidates for Program Directors in our Geology and Paleontology Program. These positions are excepted from the competitive Civil Service and may be filled on a permanent basis or on a 1- to 2-year Visiting Scientist/Temporary basis or under the provisions of the Intergovernmental Personnel Act (IPA). IPA applicants must be permanent, career employees of eligible organizations for at least 90 days prior to entering into a mobility assignment agreement with NSF. Reimbursement salary and other related costs are negotiated between NSF and the individual's institution. Current annual salary for the position ranges from Program Director—\$66,138 to \$103,078.

Applicants must have a Ph.D. or equivalent experience in geology or a closely related earth sciences field; plus 6 years of successful research, research administration, and/or management experience beyond the Ph.D. in an area supported by the Program. A broad general knowledge of earth sciences research and familiarity with the U.S. scientific community and experience in an academic setting are desirable. The Geology & Paleontology Program supports basic research on the physical, chemical, geological, and biological processes at or near the earth's surface and the landforms, sediments, fossils, low-temperature fluids, and sedimentary rocks that they produce. The Program is broadly defined, including research in paleontology, paleoecology, paleoclimatology, geomorphology, glacial geology, sedimentology, stratigraphy, sedimentary petrology, diagenesis, soil genesis, and low-temperature and organic geochemistry.

Applicants interested in a 1- or 2-year appointment as a temporary position or under the provisions of the NSF Visiting Scientist program or Intergovernmental Personnel Act must submit a letter of recommendation and employment application, résumé, or vitae to **Vacancy Announcement EX98-20A, National Science Foundation, Division of Human Resource Management, Attn: Sybil Smith, 4201 Wilson Blvd., Suite 315, Arlington, VA 22230.**

Applicants interested in the permanent position should obtain a copy of the vacancy Announcement EX98-19A from the NSF's website or by calling Ms. Smith at 1-703/306-1185, ext. 3090. All applications must be received by February 27, 1998.

Vacancy Announcements and other employment information are available at NSF's website: <http://www.nsf.gov/oirm/>. For further technical information, contact Alan Gaines at (703) 306-1553; e-mail: [againes@nsf.gov](mailto:againes@nsf.gov). Hearing-impaired individuals should call TDD at (703) 306-0189.

*NSF is an Equal Opportunity Employer committed to employing a highly qualified staff that reflects the diversity of our nation.*

### Cellular Immunology and Treatment of Childhood Cancers

The Pediatric Oncology Branch (POB) is searching for a tenure-track scientist to conduct a cutting-edge research program to develop novel approaches to the treatment of childhood cancer using cellular immunology approaches and an understanding of the unique cellular immune system in children. The successful candidate must have demonstrated expertise in cellular immunology and the ability to run an independent laboratory-based research program. In addition, the candidate must have an interest in developing a translational research program capable of developing new treatment protocols based upon leads generated in the laboratory. Resources include laboratory space, shared facilities, equipment, and supplies, and the support of two postdoctoral fellows and one technician. Candidates must have an M.D. degree with training and experience in Pediatric Hematology/Oncology and Cellular Immunology. The POB is committed to improving the outcome of children with cancer through translational research. Ongoing areas of research include sarcomas, lymphomas/leukemias, brain tumors, developmental therapeutics, and supportive care. The POB website can be accessed at <http://www.wicic.nci.nih.gov/pedpage/PedBrHomeR.html>. Interested candidates should send a cover letter, CV, statement of research interests, and three letters of reference to **Chairman, Search Committee, Pediatric Oncology Branch, NCI, Building 10, Room 13N240, 10 Center Drive MSC 1928, Bethesda, MD 20892-1928**. All application materials must be received by close of business on February 27, 1998. *NIH is an Equal Opportunity Employer.*

### CONFERENCE

#### National Institutes of Health



#### Gene Therapy Policy Conference

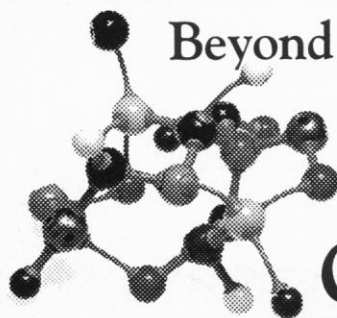
#### LENTIVIRAL VECTORS FOR GENE DELIVERY



This conference will focus on research design and safety considerations related to lentivirus vectors for human gene transfer research. Participants will explore the biology of lentiviruses and their advantages/disadvantages over previously proposed gene delivery systems.

For more information call, 410.377.0110 or fax 410.377.6429 or email, [gtpc2@strategicresults.com](mailto:gtpc2@strategicresults.com)

Register on the web at [www.strategicresults.com/nih/orda2/](http://www.strategicresults.com/nih/orda2/)



## Beyond Medicine to Health™

# CNS Research

The combined strengths of Hoechst Pharmaceuticals, Marion Merrell Dow and Roussel Uclaf make Hoechst Marion Roussel a leading global supplier of a wide range of pharmaceuticals that improve the quality of human life. We have a history of breakthrough discoveries in medicine, pioneering products for the treatment of many diseases. With the strength of our heritage and a future devoted to making meaningful advances in treating serious diseases, Hoechst Marion Roussel adds up to an unbeatable association.

Our CNS Diseases research division, based in Bridgewater, New Jersey, is focusing a significant portion of its efforts in the area of neurodegeneration. We currently have several promising compounds in the pre-clinical phase of drug development. In order to continue our advances in this field, we currently are seeking additional talented scientists to support our efforts with respect to drug innovation.

### Ph.D. Neuroscientist

We are seeking a CNS Researcher who will develop, supervise and conduct experiments designed to identify and characterize useful drugs for the treatment of diseases or illnesses that result in neurodegeneration (e.g., stroke, head trauma or brain inflammation.) Responsibilities also include interpreting and presenting test data generated as well as serving as an active participant in appropriate project teams involved in the pre-clinical phases of compound progression.

The successful candidate will possess a Ph.D. in Pharmacology or Neuroscience plus a minimum of three years pharmaceutical or academic research experience in one or more of the following fields: stroke, head trauma, brain inflammation, or brain ischemia. Experience in neuroanatomy, histology, small animal surgery and all aspects of rodent handling is needed. Basic knowledge of molecular biology, an in-depth knowledge of experimental design and the capacity to interpret and present results are also required.

### BS/MS Behavioral Pharmacology Associate

The associate will be responsible for the introduction and maintenance of behavioral assays for evaluating test compounds synthesized at HMR. In addition, the associate will be responsible for the proper documentation of test data generated in these assays. The associate will carry out these responsibilities according to the environment health and safety policies of HMR.

Requirements include a BS/MS in Biology or related equivalent discipline and a minimum of 5 years of experience in the field of behavioral pharmacology, either in a pharmaceutical or academic setting is essential. Key competencies include experience in all aspects of animal handling of rodents (including injections and surgical techniques); experience with primates would be an advantage. In addition, a basic knowledge of computers, a working knowledge of experimental design, interpretation and presentation of results is essential. The associate must have the ability to work semi-independently in initiating and maintaining routine drug screening as well as research projects. Additional competencies such as a basic knowledge of brain histology, neuroimmunology, molecular biology or microdialysis would be advantageous.

### BS/MS Neurobiology Associate

We are seeking an associate with an interest in stroke, head trauma, and neurological lesioning studies having responsibilities that involve small animal surgery including several ischemia models, implantation of indwelling catheters and stereotaxic lesioning, motor and cognitive behavioral assessment of impaired animals, preparation of drug solutions and reagents, administration of drugs, dissection and tissue preparation for histological examination, computer assisted image analysis of infarct tissue, and quantitation, statistical analysis, and documentation of experimental results, and tracking and maintaining laboratory supplies.

Candidates should have a B.S. or M.S. in Pharmacology, Biochemistry or Biology. Small animal surgical experience (vascular; stereotaxic; surgery under a dissecting microscope) is required. Experience in many aspects of rodent handling, including injections of drugs and use of behavioral assays, also is necessary. Other key competencies include some knowledge of histology and neuroanatomy.

Attracting and retaining top talent is a high priority at Hoechst Marion Roussel. That is why we offer one of the most outstanding and comprehensive compensation and benefits packages in the pharmaceutical industry. Our total rewards package includes competitive compensation and bonus programs, flexible medical and dental plans, tuition assistance, income protection plans, and generous retirement plans that have been cited as the best in the industry. For consideration, visit us today, or mail your resume (suitable for scanning) including salary history/requirements, to: Staffing Manager, D103-H, Ref #1998BW0001, Hoechst Marion Roussel, Routes 202-206, P.O. Box 6800, Bridgewater, New Jersey 08807-0800, U.S.A., or e-mail: [jobs@hmri.com](mailto:jobs@hmri.com). For additional company information, we invite you to visit our website: [www.hmri.com](http://www.hmri.com). An affirmative action employer M/F/D/V.

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

ALSAC • Danny Thomas, Founder

## POSTDOCTORAL POSITION SIGNAL TRANSDUCTION BY NEUROPEPTIDE RECEPTORS

A National Cancer Institute-funded postdoctoral position is available to participate in studies on signal transduction pathways activated by G protein-coupled neuropeptide receptors in brain tumors. The role of substance P and bombesin-like neuropeptide receptors in enhancing the growth of astroglial brain tumor-derived cells is being investigated using biochemical, pharmacological, and molecular approaches (see: *Cancer Research* 56: 4983-4991, 1996; *Cellular Pharmacology* 3: 441-449, 1996; *Molecular and Cellular Endocrinology* 130: 119-130, 1997; *International Journal of Oncology* 11: 797-805, 1997; *Cell Growth and Differentiation* 8: 1225-1240, 1997; *International Journal of Oncology* 12: In press, 1998). Candidates should have a strong research experience and a recent Ph.D. in Molecular Biology, Cell Biology, Neuroscience, or related fields. Interest in signal transduction and brain tumor biology is a plus.

St. Jude Children's Research Hospital (Danny Thomas, Founder) is an outstanding research center for biomedical research and provides an exceptional environment for scientific achievement and career development. Stipend and benefits are highly competitive. Send a summary of research accomplishments (including copies of publications), curriculum vitae, and **three** letters of reference to: M. Sharif, Ph.D., Department of Molecular Pharmacology, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105.

Last date for receiving applications is three weeks after the appearance of this advertisement.

An Equal Opportunity/Affirmative Action Employer

## FOOD AND DRUG ADMINISTRATION CENTER FOR BIOLOGICS EVALUATION AND RESEARCH

### SENIOR SERVICE FELLOWSHIP *Immediate Opening*

The Laboratory of Bacterial Toxins of the Division of Bacterial Products, Office of Vaccine Research and Review, Center for Biologics Evaluation and Research (CBER), a research and regulatory center of the Food and Drug Administration (FDA), has a postdoctoral fellowship opportunity. The laboratory is located on the campus of the National Institutes of Health in Bethesda, Maryland. The laboratory reviews investigational new drug applications and product license applications related to bacterial toxins and vaccines derived from bacterial toxins. We would like for the incumbent to develop a research program with structure and interactions of bacterial toxins and to share regulatory responsibilities for Clostridium toxin related products. The appointment is for 2 years with a potential for tenure track. Salary is commensurate with experience.

**Qualifications:** Applicants should have a Ph.D. in biochemistry or microbiology with 3 to 5 years of postdoctoral experience. *Applicants must be either U.S. citizens or U.S. permanent residents.*

**How to apply:** Send CV or résumé with names of three references to:

#### FDA/CBER

1401 Rockville Pike, HFM-123  
Rockville, MD 20852-1448

Attention: 96026-WV - Recruitment Office

For questions and/or further information about the position, please call Willie F. Vann, Ph.D. at 301-496-2008 (e-mail: [wvann@helix.nih.gov](mailto:wvann@helix.nih.gov))

*FDA is an Equal Opportunity Employer and has a smoke-free environment.*

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- Stereochemistry
- Polymer Chemistry
- Organic Chemistry

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Candidates should have an appropriate degree (BS or MS). The ability to read technical documents and patents in German, French or Japanese is very desirable.

We offer a professional working environment in convenient suburban area as well as competitive salaries, excellent insurance and retirement programs and generous vacations. For consideration, fax or mail your resume and salary requirements to:

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Human Resource Department-SR  
PO Box 3012  
Columbus, Ohio 43210  
FAX: 614-447-3816



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### MAYO CLINIC POSTDOCTORAL POSITION

Postdoctoral position is available immediately with an active group investigating the T cell response to peptides encoded by Thyle's virus. The central focus of this research effort is the identification of virally encoded peptides that are recognized by cytolytic T lymphocytes and the roles played by these peptides in inducing resistance to demyelination in a mouse model of multiple sclerosis. A Ph.D., M.D., or D.V.M. degree is required and experience in *in vitro* assays of cellular immunology and basic methods of molecular biology is preferable. Send a curriculum vitae, description of research experience, and the names and addresses of three references to:

**Dr. Peter J. Wettstein**  
([wettstein@mayo.edu](mailto:wettstein@mayo.edu))

or

**Dr. Moses Rodriguez**  
([redriguez@mayo.edu](mailto:redriguez@mayo.edu))

Department of Immunology

Mayo Clinic  
200 First St. SW  
Rochester, MN 55905

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



## Associate Director of Vaccine and Prevention Research

(GS-15)

The Division of AIDS (DAIDS), NIAID is seeking an outstanding physician (M.D.) or scientist (Ph.D.) to fill the very critical, high-profile position of Associate Director of Vaccine and Prevention Research. Incumbent will oversee a comprehensive Extramural program to discover promising HIV/AIDS vaccines and other biomedical prevention approaches and further their development through basic and clinical research on a global scale. The position is responsible for creating and implementing an overall research agenda and specific research initiatives involving diverse scientific disciplines.

**Basic Qualifications (M.D.):** Doctor of Medicine, Doctor of Osteopathy OR Ph.D. in a health or health-related research field with comprehensive knowledge of the field of HIV vaccine research and development.

Both M.D. or Ph.D. candidates must have expertise in managing a complex biomedical research program

and the ability to inspire and lead a dedicated staff with expertise in areas that include microbiology/immunology, infectious diseases, public health, international health, and clinical site monitoring. The position requires highly developed interpersonal and communication skills in order to interact effectively with representatives of academia, private industry, other national and international research and health organizations and government agencies, the scientific and lay press, and the general public.

**SPECIFIC APPLICATION PROCEDURES APPLY.** For more information contact **Sheila Conner at 301-402-0957 or [sc23@nih.gov](mailto:sc23@nih.gov).**

Salary commensurate with experience and level of accomplishment and will range from of \$77,361 to \$99,123 (M.D's) and \$77,798 to \$101,142 for non-M.D's. Recruitment Bonus/Relocation expenses up to 25% of base pay or Physicians's Comparability Allowance (M.D's) may be available.

### NEW ENDOWED CHAIR IN CANCER RESEARCH

The newly funded Endowed Chair offers the successful candidate the exciting opportunity to head and shape the future research of an expanding group of investigators, focusing on the biology and therapy of childhood cancer. The successful candidate will have the opportunity to expand research on site and build on the existing collaborative network involving the BC Cancer Research Centre, The Centre for Molecular Medicine and Therapeutics and the BC Research Institute. The successful candidate should have internationally recognized expertise in the Molecular Biology of cancer, and have proven team building capabilities and strong leadership skills.

The position will link with a strong clinical trials program at BC's Children's Hospital and the Children's cancer Group. This affords an excellent opportunity for material based, basic and transitional biological research.

Applicants must be eligible for academic appointment to the Department of Pediatrics, Faculty of Medicine, University of British Columbia.

Applications should be received by the 28th of February, 1998, and should include curriculum vitae, three references, a summary of research accomplishments and information on future research directions.

UBC hires on the basis of merit and is committed to employment equity. We encourage all qualified persons to apply. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. International applications are welcomed. Send applications in confidence to: **Dr. Judith G. Hall, MD, Professor and Head, Department of Pediatrics, UBC and BC's Children's Hospital, 4480 Oak Street, Vancouver, BC V6H 3V4. E-Mail [jhall@wpog.childhosp.bc.ca](mailto:jhall@wpog.childhosp.bc.ca) Fax: (604) 875-2890.**



BC Cancer Agency



B.C. RESEARCH INSTITUTE FOR  
CHILDREN'S & WOMEN'S HEALTH

Incyte Pharmaceuticals, Inc., is a leader in the design, development and marketing of genomic database products, software tools and related services. Our database products integrate bioinformatics software with both proprietary and publicly available genetic information to create information-based tools used by pharmaceutical and biotechnology companies in drug discovery and development.

### SURGICAL PATHOLOGIST / SR. CLINICAL SCIENTIST

You will be responsible for the surgical / pathological diagnoses of all banked Incyte tissue pieces/sections as well as evolving tissue classification schemas. Additionally you will be responsible for providing scientific understanding to Incyte's software development to biological databases. Your main role will be to work with research scientists to establish useful clinical assays for diagnosing disease and treating patients using Incyte's gene expression databases and data mining capabilities. You will as a physician, become Incyte's liaison in providing the utility of developed screens to the medical community at large.

Requires a MD or MD/Ph.D. and post-graduate training in surgical pathology. Must possess a clear knowledge of the power of functional genomics in better understanding human diseases coupled with excellent communication and interpersonal skills. In this position, you will interact with the scientific community at Incyte, composed of research scientists, programmers, and database developers. External collaborators include pharmaceutical R&D staff as well as a national network of hospital-based tissue suppliers.

If you recognize these qualities in yourself, we want to hear from you. Incyte offers competitive salaries, an outstanding benefits package and significant opportunities for professional growth. Mail/Fax your resume to:

Incyte Pharmaceuticals  
Attn: HR/REF: SD1347SS

3174 Porter Drive; Palo Alto, CA 94304.

FAX: (415) 845-4176. EOE.

E-mail: [employ@incyte.com](mailto:employ@incyte.com) - Website: [www.incyte.com](http://www.incyte.com)



INCYTE  
PHARMACEUTICALS, INC.

## Medical School

### Assistant Professor in Cell Biology and Neuroanatomy

The Department of Cell Biology and Neuroanatomy seeks applications for a tenure track assistant professor position. Research areas will be considered that complement the departmental strengths in cell biology, developmental biology and neuroscience. A demonstrated ability to interact and collaborate will be favored. Candidates will be expected to develop a strong, independent research program that leads to external funding. Teaching will be in human gross anatomy for professional students, as well as the opportunity to participate in several interdepartmental graduate programs. Previous gross anatomy experience is not required, but if necessary, the successful candidate must be willing to learn to teach gross anatomy. Applicants must possess a Ph.D. or equivalent degree and have at least two years of postdoctoral experience. Strong candidates will have significant publications in high quality peer-reviewed journals. Candidates must be U.S. citizens or be able to secure permanent resident status and must provide verification of highest degree. Candidates should send curriculum vitae, statement of research interests, and arrange for three reference letters to be sent to: Hasina Hason, Department of Cell Biology and Neuroanatomy, 4-144 Jackson Hall, 321 Church St. S.E., University of Minnesota, Minneapolis MN 55455. The last date for receipt of applications is March 16, 1998.

*The University of Minnesota is an equal opportunity educator and employer.*

#### POSITIONS OPEN

##### HARVARD UNIVERSITY ENVIRONMENTAL ENGINEERING

We invite applications and nominations for a tenure-track junior faculty position in environmental engineering, to begin in the fall of 1998. Candidates should have strong experimental and/or quantitative qualifications in hydrology, defined as the chemistry, biology, and physics of pollutant and water transport. Included are surface water and groundwater hydrology, especially modern approaches such as tracer techniques, regional and global modeling, and problems of multiphase transport.

Candidates should have a strong commitment to undergraduate teaching and graduate training in engineering and the environmental sciences as well as an outstanding research record. Applicants must have completed a Ph.D. by September 1, 1998.

Candidates should send a curriculum vitae, including names of three references with e-mail contact information, a list of publications, and a statement of research and teaching interests to: Environmental Engineering Search Committee, Division of Engineering and Applied Sciences, Pierce Hall 218, Harvard University, 29 Oxford Street, Cambridge, MA 02138. Applicants are encouraged to apply before March 1, 1998. *Harvard is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and members of minority groups.*

##### FACULTY POSITION BOSTON UNIVERSITY SCHOOL OF MEDICINE

An NIH-funded LABORATORY INVESTIGATOR is sought for the study of retinal and retinal pigment epithelial lipid and protein metabolism in aging. Immunocytochemistry experience is desirable. A Ph.D. and U.S. citizenship or permanent residency is required. Renovated laboratory space and supplemental salary support is available. Please submit a cover letter, curriculum vitae, copies of selected publications, and names, addresses, and telephone numbers of three references to: Dr. Robert Haimovici, Search Committee, Department of Ophthalmology, Boston University School of Medicine, 715 Albany Street, Boston, MA 02118-2526. Telephone: 617-638-4550. *Equal Opportunity Employer.*

#### POSITIONS OPEN



##### UNITED STATES DEPARTMENT OF AGRICULTURE PLANT GENE EXPRESSION CENTER Albany, California

The Agricultural Research Service (ARS) is accepting applications for the position of CENTER DIRECTOR for the Plant Gene Expression Center (PGEN) in Albany, California. PGEN is a consortium of ARS and the University of California, Berkeley (UCB). The ideal candidate will have a distinguished professional record with substantial experience in research. Evidence of creativity and demonstrated leadership and management skills are also required. The applicant should be capable of stimulating collaboration and interaction across a wide spectrum of plant biology research areas. A Ph.D. in plant molecular biology or related discipline is highly desirable. The applicant's research program should address an agriculturally important problem, using biochemical, molecular, or genetic approaches, and should complement existing PGEN programs. The applicant will also be considered for appointment as an Adjunct Professor by the Department of Plant and Microbial Biology at UCB. Salary for the GS-15-level position (\$81,272 to \$105,658) will be based on qualifications and experience. *Must be a U.S. citizen.* For information on research program and/or position contact: Dr. Antoinette A. Betschart, USDA-ARS-PWA, 800 Buchanan Street, Albany, CA 94710. Telephone: 510-559-6060; e-mail: abetschart@ars.usda.gov; FAX: 510-559-5779. For general information or application procedures and forms contact: Jan Lewis, USDA-ARS-PWA, Personnel Office, 800 Buchanan Street, Albany, CA 94710. Telephone: 510-559-6014. Application forms must be mailed directly to: USDA-ARS, Human Resources, 6305 Ivy Lane, Room 224, Greenbelt, MD 20770-1435 and be postmarked by March 9, 1998.

*The U.S. Department of Agriculture is an Equal Opportunity Employer.*

#### POSITIONS OPEN

##### DEAN OF NATURAL AND SOCIAL SCIENCES LEHMAN COLLEGE OF CUNY

The Dean supervises 12 academic departments comprised of 133 full-time faculty. She/he reports to the Provost/Senior Vice President for Academic Affairs and serves as a member of the Deans Council. The candidate should have an earned doctorate in one of the disciplines within the Division (see the Lehman College website: <http://www.lehman.cuny.edu>) and a record of academic achievement in the discipline meriting appointment as a tenured Full Professor. Additionally the candidate should have a demonstrated record of success in obtaining federal, state, and private grants, and evidence of a strong commitment to the goals of urban public higher education serving diverse populations. Salary range: \$89,762 to \$105,115. Anticipated appointment date: July 1, 1998. Send letters of application with curriculum vitae by February 16, 1998, to: Professor Robert DiBennardo, Chair, Search Committee, Lehman College/CUNY, 250 Bedford Park Boulevard West-D418, Bronx, NY 10468. *An Equal Employment Opportunity/Affirmative Action/ADA Employer.*

##### FACULTY POSITIONS MICROBIOLOGY AND PHYSIOLOGY

Two full-time faculty positions at the ASSISTANT PROFESSOR rank are available effective July 1, 1998. One is in medical microbiology, with teaching responsibilities primarily in bacteriology, mycology, and parasitology. Additional experience in immunology or virology is preferred. The other position is in physiology, with specialty primarily in endocrinology and reproductive physiology, although experience in other areas of physiology would also be helpful. Excellent teaching skills are essential. Candidates are also expected to have a record of grant writing and active research. Please send a letter describing your qualifications and interests, a complete curriculum vitae, and the names of three references by March 1, 1998, to: Sandra Piccini, Director of Human Resources, Touro University College of Osteopathic Medicine, 1210 Scott Street, San Francisco, CA 94115. *The Touro University College of Osteopathic Medicine-San Francisco is an Affirmative Action/Equal Opportunity Employer.*



## The Future of Genomics™

A rapidly growing public genomics company located in the heart of Silicon Valley is looking for aggressive and enthusiastic professionals who thrive in a fast-paced collaborative environment. Be a part of the team that is making substantial contributions to the discovery of human genes, with the highest throughput cDNA screening. If you have the following qualifications & are highly motivated, we would like to hear from you:

### Scientist

Ph.D's with industrial or academic experience in DNA cloning & analysis, PCR and hybridization, DNA diagnostic methods of informatics. The ideal candidate will have 5-10 years of experience managing groups of scientists in both research and production line settings. Ability to plan, schedule, and budget for projects, meet production schedules, and create new systems is required. Strong background in genetics, molecular biology, or related fields. **JOB CODE: SCI6321.**

Ph.D. in Molecular Biology or equivalent with 2+ years of experience in fluorescence DNA sequencing. To work in either research or production group. Industrial and academic experience required. **JOB CODE: SEQ9556.**

Postdoctoral researchers with outstanding credentials to work in DNA sequencing, DNA chip development & database development. **JOB CODE: MB3501.**

Hyseq, Inc. offers competitive salary & benefits. Send, fax, or e-mail résumé w/cover letter & salary history to:

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Attn: HR Dept., 575 Maude  
Court, Sunnydale, CA 94086  
Fax: (408) 524-8141  
E-mail: [hr@sbh.com](mailto:hr@sbh.com).  
No calls please.

# The feel of a *start-up*. The force of a leader.

All the energy and excitement of a new venture. All the strength of 35 years of experience and proven leadership. These forces combine to create the environment that is GTC today. Our genomics research has provided our pharmaceutical partners with a valuable tool for gene discovery. Today our expertise in Pathogen, Human and Functional Genomics research is complemented by well recognized capabilities in Bioinformatics and High Throughput Screening. Join us in building a world class integrated genomics company.

## Bioinformatics

### Relational Database Administrators

- Sybase environment
- 4+ years' experience

### Senior Software Engineers

- Lead design and development of data management, analysis, and visualization systems to support production and use of biological data
- 5+ years' commercial programming experience
- Function in dynamic environment with changing requirements
- Good communication skills

### Software Engineers

- 2+ years' object-oriented programming job experience
- UNIX, Perl, C/C++, Smalltalk, Java
- Database applications a big plus

### SAS Programmers

- Manage and analyze data for genetic linkage studies
- BS/MS/Ph.D. in Computer Science, Statistics, or Mathematics or background in genetics with extensive computing experience
- 2+ years' experience
- Experience in multivariate analysis useful
- SAS interface with relational databases helpful

### Scientific Programmers

- Write and modify numerical software for statistical analysis of genotyping data in human genetics
- BSCS/EE, 2+ years' scientific programming work experience
- C, Fortran, UNIX

### Genome Analysts

- MS/Ph.D. in Biological or Biochemical Science
- Human or microbial lab background
- Extensive sequence analysis experience

## Genomics Technology

### Biochemists/Biotechnologists

- Develop and test new solutions to challenging problems in high throughput sequencing and genomic analysis using micro-arrays
- Ph.D. with postdoctoral experience preferred
- Experience in DNA or surface chemistry, nanoliter scale liquid handling, and ultra high-throughput automation
- Good communication skills and an ability to work closely with teams of engineers and molecular biologists essential

### Scientists

- BS and MS level scientist positions exist in our high throughput sequencing and finishing groups
- In addition to previous lab experience, candidates should also be highly computer literate

### Laboratory Automation Operator

- Position will conduct biochemical/biological assays on an integrated high throughput automation platform
- Individual will interface with development personnel as well as integrate with production group
- Multidisciplinary background in networks/computers, laboratory instrumentation/automation and biochemistry as well as demonstrated abilities to trouble shoot hardware/software issues and solve problems in complex laboratory operations required
- Ability to work independently and interact with other groups essential

## Functional Genomics

### Scientists

- MS/Ph.D. level scientists opportunities exist to identify functionalities of various human and pathogen genomics information to create a bridge between gene discovery and drug discovery

## Pathogen Genetics

### Senior Molecular Biologists

- Position will focus on the identification of novel targets for the development of a new generation of anti-infective therapeutics
- Ph.D. candidates with 0-5 years' postdoctoral experience in fungal molecular genetics
- Experience with genomic approaches and sequence analysis packages such as GCG highly desirable

### Scientists

- Participate in projects focused on developing high throughput methods of target validation and cell-based assays for validated targets of unknown function
- BS/MS with 2 years' experience
- Expertise in general molecular biology and/or microbial genetics to facilitate the use of genomic DNA sequences in the identification, characterization, and use of novel antifungal and anti-microbial drug targets
- Computer skills desirable

## Human Genetics

### Genetic Epidemiologist

- Analyze data to study the genetic causes of complex human diseases and contribute to the development of improved methodologies
- MS/Ph.D. in a relevant discipline (i.e. Biostatistics, Epidemiology, Public Health, or Human Genetics) with experience in genetic epidemiology
- Ability to communicate effectively with scientists and managers, balance priorities between multiple projects, and function effectively in the face of changing requirements
- Experience with genetic linkage analysis, data, quantitative genetics, biostatistics, and UNIX based programming required

### Scientists

- Participate in various human disease research areas
- MS and Ph.D. level experience

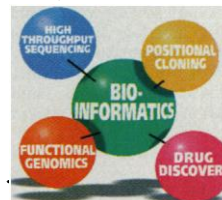
## Business Development

### Senior Business Development Professional

- Technology evaluation and commercial assessment
- Interface with academic institutions, biotech firms, and large pharmaceutical companies
- Negotiate various business arrangements
- Planning/marketing of novel products

Bioinformatics candidates should forward resumes to Dept.: JAP. General and Administrative candidates to Dept.: PM. All other applicants should forward their resumes to Dept.: DAG. **Human Resources, Genome Therapeutics Corporation, 100 Beaver Street, Waltham, MA 02154; FAX (617) 893-9535 or e-mail: [human.resources@genomecorp.com](mailto:human.resources@genomecorp.com).**

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## POSITIONS OPEN

### FACULTY POSITION DEPARTMENT OF PHARMACOLOGY University of Wisconsin Medical School

The Department of Pharmacology invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level, available July 1, 1999, as part of a Departmental growth program. Applicants should have a Ph.D. and/or M.D., relevant postdoctoral experience, a strong research background, and be using state-of-the-art methods to define molecular mechanisms which regulate cell function. Outstanding individuals who will expand and complement current Departmental teaching programs and research programs in the area of cardiovascular pharmacology, receptor pharmacology, neuropharmacology, signal transduction, and regulation of cell growth will be considered. Faculty in the Department of Pharmacology are expected to establish externally funded research programs and teach medical students, graduate students, and postdoctoral trainees. The Department of Pharmacology functions in an outstanding research environment and participates in campus-wide interactive programs. An attractive start-up package and competitive start-up funds will be available.

Applicants are encouraged to apply by February 28, 1998; the search will continue until the position is filled. Applicants should send a curriculum vitae, along with a summary of research interests and goals, and arrange to have at least three letters of reference sent to:

**Faculty Search Committee  
Department of Pharmacology  
University of Wisconsin Medical School  
1300 University Avenue  
Madison, WI 53706-1532**

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

### DEPARTMENT HEAD DEPARTMENT OF BIOLOGY FALL 1998 TENURED FULL PROFESSOR

Northern Michigan University invites applications for Department of Biology Head as tenured Full Professor. Requirements include Ph.D. (preferred but not limited to: entomology/invertebrate zoology, lower plant biology, plant molecular biology, or wildlife ecology), demonstrated administrative abilities, record of professional accomplishments in teaching and research. Head has overall responsibility for instruction, recruitment, promotion/tenure, budget; and is expected to teach, direct research, act as departmental advocate, and lead in Equal Opportunity. Complete qualifications provided on request.

For additional information visit **website: <http://www.nmu.edu/biology>**.

Application review begins February 15, 1998, and continues until position is filled. Appointment begins July 1, 1998. Send curriculum vitae, statement of administrative philosophy and vision, and names, addresses, telephone numbers, and e-mail addresses of five references to: **Chair, Department Head Search, Department of Biology, 1401 Presque Isle Avenue, Northern Michigan University, Marquette, MI 49855-5341. Telephone: 906-227-2310. FAX: 906-227-1063. E-mail: [biology@nmu.edu](mailto:biology@nmu.edu).**

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

Microbiology/cell biology. **ASSISTANT PROFESSOR**, full-time, tenure-track. The department seeks a person with a Ph.D. plus combined strength in teaching and research; a commitment to research with undergraduates; and experience in laboratory studies. Teaching responsibilities will include lectures and laboratories in microbiology, cell biology, and a majors introductory biology course. Vertebrate ecology. **VISITING INSTRUCTOR**, one year, full-time, non-tenure-track. Ph.D. and teaching experience required. Responsibilities include teaching lectures and laboratories in ecology, vertebrate biology, and a non-majors general biology course. Applicants should send curriculum vitae, a teaching statement including experience and plans for engaging students in active learning by February 16, 1998, and arrange for graduate transcripts and three letters of reference to: **Dr. Karin A. Grimmes, Department of Biology, Alma College, Alma, MI 48801. Telephone: 517-463-7198; e-mail: [grimmes@alma.edu](mailto:grimmes@alma.edu); website: [www.alma.edu](http://www.alma.edu).** Applicants for the tenure-track position must also submit a research plan. A selective liberal arts college in central Michigan, Alma College has a stable enrollment of 1,400 students and is a member of the Undergraduate Science Group. *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### PENNSTATE



### FACULTY POSITIONS IN MOLECULAR PHARMACOLOGY AND TOXICOLOGY

Two tenure-track positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level are available in the Pharmacology Department of the Pennsylvania State University College of Medicine. The positions require a Ph.D. degree and postdoctoral training. One position requires demonstrated experience in molecular pharmacology. Research areas of special interest include antisense oligonucleotide therapeutics, patch clamp analysis of ion channels, and mechanisms of signal transduction. Proven capability in generating extramural support and ability to work as an independent investigator will be crucial in the selection process. The successful candidate will participate in teaching medical and graduate students; previous teaching experience in pharmacology would be helpful.

The second position requires demonstrated expertise in molecular toxicology. Research areas of interest include molecular carcinogenesis, developmental toxicology, and receptor and ion channel-based toxicology. The successful candidate will apply techniques of molecular biology to address mechanistic issues in toxicology. This position will be co-funded with the Life Sciences Consortium (LSC) of Pennsylvania State University. The candidate will interact with faculty members in the Cellular and Molecular Toxicology Program, and will foster collaborative research projects and will participate in teaching graduate and medical students. Additional information concerning this position and the LSC is available at the following **website: <http://www.lsc.psu.edu>**.

Start-up funds are available for both positions and salaries will be commensurate with experience and qualifications. Interested applicants should identify which position is of interest and should send a curriculum vitae, three representative reprints, and names and addresses of three referees to: **Dr. Elliot S. Vesell, Department of Pharmacology H078, Penn State University College of Medicine, P.O. Box 850, Hershey, PA 17033.**

Deadline for receipt of applications is March 31, 1998. *Penn State University is an Equal Opportunity/Affirmative Action Employer; minorities and females are encouraged to apply.*

### ASSISTANT PROFESSOR, WILDLIFE

Ph.D. in wildlife with emphasis in wetland ecology. Experience with agricultural systems, GIS, or wildlife diseases desirable. Record of excellence in undergraduate teaching and ability to work with students in field applications and applied research preferred. Work experience with a wildlife agency desirable. This tenure-track position includes teaching up to 12 credits per semester and three to six weeks during the summer, advising undergraduates, and directing graduate research in specialty. Appointment begins August 1998 or January 1999. Salary commensurate with qualifications and experience. For full consideration send letter of application, curriculum vitae, copy of academic transcripts, at least three letters of reference, and examples of scholarly work by 1 March 1998 to: **Dr. J. W. Hardin, College of Natural Resources, University of Wisconsin-Stevens Point, Stevens Point, WI 54481. E-mail: [jhardin@uwsp.edu](mailto:jhardin@uwsp.edu).** *University of Wisconsin-Stevens Point is an Equal Opportunity Employer.*

The Department of Zoology, University of Hawaii invites applications for a tenure-track **ASSISTANT PROFESSOR** position. The successful candidate is expected to develop an active research program in any area of developmental biology. Teaching responsibilities will include an advanced undergraduate course in developmental biology and a graduate course in his/her specialty. Individuals whose research interfaces developmental and evolutionary biology are encouraged to apply. Applicants must have a Ph.D., evidence of significant research accomplishments, and a commitment to excellence in teaching. Postdoctoral experience is preferred. Letters of application should be accompanied by a curriculum vitae, statements of research and teaching interests, and reprints of three publications. Applicants should provide the names, addresses, e-mail, and telephone contacts of three references to: **Search Committee, Department of Zoology, 2538 The Mall, University of Hawaii, Honolulu, HI 96822.** Closing date: March 9, 1998. *The University of Hawaii is an Affirmative Action/Equal Opportunity Institution.*

## POSITIONS OPEN

### TWO ASSISTANT PROFESSORS MICROBIOLOGY AND IMMUNOLOGY UNIVERSITY OF NORTH DAKOTA School of Medicine and Health Sciences

The Department of Microbiology and Immunology at the University of North Dakota School of Medicine and Health Sciences invites applications for two tenure-track faculty positions at the Assistant Professor level. Candidates should have a Ph.D. or M.D., postdoctoral experience, and a record of innovative research productivity that demonstrates the potential to establish an externally funded, independent research program. One position is for an Immunologist with research interests in the interactions between the immune system and infectious agents, either bacterial or viral, and with training or experience in the mechanisms and techniques of cell-mediated immunity. The second position is for a Microbiologist with research interests in the pathogenesis of bacteria or viruses. The successful candidates will complement, expand, and strengthen existing areas of research in the Department, and will participate in teaching medical students, graduate students, and allied health students. Specific information about the Department of Microbiology and Immunology and about the University of North Dakota is available at **website: <http://www.med.und.nodak.edu/depts/microb/home.htm>**.

Review of applications will begin March 1, 1998, and will continue until suitable applicants have been identified. To apply, send a curriculum vitae and statement of research plans, and have three letters of recommendation sent to: **Dr. Roger Melvold, Chair, Department of Microbiology and Immunology, University of North Dakota School of Medicine and Health Sciences, Grand Forks, ND 58202-9037.**

*University of North Dakota is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR ECOLOGIST/BOTANIST

The Department of Natural Sciences at the University of North Florida invites applications for a tenure-track position beginning August 1998. A Ph.D. in the general area of plant ecology is required. Applicants must demonstrate a strong commitment to undergraduate teaching and the ability to conduct meaningful research involving undergraduates. The successful candidate will have a specialization in ecology with a strong background in botany and will be able to teach courses in general ecology, botany, and introductory biology. Postdoctoral experience and the ability to procure external funding are valued assets. A letter of application, curriculum vitae, concise statements of teaching and research interests, undergraduate and graduate transcripts, and three letters of reference should be sent to: **Valerie J. Harwood, Biology Search Committee, Department of Natural Sciences, University of North Florida, Jacksonville, FL 32224-2645** by postmark deadline March 4, 1998. *University of North Florida is an Equal Opportunity/Equal Access/Affirmative Action Institution. Individuals who need reasonable accommodations to participate in the application/selection process must notify the Search Committee at the address listed above (or Telephone: 904-620-2830) a minimum of five (5) working days in advance of the interview.*

### MOLECULAR IMAGING JUNIOR STAFF POSITION INSTRUCTOR/ASSISTANT PROFESSOR

The Center for Molecular Imaging Research (CMIR) in the Department of Radiology at Massachusetts General Hospital, Harvard Medical School invites applications for a faculty position in the area of molecular imaging research. The successful candidate must be an independent investigator (M.D.-Ph.D. or M.D.) with an outstanding track record for independent research and extramural support. Candidates should have expertise in either cell or molecular biology techniques to conduct interdisciplinary research (for further information see **website: <http://www.mgh.harvard.edu/depts/CMIR/CMIR.html>**). Excellent verbal and written communication skills are required. Successful candidates will also have a clinical appointment in the Department of Radiology and should be American Board of Radiology (ABR) certified or eligible. Send curriculum vitae, names and addresses of three references to: **Ralph Weissleder, M.D., Ph.D., CMIR, Department of Radiology, Massachusetts General Hospital, CNY 149-5403, Charlestown, MA 02129.**

*The Massachusetts General Hospital is an Affirmative Action/Equal Opportunity Employer.*

# Senior Research Associate

Located in the San Francisco Bay Area, **COR Therapeutics, Inc.** is a publicly-held biopharmaceutical company focused on the discovery & development of novel therapeutics for the treatment of severe cardiovascular disease. Our continued growth has created an exciting career opportunity for a motivated self-starter to join our expanding R&D team.

You will design/implement *in vivo* experimentation; perform pharmacokinetic, pharmacodynamic, efficacy, and toxicological evaluation of new compounds in relevant models; interpret/analyze experimental results; write departmental reports; and help train/manage departmental personnel. The position requires a BS with 5+ years' experience or an MS with 2+ years' experience; prior *in vivo* experience in an academic, pharmaceutical, or biotechnology setting; demonstrated ability to utilize laboratory techniques & methodologies; and strong written/verbal communication skills. Prior *in vivo* experimentation in the field of thrombosis, coagulation, or vascular restenosis a definite plus.

We offer competitive salaries & benefits, attractive equity positions and the opportunity to make significant research contributions. To apply, please send resume & salary history to: **COR Therapeutics, Inc., Human Resources, Attn: Job# 97072-SC, 256 East Grand Ave, South San Francisco, CA 94080; Fax: (650) 244-9208; Email: hr@corr.com. COR is an equal opportunity employer.**

**COR** COR THERAPEUTICS, INC.

**3M**

## Inhalation Toxicologist

3M Pharmaceuticals, a leading aerosol drug development company, has an immediate opening for an inhalation toxicologist. The position entails the designing and conducting of internal and external preclinical safety programs as well as participation in the aerosol drug discovery process. This person will be responsible for the small animal inhalation laboratory and for placing and monitoring outside toxicology studies in support of the global registration of products. The person will author INDs, NDAs, and European and global regulatory submissions as well as defend these programs globally. 3M Pharmaceuticals is an R&D driven organization heavily dependent on the team process. The successful candidate will serve on highly empowered development teams and will interact extensively with a diverse team of pharmaceutical scientists. Other duties include the supervision of junior staff. The candidate should have a Ph.D. in toxicology or closely related field, with demonstrable inhalation experience, preferably in the pharmaceutical industry. Certification or intent to be certified by the American Board of Toxicology is highly desirable.

3M is a Fortune-50 company headquartered in St. Paul, Minnesota with global operations in over 50 countries. 3M offers highly competitive salaries and benefits. The main research campus is located such that there is easy access to metropolitan as well as rural lifestyles. The Twin Cities provide cultural opportunities as well as a variety of outdoor activities for all seasons.

For confidential consideration, please submit your resume (no phone calls or agencies) to:

**NAS Reply Service  
Dept. 1MP320  
Job #R39085  
Riverview Office Tower  
8009 34th Ave South  
Minneapolis, MN 55425-1619**

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WHERE IT MATTERS MOST.



When it comes to improving people's lives, there are no shortcuts. That's why at Johnson & Johnson we give it our all. 100% of the time. It's a business philosophy that's led to our being awarded the National Medal of Technology. And one that's helped us set new standards of excellence for our industry and our people.

## Postdoctoral Position Molecular Toxicology

We have two positions in our **Raritan, NJ** facility for highly-motivated individuals to work in a new, exciting and rapidly evolving area of toxicology using modern experimental approaches to create streamlined mechanism-based assays for evaluating the potential toxicity of developmental pharmaceuticals. Will participate in the development and validation of novel *in vitro* assays for assessment of toxicity, use of gene expression endpoints including DNA chip technology, and high throughput screens for toxicology. Opportunities for collaboration within the company and with outside consultants are available. Publication of results is encouraged.

To qualify, candidates must have a Ph.D. in Biochemistry, Toxicology, Pharmacology, Molecular Biology or a related discipline and a strong background/experience in cell biology and cell culture techniques. Expertise in biochemistry/molecular biology as evidenced by a record of publication and experience with indices of cellular toxicity, genotoxicity, monitoring gene expression, detection of mRNA by hybridization, or fluorescence and radiometric assays in cultured cells are required. Strong written/verbal communication skills and the ability to work in a highly interactive environment are a must.

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

To apply, please forward a scannable resume and salary requirement, to: **Dept. 1788, Johnson & Johnson Recruiting Services, PO Box 16597, New Brunswick, NJ 08906-6597.** An equal opportunity employer, m/f/d/v, committed to diversity in the workplace.

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**Johnson & Johnson**



## POSITIONS OPEN

### ASSISTANT PROFESSOR OF BIOLOGY McMASTER UNIVERSITY

McMaster University, a research-intensive institution and leading centre for biomedical and biological research, invites applications for a tenure-track position at the Assistant Professor level in the Department of Biology, effective July 1, 1998.

Candidates must hold a Ph.D. in biology or a closely related field from an accredited university, possess at least one year of postdoctoral experience, and have a productive research record in an area of cell biology, genetics, or virology. Successful applicants will be expected to establish and maintain an independent and externally funded research program, contribute to the education of graduate students, and teach undergraduate courses in one or more of genetics, cell biology, and virology.

Applicants should submit a curriculum vitae, a statement of their research goals, a statement of their teaching interests and experience, and should arrange for three letters of recommendation to be sent to: **Dr. Andrew J. Rainbow, Professor and Chair, Department of Biology, McMaster University, 1280 Main Street West, Hamilton, Ontario L8S 4K1 Canada.** The closing date for applications is March 1, 1998. E-mail and FAX applications will not be accepted.

*In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. McMaster University is committed to Employment Equity and encourages applications from qualified men and women, members of visible minorities, aboriginal peoples, and persons with disability.*

**OPEN RANK.** The Department of Pathology, University of Alabama at Birmingham is seeking an individual for a position at the faculty level who is interested in joining an active and growing group of investigators in basic research and graduate training. Applicants should have a Ph.D. or M.D. degree and are expected to develop independently funded research programs. The successful candidate will have research interests aimed at understanding the mechanisms mediating the integration of signals derived from the T cell antigen receptor and co-receptors that regulate cytokine production and cell proliferation. Particular emphasis will be placed upon the development of novel technologies for the detection and genetic manipulation of these signaling outcomes. The successful candidate will have a demonstrated ability in extending the state of the art of flow cytometric analysis. This should involve the development of new fluorochromes and reporters. This candidate should also have a demonstrated facility with molecular biology tools including the rapid production of retroviral libraries. Level of appointment will be determined by qualifications. Please send a detailed curriculum vitae including description of research, recent reprints, and names of three references to: **Thomas M. Lincoln, Ph.D., Director, Division of Molecular and Cellular Pathology, Department of Pathology, University of Alabama at Birmingham, 170 University Boulevard, Birmingham, AL 35294-0019.** *University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer and welcomes applications from women and minorities.*

### ASSISTANT PROFESSOR OF PLANT PATHOLOGY UNIVERSITY OF CONNECTICUT

The Department of Plant Science invites applications for a tenure-track position. Ph.D. in plant pathology or closely related area required. Applicants should have research experience with molecular methods and plant diseases, interest in undergraduate teaching, and a record of scholarly contributions. The successful applicant will develop an externally funded research program emphasizing the molecular basis of plant pathogen-host plant interactions. Teaching responsibilities include an upper-division undergraduate course in plant diseases and a graduate course in an area of interest. The successful applicant will also be expected to support efforts to aid the state's agricultural industry in plant disease management. Academic year (nine months), 60 percent research, 40 percent teaching. Closing date for applications: March 20, 1998. Position available August 23, 1998. Submit a letter of application including a statement of interests and goals, curriculum vitae, official transcripts, three letters of recommendation, and reprints of no more than three recent publications to: **Dr. George Elliott, Plant Pathology Search Committee, Department of Plant Science, U-67 University of Connecticut, Storrs, CT 06269-4067.** FAX: 860-486-0682; e-mail: gelliott@canrl.cag.uconn.edu. *Affirmative Action/Equal Opportunity Employer.* (Search #98A262)

## POSITIONS OPEN

### Juniata COLLEGE

#### VISITING ASSISTANT PROFESSOR OF BIOLOGY

The Department of Biology at Juniata College invites applications for a one-year sabbatical replacement starting August 1998. Ph.D. with teaching experience in microbiology, ecology, evolutionary biology, or related area is required. Teaching assignment will include a library module in a freshman-level chemistry/biology laboratory, sophomore-level microbiology with laboratory, junior-level general ecology with laboratory, and evolution. Juniata College is a selective liberal arts institution with a strong reputation in the natural sciences, including undergraduate research (see website: <http://www.juniata.edu>). Send letter of application, curriculum vitae, transcripts, three letters of recommendation, and one-page descriptions of teaching philosophy and research interests to: **Ms. Gail Leiby Ulrich, Director of Human Resources, Juniata College, Huntingdon, PA 16652.** Review of applications will begin February 23, 1998, and will continue until the position is filled. *Affirmative Action/Equal Opportunity Employer.*

#### FACULTY POSITION BIOCHEMISTRY AND MOLECULAR BIOLOGY

Applications are invited for a research-track faculty position in the Department of Dermatology. Selected applicant would join a 50-member multidisciplinary research team studying molecular mechanisms of skin repair. The ongoing comprehensive research effort provides a unique opportunity to study regulation of signal transduction and gene expression at the molecular level in a human organ *in vivo* (see *Nature* **379**:336-339, 1996; *New England Journal of Medicine* **337**(20):1419-1428, 1997). Candidates should have documented expertise in state-of-the-art approaches to the study of gene regulation and/or signal transduction. Applicants should possess a Ph.D. degree, at least three years of postdoctoral experience, demonstrated research excellence, and strong written and oral communication skills. Selected applicants will be expected to conduct primary and collaborative research projects. Topics of interest include molecular mechanisms of cell activation by ultraviolet irradiation; regulation of signal transduction by reactive oxygen/anti-oxidants; functions of nuclear receptor superfamily members; cross-talk between nuclear receptors and AP-1/NF- $\kappa$ B; regulation of matrix protein/matrix metalloproteinases gene expression.

Please send curriculum vitae, a one-page summary of research interests, three representative reprints, and the names and addresses of three references to: **John J. Voorhees, M.D., Professor and Chair, Department of Dermatology, University of Michigan, 1301 East Catherine, Med Sci I R6447, Ann Arbor, MI 48109-0609.** FAX: 734-647-0076; e-mail: dianemch@umich.edu.

*The University of Michigan is a nondiscriminatory, Affirmative Action Employer and encourages minorities and women to apply.*

#### WASHINGTON UNIVERSITY SCHOOL OF MEDICINE DEPARTMENT OF ANESTHESIOLOGY

The Anesthesiology Research Unit is seeking to fill a tenure-track faculty position for a basic scientist at the ASSISTANT/ASSOCIATE PROFESSOR level. The successful candidate will be expected to use innovative cellular and/or molecular approaches to problems relevant to cell signaling (e.g., synaptic transmission, cell excitability, modulation, transmitter release). Generous start-up funds and space will be provided. The Unit provides a unique research environment with ongoing programs in the molecular biology of G-proteins, structure and function of ion channels, molecular targets of anesthetics, cellular physiology of excitable cells, and pain. Faculty members have joint appointments in a basic science department and are part of the strong graduate training program at Washington University. Candidates must have a Ph.D. and/or M.D. degree with appropriate postdoctoral experience. The application deadline is April 1, 1998. Interested individuals should submit a curriculum vitae, a statement of research plans, and names of three referees to: **Search Committee, Anesthesiology Research Unit, Box 8054, Washington University, 660 South Euclid Avenue, St. Louis, MO 63110.**

## POSITIONS OPEN

### FACULTY POSITION IN HEMATOPOIESIS/ LYMPHOCYTE DEVELOPMENT

The Department of Microbiology and Immunology in conjunction with the Division of Hematology and Oncology and the Sylvester Cancer Center at the University of Miami School of Medicine invite applications for a tenure-track faculty position at the ASSISTANT or ASSOCIATE PROFESSOR level for investigators with research interests in the development of hematopoietic stem cells. The preferred areas of investigation are either at the level of primitive stem cells or the development of lymphoid (B, T, NK) cells. Candidates who are also interested in oncogenesis and stem cell manipulation are encouraged to apply. The chief criteria for candidates are proven excellence in research and the potential to develop an externally funded research program.

All applicants who wish to be considered for the position at the level of Associate Professor should have an established, funded research program.

Interested applicants should send a current curriculum vitae, a statement describing research achievements and future research plans, and the names and addresses of three references to:

**Dr. Thomas Malek  
Chairman, Hematopoiesis Search Committee  
Department of Microbiology and Immunology  
University of Miami School of Medicine  
P.O. Box 016960 (R-138)  
Miami, FL 33101**

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

**ASSISTANT PROFESSOR.** Behavioral neuroscience. The Department of Psychology at Yale University expects to make an appointment at the rank of Assistant Professor in behavioral neuroscience effective July 1, 1998. The emphasis of the behavioral neuroscience faculty in the Department is on the analysis of learning and memory. Preference will be given to candidates whose research relates effectively to this concentration, but outstanding candidates in any subspecialty of behavioral neuroscience are encouraged to apply. Applicants are expected to provide high-quality teaching at the undergraduate level and in a graduate behavioral neuroscience program, and to have exhibited (or show clear promise of) excellence in research. Applicants should send a letter of application, a curriculum vitae, papers or reprints, and should arrange for three letters of recommendation to be sent to: **Chair, Behavioral Neuroscience Search Committee, Department of Psychology, Yale University, P.O. Box 208205, New Haven, CT 06520-8205.** Deadline for completed applications: March 1, 1998. *Yale is an Equal Opportunity/Affirmative Action Employer, and applications from women and minority group members are especially encouraged.*

**ASSISTANT/ASSOCIATE PROFESSOR** of biology, full-time, tenure-track position beginning July 1998. Qualifications: Ph.D. in microbiology with broad training, student-oriented teacher with commitment to teaching thinking skills/content. Minimum of one year of college/university teaching experience. Experience as a teaching assistant is acceptable. Responsibilities: teach undergraduate/graduate courses (introductory and cell/molecular biology, general and environmental microbiology, immunology, senior readings) including one or more courses in specialty; advise undergraduate/graduate students. To apply send a letter describing research and teaching interests, a curriculum vitae, official transcripts, and names, addresses, and telephone numbers of four references to: **Dr. Malcolm McEwen, Delta State University, Box 3262, Cleveland, MS 38733.** Telephone: 601-846-4248; e-mail: mmcewen@dsu.deltast.edu. Application deadline is February 6, 1998. *Equal Opportunity Employer/Minorities/Females.*

#### RESEARCH PERSONNEL

Advanced Viral Research Corporation (AVR), an established leader in the new exciting pharmacology of peptide nucleic acids (PNAs), is seeking research support personnel to staff its new research laboratories in Westchester County, New York City metropolitan area.

Candidates for these positions must have Bachelor's or Master's degrees, with at least one year of laboratory research experience. Candidates should be familiar with techniques of modern molecular biology and cell culture.

We offer highly competitive compensation and benefits packages. Please forward curriculum vitae to: **Advanced Viral Research, 200 Corporate Boulevard South, Yonkers, NY 10701, Attn: Dr. S. Hirschman.** FAX: 914-376-7368. *AVR is an Equal Opportunity Employer.*

### Laboratory Chief, NIAID, NIH

The National Institute of Allergy and Infectious Diseases (NIAID), NIH seeks an individual to head a Laboratory at the Rocky Mountain Laboratories (RML). This program is located in the Bitterroot Valley in Hamilton, Montana, and is a component of the NIAID Division of Intramural Research. This position requires an M.D., Ph.D., or equivalent with proven leadership abilities and a strong independent research program. Preference will be given to candidates with research interest in bacterial pathogenesis including emerging and reemerging infectious diseases and those whose program complements other research programs at the RML. The Laboratory Chief will have independent resources to conduct their research and will supervise other Principal Investigators with independent research programs. A Laboratory Chief in the Division of Intramural Research is equivalent to a Department Head in a University or Medical School. *Applicants must be U.S. citizens or permanent residents.* Salary depends on degree and qualifications and ranges up to \$148,400. Interested persons may contact **Dr. Karyl Barron, Deputy Director, DIR, NIAID** at (301) 402-2208 or ([kbarron@niaid.nih.gov](mailto:kbarron@niaid.nih.gov)) for additional information about the position. A curriculum vitae, bibliography, three letters of reference, a detailed statement of research interests, and selected publications should be submitted by March 31, 1998, to: **Ms. Melissa Keller, Office of Human Resources Management, NIAID, Building 31, Room 7A27, 31 Center Drive, MSC 2520, Bethesda, MD 20892-2520.**

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## Cancer Research Scientist

Pfizer scientists are involved in some of the most critical research in the world today. As a Fortune 100 company, we have established a product pipeline that is unparalleled, and an intellectual, collaborative environment that inspires scientific achievement. Join us and become a part of the cure.

In addition to a fast-paced, yet collegial environment, we offer very competitive salaries and excellent benefits including relocation assistance. For confidential consideration, please forward resume to: **Employee Resources, Pfizer Inc, Job Code #\_\_\_\_, Central Research Division, Eastern Point Road, Groton, CT 06340.** For more information about Pfizer, see us on the Internet at: <http://www.pfizer.com>. We are an equal opportunity employer M/F/D/V.

**For more opportunities,  
see our ad in  
the February 6th  
issue of Science**

Seeking a Cancer Pharmacologist (PhD or MD/PhD) to supervise a laboratory working as part of a multidisciplinary team focused on the discovery of novel antitumor agents. Demonstrated experience in cancer pharmacology required, with significant expertise in the biochemistry, cell and molecular biology of tumor cell signaling, growth regulation, apoptosis or angiogenesis. Working knowledge of contemporary tumor models/pharmacodynamic endpoints a plus. Strong communication skills expected, as is demonstration of significant achievement as member of a multidisciplinary team. Minimum qualifications are 3 years of postdoctoral work in cancer pharmacology or biology; industrial experience is highly desired. **Job Code: 2458**

## Research Associates

Seeking two highly motivated individuals who have interest in the discovery of novel, mechanism-based cancer drugs working within a multidisciplinary project team. These individuals will have a BS/BA plus 3 years of research experience, or an MS in a related discipline, and have demonstrable experience in pharmacology, molecular biology or protein biochemistry. Extensive knowledge of tumor cell culture techniques is preferred, and skills related to prokaryotic/eukaryotic protein expression, protein purification, and biochemical pharmacology, including work in animal models are highly desired. **Job Code: 2459**



*We're part of the cure.*

## BS/MS Level Scientists: High Throughput Screening

Join a group on the forefront of technology development. We are currently seeking scientists to develop new technologies which will accelerate the pace of drug discovery.

Candidates will participate in technology development for high throughput screening of combinatorial and discrete compound libraries. Previous work with signal transduction pathway proteins, kinases, or cell-based assays is a plus. BS/MS degree or equivalent required. Experience in high throughput screening, assay automation, micro liquid handling, or low light imaging highly desirable.

DuPont Merck offers a competitive salary and a generous benefits package including 401K plan as well as excellent working conditions and challenging assignments. Please send letter of introduction and resume to: The DuPont Merck Pharmaceutical Company, E400/2413-KO, P.O. Box 80400, Wilmington, DE 19880-0400. An equal opportunity employer, M/F/D/V.

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## POSTDOCTORAL POSITIONS Molecular Therapeutics

Funded postdoctoral positions are available to study molecular and cellular responses to cytotoxic stress. Laboratory projects currently focus on: 1) biochemical pathways leading to p53 induction after cytotoxic stress, 2) molecular mechanisms of ATM ("ataxia-telangiectasia-mutated") function and, 3) growth factor signalling pathways and apoptosis signalling. Successful candidates will have a strong background in molecular and/or cell biological techniques. Experience in oxidative metabolism pathways would be a desirable bonus. Please send a letter of interest and curriculum vitae to:

**Michael B. Kastan, M.D., Ph.D.**  
Department of Hematology/Oncology  
c/o Office of Academic Programs  
St. Jude Children's Research Hospital  
332 N. Lauderdale Street  
Memphis, TN 38105  
AA/EOE



## POSITIONS OPEN

### PARADIGM GENETICS, INC.

At Paradigm Genetics, Inc. we are taking an integrated approach to functional genomics utilizing molecular biology, genetics, biochemistry, physiology, and computer science in order to understand gene function and the rules by which genes and gene products interact to maintain living systems. Through this higher level of understanding functional genomics we will impact worldwide food and fiber production by improving the discovery of safer, more effective crop protection chemicals and seeds. Paradigm Genetics, Inc. is located in Research Triangle Park, North Carolina, where affordable housing, numerous outdoor activities, Smoky Mountains, and sunny beaches are at your doorstep. The Triangle area is also host to many technology companies both large and small.

### HEAD OF BIOINFORMATICS

The selected candidate will lead a highly motivated team aimed at design and implementation of bioinformatics tools designed to assist in gene identification, the understanding of gene function, target selection, target validation, and assay development. The successful candidate will report to the CEO/CSO and be involved in strategic issues involving the company. The Head of Bioinformatics will have a Ph.D. in computer science or equivalent and experience designing and implementing systems to understand biological systems, genes, and gene function. Experience with UNIX, Perl, and Oracle is also preferred.

### SCIENTIST

We are seeking highly motivated, independent Scientists interested in genomics/functional genomics of plants and fungal pathogens of plants. The selected candidate will be responsible for leading a scientific team or designing and implementing experiments aimed at understanding genes and/or gene function. A Ph.D., M.S., or B.S. degree in an appropriate field of study is required. Relevant laboratory experience includes biochemistry, molecular biology, cell biology, tissue culture sequencing, physiology, and functional genomics on any living system.

All successful candidates will enjoy ownership of Paradigm Genetics, a competitive salary, a benefits package, and a fast-paced, exciting team environment with emphasis on achievement, career development, and publication. Salaries will be determined by skills, experience, and highest degree obtained. Proven team building and excellent written and verbal communication skills are required for all positions. For consideration, please indicate the position of interest and send your résumé, including a list of your publications, experience, and three letters of recommendation, to:

Human Resources  
Paradigm Genetics, Inc.  
P.O. Box 14528

Research Triangle Park, NC 27709-4528  
E-mail: [hr@paradigmgenetics.com](mailto:hr@paradigmgenetics.com)

*Paradigm Genetics is committed to diversity in the workplace.*

### SUPERVISORY ECOLOGIST

The National Wetlands Research Center (NWRC) is seeking an experienced individual with a background in plant, ecosystem, or wetland ecology for the position of **CHIEF OF THE WETLAND ECOLOGY BRANCH**. The National Wetlands Research Center is a unit of the Biological Resources Division of the U.S. Geological Survey. The mission of the Wetland Ecology Branch is to conduct original research on the regulation of ecological systems and to predict the effects of environmental changes on ecosystem integrity. Projects within the branch include studies involving a wide range of ecosystem types including coastal and inland wetlands; riparian, estuarine, and marine habitats; prairies; and barrier islands. Conceptual topics include restoration ecology, conservation biology, exotic species, rare and threatened species and ecosystems, fire ecology, and global change. As Chief, Wetland Ecology Branch, the incumbent directs one of three principle research branches at NWRC. Salary for the position is in the range of \$55,004 to \$84,495 (GS0408 13/14) depending upon qualifications and experience level. This federal position is expected to be open for applications during the month of February, 1998. For an application packet or more information, please call or e-mail Susan Hoover (e-mail: [susan\\_hoover@usgs.gov](mailto:susan_hoover@usgs.gov)) in our personnel office at Telephone: 318-266-8517 or visit the OPM website: [www.usajobs.opm.gov](http://www.usajobs.opm.gov) during the open period. The USGS is an Equal Opportunity Employer.

## POSITIONS OPEN



Agricultural  
Research  
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United States  
Department of  
Agriculture

The USDA, Agricultural Research Service, Beltsville Agricultural Research Center, Plant Sciences Institute, Bee Research Laboratory, in Beltsville, Maryland is seeking a **RESEARCH ENTOMOLOGIST**, GS 414-12/13. Salary is commensurate with experience (GS 12: \$47,066 to \$61,190 per year, GS 13: \$55,969 to \$72,758 per year). Candidates must be U.S. citizens. The position conducts independent and cooperative research on the molecular biology and genetics of parasitic mites as they relate to their ability to infest honey bees. In addition to the basic education requirements, applicants must demonstrate: knowledge of the principles, methods, techniques, and procedures of entomology and genetics; ability to design, plan, and conduct research and publish results; skill in apiculture; and skill in the use of molecular/microbiological techniques such as PCR, gene cloning, DNA sequencing, protein purification and characterization, and recombinant DNA methods. For information on the research program, contact: **Dr. Mark Feldlaufer, Telephone: 301-504-8637**. This position has specific education and experience requirements, and factors that must be addressed. In order to ensure submission of a complete application, applicants must request a copy of the vacancy announcement by calling **Telephone: 301-344-4638** or by printing it from the Internet at website: <http://www.ars.usda.gov>. The vacancy announcement number for this position is ARS-D8B-064/B-8-03. The vacancy announcement closes February 17, 1998. USDA/ARS is an Equal Opportunity Employer.

### DIRECTOR, INSTITUTE OF FOOD SCIENCE AND ENGINEERING TEXAS A&M UNIVERSITY SYSTEM

The Texas A&M University System (including the Agriculture Program, the College of Veterinary Medicine, and the Engineering Program) seeks candidates for the position of Director for the Institute of Food Science and Engineering, College Station, Texas. The Director will establish and communicate the vision to lead the Institute and its centers in realizing its potential as a premier food science and engineering program. The Director will develop and coordinate interdisciplinary research, education, and outreach programs through involvement of faculty and cooperation with government and industry representatives. Candidates must have an advanced degree in microbiology, food science, food engineering, chemical engineering, biochemistry, toxicology, public health, epidemiology, or a related field, and ten years of professional research, education, or related experience with some industry experience preferred. Applications will be accepted until March 31, 1998, or until a suitable candidate is located. Submit letter of application, curriculum vitae, and names of five references to the Chair of the Search Advisory Committee: **Dr. A. Gene Nelson, Head, Department of Agricultural Economics, Texas A&M University, College Station, TX 77843-2124. Telephone: 409-845-2117; e-mail: [nelsong@tamu.edu](mailto:nelsong@tamu.edu)** for more information. *Equal Opportunity Employer.*

### RESEARCH SCIENTIST INSTRUMENTATION CHEMISTRY GEN-PROBE

As a key member of our product development team, the successful candidate will prepare technical plans, design and conduct experiments, analyze results, develop test protocols, and prepare design history documentation in support of our instrument development program. The position requires a Ph.D. or equivalent (M.S. with three-plus years or B.S. with eight-plus years of research experience) in biochemistry, molecular biology, microbiology, or bioengineering, with three-plus years of industrial experience in the areas of product development, clinical laboratory diagnostic instrument development, and assay integration on instrumentation. Experience in amplified nucleic acid procedures and in preparation of technical information to support regulatory submissions a plus.

Gen-Probe offers dedicated professionals challenging opportunities within a fast-paced corporate environment. Candidates should send résumé to: **Gen-Probe Incorporated, Human Resources Department, 10210 Genetic Center Drive, San Diego, CA 92121. FAX: 619-410-8001. Please call our job line at Telephone: 619-410-8020 or visit our website: [www.gen-probe.com](http://www.gen-probe.com).**

*Gen-Probe supports a drug-free work environment. Equal Opportunity Employer.*

## POSITIONS OPEN

### GARST SEED COMPANY HAWAII AND IOWA OPPORTUNITIES

Garst Seed Company, a division of Advanta, is seeking Ph.D., M.S., and B.S.-level scientists in molecular genetics, biochemistry, or related field to join a team of researchers in our maize genetic engineering and genomics groups in Iowa and Hawaii.

The Transgenic Analysis Group, in Slater, Iowa, is seeking a Ph.D. and a M.S./B.S. individual with some postgraduate experience and expertise in protein characterization, expression, purification, and analysis. Candidates should be well versed with HPLC and FPLC purifications of proteins, gel electrophoresis, Westerns, ELISA, peptide mapping, N terminal sequencing, enzyme assays, antibody techniques including generation, purification, and conjugation, etc. Good management skills are a must. Additional experience in molecular biological techniques and GLP quality data acquisition will be advantageous.

The Molecular Marker Group has three positions available at our research laboratories on the Island of Oahu, Hawaii. Opportunities exist for a **LAB MANAGER**, having at least an M.S. degree in molecular genetics or equivalent experience, and two **TECHNICIANS** to set up and operate a laboratory focused on the utilization of molecular markers (RFLP, SSR, AFLP, etc.). These positions will interact very closely with our primary genomics group located at our research headquarters in Iowa.

The Dihaploid Group has two **TECHNICIAN** positions at our research farm on the island of Oahu, Hawaii. They will operate a dihaploid field project focused on producing haploid plants and doubling them to produce diploids. Must have experience in breeding nursery operation and excellent organization skills. Individuals having significant experience in molecular genetics and interested in the application of molecular markers in plant improvement, please send résumé to: **Human Resources—Job Openings, Garst Seed Company, 2369 330th Street, Slater, IA 50244. FAX: 515-685-5053; e-mail: [aginfo@netins.net](mailto:aginfo@netins.net).**

*Garst is an Equal Opportunity Employer. Minorities/Females/Disabled/Veterans.*

### PLANT PATHOLOGIST/MICROBIOLOGIST

The New England Plant, Soil, and Water Laboratory, USDA-ARS, Orono, Maine, has an opening for a Plant Pathologist/Microbiologist to conduct research aimed at developing low-input, sustainable crop production systems. Research projects will address the ecology of soil-borne pathogens/organisms and their effects on potato plant health and tuber quality. Research will also deal with the interactions of plant pathogens and microbial populations as they relate to pathogen survival and pathogenicity in sustainable cropping systems. The Laboratory is located on the University of Maine campus; thus the researcher will have access to resources and facilities afforded by the University. *Candidates must be U.S. citizens and have knowledge of plant pathology, microbiology, ecology, and skills in horticultural aspects of potato production, tissue culture, and molecular biological techniques.* Salary is \$38,593 to \$46,254. For application procedures, call **Susan Bartley, Telephone: 207-581-3266**. Applications must be marked ARS-X8N-8045 and postmarked by February 2, 1998. This position was previously advertised and the closing date has been extended to February 2, 1998. Applicants who previously applied need not reapply.

### RESEARCH SCIENTISTS

Advanced Viral Research Corporation (AVR), a leader in the exciting new pharmacology of peptide nucleic acid (PNA) research, is seeking creative scientists to staff its new laboratories in Westchester County, New York City metropolitan area.

Candidates for these positions must have a Ph.D. or M.D. degree with at least one year of postdoctoral training.

**Immunologist**—with experience in molecular immunology to study the effects of PNAs on immune function both *in vivo* and *in vitro*.

**Virologist**—with experience in molecular virology to explore the potent broad antiviral effects of PNAs.

**Structural Chemist**—with experience in polymer structure analysts to investigate structure activity relationships of PNAs.

We offer a highly competitive compensation and benefits package. Please forward curriculum vitae to: **Advanced Viral Research, 200 Corporate Boulevard South, Yonkers, NY 10701, Attn: Dr. S. Hirschman. FAX: 914-376-7368. AVR is an Equal Opportunity Employer.**

## BREAKTHROUGHS ARE OUR BUSINESS.

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### Scientist

Seeking an experienced Scientist in animal model development. Will maintain/improve existing models and develop new models in order to meet the needs of product development efforts. Duties include experimental design, protocol evaluation, and conducting relevant in vitro and in vivo assays of blood-biomaterial interactions. Strong emphasis placed on vascular disease and vascular applications. This position requires some travel, writing concise reports, and communication with outside surgeons and scientists.

The qualified applicant will have an advanced degree, preferably at the doctoral level or DVM. Experience with animal model development is a must, including an intimate overall knowledge of animal anatomy/physiology. The ideal candidate will have a background in hands-on surgery, knowledge of good laboratory practices, and experience with cardiovascular models of disease and device testing. A working knowledge of blood-biomaterial interactions and histological responses within a surgical environment are preferred.

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## Assistant/Associate Professor

The department of physiology invites applications for the position of Assistant or Associate Professor. The successful candidate will possess the Ph.D. degree or equivalent and 2 years of postdoctoral experience. The candidate must have demonstrated excellence in teaching. The position involves participating in the teaching of medical physiology and productivity in scholarly activity. Those with research interest in respiratory control, exercise or molecular biology are encouraged to apply. Please send a curriculum vitae, statement of professional goals, and names and addresses of 3 references to:

Dawn M. Harrington  
Director of Human Resources  
University of Health Sciences  
College of Osteopathic Medicine  
1750 E. Independence Blvd.  
Kansas City, MO 64106

All inquiries will receive a written response and submitted information will be forwarded to Gary O. Ballam, Ph.D., Chairman, Department of Physiology.

EOE



St. Jude Children's  
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ALSAC • Danny Thomas, Founder

## POSTDOCTORAL POSITION IN MOLECULAR NEUROBIOLOGY

This laboratory is interested in identifying molecular events that play a defining role in the processes of neural trauma and neuronal degeneration in the central nervous system. Molecules important for the development and maintenance of the nervous system are being analyzed in the mouse, using modern molecular biology techniques including gene targeting, and yeast two-hybrid analysis. Presently the main focus of the work concerns the molecular events that underlie the neuronal degeneration that occurs in the hereditary human syndrome of ataxia telangiectasia.

This postdoctoral position would be ideally suited to someone with a molecular biology or neurobiology background who has recently obtained a Ph.D. and/or MD and would like to pursue training in molecular neurobiology. This position places a strong emphasis on mouse work, and will provide excellent training for persons interested in obtaining experience in gene targeting and transgenic work.

Support facilities at this institution are exceptional, and the research environment is highly interactive, both within the Research Hospital (including the Department of Developmental Neurobiology) and at the nearby UT Medical School. This position will provide an outstanding opportunity for training in molecular neurobiology.

This position is available immediately, and interested candidates should send a curriculum vitae and must arrange to have three letters of recommendation sent to Peter McKinnon, Ph.D., Department of Genetics, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101.

Affirmative Action/Equal Opportunity Employer



## POSITIONS OPEN



## TANABE RESEARCH Laboratories, USA, Inc.

### BIOANALYTICAL CHEMIST/BIOCHEMIST

Tanabe Research Laboratories USA, Inc. (TRL), located in San Diego as a subsidiary of Tanabe Seiyaku, is a biopharmaceutical company dedicated to the discovery of novel small molecules for treating inflammatory and cardiovascular diseases.

TRL is seeking an experienced Research Scientist in bioanalytical chemistry to perform assays to support drug development and *in vivo* pharmacology.

A Ph.D. in analytical biochemistry is needed with experience in the extraction, analysis, and assay of peptides and low molecular weight organic molecules from biological tissues including blood. Additionally, knowledge and experience with ADME studies, pharmacokinetic analysis, and the (*in vivo*) biodistribution of drugs is necessary. The successful candidate will have three to five years of biopharmaceutical industry experience in drug development with substantial experience using modern analytical instrumentation and chromatographic methods (including HPLC).

TRL offers a highly competitive salary plus a comprehensive benefits package, including a strong 401k program plus medical, dental, vision, and life insurance coverages. If you're interested in working in a state-of-the-art facility as part of a highly motivated group of scientific professionals, submit your résumé along with a cover letter and the name of three references to: **Tanabe Research Laboratories, Attn: L. Smith, 4540 Towne Centre Court, San Diego, CA 92121. FAX: 619-558-0650; e-mail: lsmith@trlusa.com.**

### COMPARATIVE EXPERIMENTAL PATHOLOGIST

#### THE CENTER FOR COMPARATIVE MEDICINE Schools of Medicine and Veterinary Medicine University of California, Davis

Qualified candidates are invited to apply for a Professorial position at the level of ASSISTANT or ASSOCIATE, depending upon qualifications. An Experimental Pathologist is sought as a pivotal member of the UC Davis Center for Comparative Medicine, a new research center that uniquely interdigitates research and teaching programs of the Schools of Medicine and Veterinary Medicine, with close affiliation with the California Regional Primate Research Center. Applicants must have M.D. or M.D.-Ph.D. degrees. AP/CP boards desirable, but not required. Applicants must have a record of publication in mainstream journals that exemplifies enthusiasm for comparative pathology using animal models. Faculty are sought whose research encompasses mechanisms of host-agent interactions during persistent infection or pathogenesis of infectious diseases common to humans and animals. The candidate must establish and maintain a robust extramurally funded research program and participate in professional and graduate education with an academic appointment in the Medical School Department of Pathology. Review of applications will commence immediately and be accepted through March 2, 1998, or until position is filled. Submit applications with letter of interest, curriculum vitae, concise statement of present and future research plans, summary of teaching experience/philosophy, up to three representative reprints, and four references (including addresses, telephone numbers, and e-mail addresses) to: **Stephen W. Barthold, D.V.M., Ph.D., Professor and Director, c/o Murray Gardner, M.D., Search Committee Chair, Center for Comparative Medicine, University of California, Davis, CA 95616. The University of California is an Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL RESEARCH ASSOCIATE CASE WESTERN RESERVE UNIVERSITY

Postdoctoral position available immediately to study immunology of bacterial polysaccharides. Humanized murine model will be utilized to investigate the role of IgG subclass in protective immunity to encapsulated bacteria such as *pneumococcus*. Position requires background and experience in immunology, molecular biology, cell culture, and monoclonal antibodies. Send curriculum vitae and names of three references to: **Dr. John Schreiber, Department of Pediatrics, Division of Infectious Diseases, Rainbow Babies and Children's Hospital, 11100 Euclid Avenue, Cleveland, OH 44106. FAX: 216-844-8362; e-mail: jrs3@po.cwru.edu.**

## POSITIONS OPEN

### THE HELEN C. LEVITT ENDOWED ANNUAL VISITING PROFESSORSHIP

The University of Iowa College of Medicine seeks applicants to fill the Helen C. Levitt Endowed Annual Visiting Professorship for an academic year. Established scientists at the rank of Professor, Associate Professor, or equivalent rank having a Ph.D., M.D., or M.D.-Ph.D. degree(s) are invited to apply. Areas of emphasis include viral pathogenesis and disease, women's health, and macular degeneration. Applicants with established records and reputation as independent investigators are desired. Candidates who would interact and/or collaborate with established scientist(s) at the University of Iowa are desired. The successful applicant will have a variety of opportunities to interact with scientists, physicians, educators, and students at The University of Iowa, and will receive an attractive support package. Salary and faculty rank will be commensurate with experience and qualifications. The departmental affiliation of the applicant's faculty appointment will be based on the applicant's academic discipline and research orientation.

The Visiting Professor will lecture, consult with staff and students of various departments in the College of Medicine, and participate in research and educational activities.

Candidates should send curriculum vitae, a statement of research interests and how the candidate would interact with University of Iowa faculty and students; and the names of three individuals who could be contacted as references:

**Allyn L. Mark, M.D.  
Associate Dean for Research  
College of Medicine  
The University of Iowa  
220 CMAB  
Iowa City, IA 52242-1101**

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

### RESEARCH PLANT PATHOLOGIST

The New England Plant, Soil, and Water Laboratory, USDA-ARS, Orono, Maine, has an opening for a Plant Pathologist to conduct research aimed at developing low-input, sustainable crop production systems. Research projects will address factors affecting survival, parasitic fitness, and pathogenicity of fungal pathogens as they relate to the epidemiology and management of foliar diseases of potatoes with primary emphasis on potato late blight. Research can also deal with molecular studies of fungal biology leading to field-based research on improved management practices for potato late blight and/or other foliar diseases of potato. The Laboratory is located on the University of Maine campus; thus the researcher will have access to resources and facilities afforded by the University. *Candidates must be U.S. citizens and have knowledge of plant pathology, fungal and plant biology, and epidemiology as well as skills in horticultural aspects of potato culture, tissue culture, and molecular biological techniques.* Salary is \$38,593 to \$46,254. For application procedures, call **Susan Bartley, Telephone: 207-581-3266.** Applications must be marked ARS-X8N-8044 and postmarked by February 2, 1998. This position was previously advertised and the closing date has been extended to February 2, 1998. Applicants who previously applied need not reapply.

The National Institute on Aging, National Institutes of Health, Public Health Service, is seeking a **SCIENTIFIC REVIEW ADMINISTRATOR** to conduct reviews of grant applications in the area of neuroscience (GS 601/602—12/13/14; \$47,066 to \$85,978). Applications are invited from candidates with demonstrated strong scientific, administrative, and communication skills. A research background in the neurosciences is required. Broad knowledge of principles, theories, and practices related to the scientific fields of contemporary neuroscience is expected. Experience with peer review of health research grant applications is desirable.

*U.S. citizenship is required.* Send a résumé and/or the Optional Application for Federal Employment (OF-612), or the Application for Federal Employment (SF-171) to: **Christine Hartz, NIA Personnel Office, Building 31, Room 2C02, Center Drive MSC 2292, Bethesda, MD 20892-2292. Telephone: 301-496-5460.** To receive a FAX of the complete vacancy announcement, Telephone: 1-800-728-5627, ID #1215.

*NIH is an Equal Opportunity Employer.*

## POSITIONS OPEN



### DEVELOPMENT MANAGER

VICAM LP. seeks a Ph.D.-level professional with a minimum five years of experience in assay development and assay application for an outstanding opportunity to run laboratories. Reporting to the Vice President of Research and Development, the successful candidate will be responsible for the research and development of test kits for mycotoxins, pathogens, and other target analytes relevant to the food industry. Responsibilities will also include conducting international and domestic validation studies and collaborating with scientists worldwide. The Development Manager will be charged with overseeing the day-to-day operations of chemistry and microbiology laboratories. Only applicants with a record of successful product development and HPLC experience will be considered. Must be willing and able to interact with customers of varied educational backgrounds. (Job Code: DM).

We offer a competitive salary and benefits package and are located in a beautiful Boston location. For consideration, please FAX or send résumé with cover letter indicating salary history immediately to: **VICAM, Human Resources, Job Code: DM, 313 Pleasant Street, Woburn, MA 02172. FAX: 617-923-8055. e-mail: r+d@vicam.com.** Principals. No phone calls please. *Equal Opportunity Employer.*

### STAFF SCIENTIST/POSTDOCTORAL RESEARCH ASSOCIATE MARINE MICROBIOLOGY AND BIOCHEMISTRY CalBioMarine Technologies, Inc.

A 20-month position is available immediately for a scientist to work on a NIH/NCI SBIR grant-funded project which seeks to optimize the biosynthesis of bryostatin 1 (a promising anticancer compound) in cultured populations of the source marine bryozoan *Bugula neritina*. The postdoctoral project will investigate the role and possible contribution of microbial symbionts of the host bryozoan in the biosynthesis of the compound. The candidate will work as a visiting scientist of the company at the University of California, San Diego Scripps Institution of Oceanography (SIO) in La Jolla, California, under the guidance of an SIO faculty researcher/collaborator. Applicants should have graduated from an accredited university and have been awarded a Ph.D., D.Phil., or equivalent degree. Skills, coursework, and work experience should be in the fields of microbiology (marine courses preferred), biochemistry, molecular biology (PCR and DNA hybridization), analytical chemistry (HPLC, MS, gel chromatography), with marine invertebrate biology, physiology, and ecology helpful. Salary similar to university postdoctorals, plus health insurance co-pay and stock option. Selection to begin February 16, to hire by end of March. Send résumé, verification of degrees conferred, GPAs, and at least two academic references (persons we can contact) to: **CalBioMarine, 5145 Avenida Encinas, Suite C, Carlsbad, CA 92008. FAX: 760-431-5925; e-mail: dmendola@aol.com.** CalBioMarine adheres to NIH guidelines for Equal Opportunity Employment.

### RESEARCH ASSOCIATE MOLECULAR AND CELLULAR BIOLOGY

The Physiology and Biophysics Department at Case Western Reserve University, in Cleveland, Ohio, has two positions available. This research utilizes cellular and molecular approaches to the study of systems integrated physiology, with emphasis on cardiorespiratory systems. A Ph.D. in molecular or cellular biology is required.

Send curriculum vitae, three representative reprints, and the names of three references to: **Dr. N. R. Prabhakar, The Department of Physiology and Biophysics, Case Western Reserve University, Cleveland, OH 44106-4970 USA.**

**RESEARCH ASSOCIATE.** Position immediately available for a Ph.D. familiar with vascular biology and possibly having skills in molecular biology to participate in studies of the action and regulation of cytokines in the vascular system. Interested candidates should send curriculum vitae and names of three references to: **Dr. Walter H. Newman, Mercer University School of Medicine, 1550 College Street, Macon, GA 31207. Affirmative Action/Equal Opportunity Employer.**

## Postdoctoral Fellowship

A Postdoctoral position is immediately available in the Cancer and Developmental Biology Laboratory under the supervision of Dr. Colin Stewart, Director, at the ABL-Basic Research Program. Applications are sought from individuals interested in analyzing either the role of genomic imprinting in mammalian embryogenesis or on the function of growth factors in early development. Experience in the techniques of molecular biology and/or mammalian development would be an advantage.

The ABL-Basic Research Program, located at the NCI-Frederick Cancer Research and Development Center, Frederick, Maryland (45 miles north of Washington, DC) offers a full complement of benefits, competitive Postdoctoral stipends, and an excellent work environment. Interested applicants should send a CV, an introductory letter containing a brief description of research experience, and contact information for three references to:

**Human Resources  
Department/CDB  
ABL-Basic Research Program  
NCI-FCRDC  
P.O. Box B, Building 428  
Frederick, MD 21702-1201**



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

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## POSTDOCTORAL POSITION IN IMMUNOLOGY

A position is available immediately in the Department of Immunology for an enthusiastic, hard-working individual to work in one of the following areas:

1. T cell receptor recognition and immunogenicity (Immunity 7:387, 1997)
2. TCR:CD3 structure and assembly
3. Cytokine control of T cell development and function (Nature 380:630 & 382:171, 1996)

You should have a PhD, a solid understanding of basic immunology, and practical experience in molecular biology, cellular immunology, biochemistry or structural studies.

Please send a CV with the names of three references (postal and E-mail addresses, phone and FAX numbers) and an outline of your past accomplishments and future career aspirations to Dr. Dario Vignali, Department of Immunology, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105. Tel: 901-495-2332. Fax: 901-495-3107. E-mail: dario.vignali@stjude.org

Affirmative Action/Equal Opportunity Employer

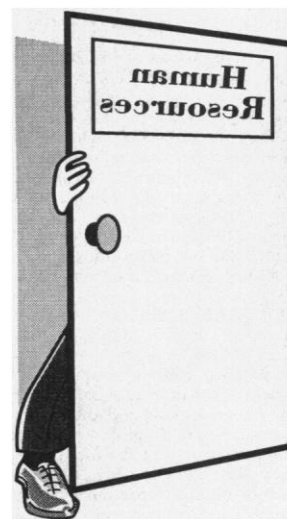
# Want to get your foot in the door?

Then let SCIENCE open some doors for you by attending the **SCIENCE Career Fairs**. SCIENCE Career Fairs offer the perfect opportunity for scientific professionals to meet in person with representatives from top biotechnology and pharmaceutical companies, universities, governmental agencies, and institutions. The Philadelphia Career Fair is being held in conjunction with the 1998 AAAS Annual Meeting.

### UPCOMING 1998 SCIENCE CAREER FAIR

**Philadelphia, PA at the  
Pennsylvania State Convention Center  
1101 Arch Street, Room 108  
17 February: 11 am – 4 pm**

Registration is on site. Remember to bring multiple copies of your CV or résumé with you to the Career Fair; a copy will be necessary to gain admission to the hall. For more information call (202) 326-7018 or check SCIENCE Career Fair Information Online: [www.sciencemag.org](http://www.sciencemag.org). Admission to the event is FREE.



**SCIENCE  
CAREER FAIRS**  
[www.sciencemag.org](http://www.sciencemag.org)  
(Choose SCIENCE Professional Network from the menu)

## POSITIONS OPEN

### NEUROPHYSIOLOGY

**POSTDOCTORAL RESEARCH ASSOCIATE** job available for electrophysiological studies of circadian clock resetting. Current interests are mechanisms that underlie nonphotic and photic phase shifting, coupling of clock cells, and output. Techniques used include extracellular single-unit and patch clamp recordings, from cell cultures, brain slices, or dissociated cell preparations of mammalian suprachiasmatic nuclei. Gene expression associated with phase shifts is analyzed via RT-PCR. Ph.D. in related field required.

Forward a letter of application and résumé to: **Human Resources, Smith College, Box 685, 30 Belmont Avenue, Northampton, MA 01063.** *Smith College is an Equal Opportunity Employer encouraging excellence through diversity.*

### POSTDOCTORAL POSITIONS IN MOLECULAR PHARMACOLOGY AND TUMOR BIOLOGY

The Prostate Cancer Program of the University of Michigan Comprehensive Cancer Center has two vacancies for Postdoctoral Fellows. Both positions require experience with molecular biology techniques. The following projects are available: (1) Studies on the interaction of prostate cancer cells with bone marrow endothelial cells. (2) Studies on the induction of apoptotic pathways in prostate cancer cells.

Applicants must be eligible for NIH funding. *Only U.S. citizens and permanent residents are eligible.* Applicants should direct their credentials to: **Kenneth J. Pienta, M.D., 1500 East Medical Center Drive, Room 7303 CCGC, Ann Arbor, MI 48109-0946. FAX: 734-647-9480.**

### POSTDOCTORAL POSITION DEVELOPMENTAL NEUROBIOLOGY Yale University School of Medicine

Position available for an individual with experience in primary neuronal culture and/or molecular genetics. This position is part of an ongoing project to determine the role of proteoglycans in neuronal development and synapse formation. Send curriculum vitae, statement of interest, and three letters of recommendation to: **Dr. Susan Hockfield, Section of Neurobiology, Yale University School of Medicine, P.O. Box 208001, 333 Cedar Street, New Haven, CT 06520. E-mail: susan.hockfield@yale.edu.**

### POSTDOCTORAL POSITION

The Division of Critical Care of the Children's Hospital Medical Center is looking for a Postdoctoral Fellow to study the mechanisms of free radical and oxidant mediated cell injury and the relevance of these processes in shock and inflammation. The successful applicant will have an M.D. and/or Ph.D. degree, background in pharmacology or immunology, and experience with *in vitro* models of cell injury and/or *in vivo* models of shock and inflammation. Send curriculum vitae and names of references to: **Dr. Csaba Szabo, Division of Critical Care, Children's Hospital Medical Center, 3333 Burnet Avenue, Cincinnati, OH 45229. FAX: 513-636-4892.**

**POSTDOCTORAL POSITIONS** available immediately. We will employ a combination of molecular biology and patch-clamp techniques to study the structural basis of ion channel function. Current emphasis is on the molecular mechanism of activation of cyclic nucleotide-gated channels from photoreceptors and olfactory receptors. Strong consideration will be given to applicants with training in molecular biology or electrophysiology. Please send curriculum vitae and three letters of reference to: **Sharona Gordon, Ph.D., Department of Physiology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040. An Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** in AIDS vaccine research at Oregon Health Sciences University. To optimize the CTL response, we will attempt (a) to achieve persistent antigen expression using a herpesvirus vector, and (b) to increase the immunodominance of recombinant proteins by sequential vector vaccination.

Experience in DNA cloning and/or virology and/or immunology would be helpful. Send curriculum vitae to: **Dr. Ann Hill, Department of Molecular Microbiology and Immunology, L-220, Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3098. For additional information contact e-mail: hillan@ohsu.edu.**

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS IN MOLECULAR VIROLOGY

Postdoctoral positions are open immediately in two retrovirology laboratories (**C.-Z. Giam** and **C. C. Broder**) to study (1) the mechanisms of action of the HTLV-I transcriptional activator, Tax, and the biological and transforming properties of the HTLV-I, or (2) structural and functional analyses of the interactions between enveloped viruses (HIV/SIV) and their cellular receptors. The HTLV-I research focuses on the interactions between Tax and the cellular transcriptional machinery, and the activation of cellular signaling pathways by Tax. The HIV/SIV efforts focus on defining important structural elements in envelope and the receptors and their roles in membrane fusion; and investigations on the consequences of envelope oligomerization and glycosylation on function and antigenic structure. See Tie, F. et al., *J. Virol.* 70:8368, 1996; Broder, C. C. and R. G. Collman, *J. Leukoc. Biol.* 62:20, 1997; Earl, P. L. et al., *J. Virol.* 71:2674, 1997. A Ph.D. in biochemistry, molecular biology, or cell biology is required. Experience in eukaryotic transcription factors, protein kinases, T-cell biology, monoclonal antibody development, or classical virology will be a plus. Salary is commensurate with experience. Send letters of application, curriculum vitae, and names of three references to: **Human Resources, Reference PL2970492 (Giam) or PL2980012 (Broder), Henry M. Jackson Foundation for the Advancement of Military Medicine, 1401 Rockville Pike, Suite 600, Rockville, MD 20852. FAX: 301-424-5771; website: www.hjff.org. Affirmative Action/Equal Opportunity Employer.**

### INFECTIOUS DISEASES

**POSTDOCTORAL FELLOW** position is available immediately to join a research group studying infectious diseases. Selected individual will primarily be required to conduct independent research on bacterial pathogens and write up results for publication. Research will emphasize biochemical and molecular characterization of virulence determinants in *Legionella*. Ph.D. required and a record of productive experience in infectious diseases preferred. Send curriculum vitae and names and addresses of three references postmarked by February 28, 1998 (or until a suitable candidate is found), to: **Dr. Jeff Cirillo, Department of Veterinary and Biomedical Sciences, University of Nebraska-Lincoln, P.O. Box 830905, 120 VBS, Lincoln, NE 68583-0905. FAX: 402-472-9690; e-mail: jcirillo@unlvm.unl.edu.** *University of Nebraska-Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity; is responsive to the needs of dual career couples; and assures reasonable accommodation under the Americans With Disabilities Act. Contact: Dr. Cirillo, Telephone: 402-472-2952 for additional information.*

An **ASSISTANT SCHOLAR SCIENTIST** (Research Faculty) position is available in the National High Magnetic Field Laboratory (NHMFL). A biochemical NMR Spectroscopist is sought to conduct research both independently and within the research group of **T. A. Cross**, Director of the NHMFL NMR Program. As a faculty member, co-directive status of graduate students is possible as well as the submission of independent research proposals. A Ph.D. and postdoctoral experience is required. Send curriculum vitae, research interests and plans, and three letters of reference to: **Dr. T. A. Cross, National High Magnetic Field Laboratory, 1800 East Paul Dirac Drive, Tallahassee, FL 32306-4005. The State of Florida is an Affirmative Action/Equal Opportunity Employer.**

**RESEARCH INVESTIGATOR** position available to establish assays for quantitation of synthetic steroids and their metabolites and to study species-specific metabolism of contraceptive steroids. Requirements for the position include Ph.D. or equivalent degree in chemistry or biochemistry, one to three years of postdoctoral training, experience in analytical methods for measurement of contraceptive steroids and their metabolites, and experience in radioimmunoassay and radioreceptor assays. Send curriculum vitae and the names and addresses of three references to: **Dr. Kalyan Sundaram, Senior Scientist, Population Council, Center for Biomedical Research, 1230 York Avenue, New York, NY 10021. An Equal Opportunity/Affirmative Action Employer. Minorities/Females.**

## POSITIONS OPEN

### PART-TIME MICROSCOPE SALES/SCIENTISTS

Manufacturer of a new, high-resolution optical 3-D microscope seeks Microscopists with discretionary time interested in supplementing income through equipment sales and application development. Ideal candidate will continue to perform research in a discipline benefiting from 3-D analysis. Compensation based on ability to develop and publish new applications for technology and to assist in sales of microscopes to other scientists.

Send résumé to:

**InGen Corporation  
235 Montgomery Street  
Suite 300  
San Francisco, CA 94104**

**POSTDOCTORAL POSITION** available immediately to study the mechanism of action of cytochrome P450 and xenobiotic metabolism. Successful candidates are expected to have a degree in medicinal or pharmaceutical chemistry or pharmacology, and three-plus years of experience in the use of mechanism-based inactivators, isolation and identification of labeled peptides from P450, and molecular modeling of P450 active sites. Preference will be given to candidates who also have experience in structure-based drug design, development of enzyme assays for drug metabolism, and the identification of drug metabolites. The stipend range will be \$21,000 to \$27,500 depending on experience. Applicants should submit a curriculum vitae, three reference letters, a summary of research accomplishments, and future research directions to:

**Dr. Paul F. Hollenberg, Professor and Chair  
Department of Pharmacology  
University of Michigan Medical School  
2301 MSRB III  
1150 West Medical Center Drive  
Ann Arbor, MI 48109-0632.**

*The University of Michigan is an Affirmative Action/Equal Opportunity Employer. Applications from qualified women, minorities, and/or disabled individuals are encouraged.*

**POSTDOCTORAL POSITION** available starting in 1998 to investigate the mechanism of protein folding. Sequence-structure relationships are explored with mutationally variant proteins constructed by site-directed mutagenesis. Biophysical techniques of characterizing folding include measurements of dynamics by fast reaction methods such as stopped-flow and T-jump spectrophotometry. Global and local thermodynamic stability are compared by scanning calorimetry and hydrogen-deuterium exchange (HX). Please submit a curriculum vitae and have three letters of recommendation sent to: **Dr. Barry T. Nall, Biochemistry, University of Texas Health Science Center, San Antonio, TX 78284-7760. FAX: 210-567-6595; e-mail: nall@bioc01.uthscsa.edu.** *The University of Texas Health Science Center, San Antonio is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available to study the molecular and cellular role of opioid receptors in the development and function of T-cells. Studies will include a molecular analysis of receptor structure and processing. Experience and interest in immunology and molecular biology required. *Applicants must be U.S. citizens or have resident alien status.* Please send curriculum vitae and at least three letters of reference to: **Dr. Thomas J. Rogers, Department of Microbiology and Immunology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140. FAX: 215-707-3218. An Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** is available to study fimbrial adhesins of bacteria and interactions between host, bacteria, and the environment. A background in molecular biology is required and experience in bacterial pathogenesis is desirable. Send curriculum vitae, description of previous experience, and references (address, telephone, e-mail) to: **Dr. Dieter M. Schifferli, University of Pennsylvania, Department of Pathobiology, 3800 Spruce Street, Philadelphia, PA 19104-6049. FAX: 215-898-7887. Affirmative Action/Equal Opportunity Employer.**



### Postdoctoral Fellowships

The UNC Lineberger Comprehensive Cancer Center of the University of North Carolina at Chapel Hill will have openings in 1997-98 in its training program, now in its 23rd year, for persons completing graduate studies to train with excellent investigators in basic research in tumor virology, molecular carcinogenesis, molecular therapeutics, cancer cell biology, genetics, tumor immunology, and research that interfaces with clinical and physical sciences. Training is available in DNA repair, replication, and mutagenesis; regulation of cellular proliferation and differentiation including growth factors, signal transduction pathways, and intercellular communication; molecular immunology; molecular genetics and epidemiology of cancer; and human disease models and gene therapy. Unique training resources and core facilities are supported by the NCI-designated UNC Lineberger Comprehensive Cancer Center.

Preceptors are: **Steven Bachenheimer, Albert Baldwin, Victoria Bautch, David Brenner, Keith Burridge, Sharon Campbell, Stephen Chaney, David Clemmons, Edward Collins, Marila Cordeiro-Stone, Channing Der, Robert Duronio, H. Shelton Earp, Jeffrey Frelinger, Frank French, Jack Griffith, Stephen Haskill, Brian Herman, Eng-Shang Huang, Clyde Hutchinson III, Kenneth Jacobson, Rudolph Juliano, David Kaufman, Shannon Kenney, Ryszard Kole, Steven Leadon, David Lee, Patricia Maness-Tidwell, William Marzluff, Beverly Mitchell, Joseph Pagano, Tom Petes, Mark Peifer, Nancy Raab-Traub, James Raleigh, R. Jude Samulski, Aziz Sancar, Ronald Swanstorm, Lishan Su, Jenny Ting, Ronald Thurman, Michael Topal, Terry Van Dyke, Jean-Michel Vos, Kevin Weeks, Bernard Weissman, Elizabeth Wilson, and Yue Xiong.**

Candidates must be U.S. citizens or permanent residents. For an informational brochure or to apply (include curriculum vitae, three letters of recommendation, a statement of research interests, and graduate school records) write to:

**Joseph S. Pagano, M.D.**  
CB# 7295

**UNC Lineberger Comprehensive Cancer Center**  
School of Medicine  
University of North Carolina at Chapel Hill  
Chapel Hill, NC 27599-7295

*UNC's Comprehensive Cancer Center is an Affirmative Action/Equal Opportunity Employer. Minority applicants are encouraged to identify themselves voluntarily.*

### MEETINGS

#### 14th Annual Meeting on Oncogenes: Oncogenes, Tumor Suppressors and Signal Transduction in Cancer and Development



June 24 - 27, 1998

**The Salk Institute**

Organizers: Ron DePinho, Dan Donoghue, Martine Roussel

The meeting is being held for the FIRST TIME on the west coast in beautiful La Jolla. Emphasis will be placed on the control of cellular proliferation and signaling by oncogenes, tumor suppressors, and cell-cycle regulators. Principal investigators, graduate students, and postdoctoral researchers are all encouraged to attend. The format will consist of oral and poster presentations with plenary talks by distinguished investigators. This meeting is an exciting forum for young investigators to present and discuss their research. Cosponsored by the Foundation for Advanced Cancer Studies, Inc. and by The Salk Institute for Biological Studies.

-Information on registration can be found at  
<http://www.salk.edu/meeting.html>

Registration: \*Abstract deadline is April 30, 1998\*  
\$650 US (includes housing and meals)  
\$500 US (includes meals only)  
\$250 US (special rate for predoctoral students,  
includes housing and meals)  
\$100 US (no meals, no housing)

Application and abstract forms can be obtained from Sheila Moles,  
The Salk Institute 10010 N. Torrey Pines Rd., La Jolla, CA 92037  
(619)453-4100x1615. Fax (619)546-0838. Email: moles@salk.edu

## NEUROSCIENCE FACULTY POSITIONS

**McLean Hospital and the Department of Psychiatry, Harvard Medical School**, are inviting applications for faculty positions at the **Assistant or Associate Professor** level from qualified applicants with research interests relevant to psychiatric neuroscience. We are looking for investigators to complement the existing benchtop research program in the Mailman Research Center as it undergoes a major expansion of 23,500 sf of new space. Appropriate areas of interest would include basic neuroscience and laboratory based research related to schizophrenia, major mental disorders, and Alzheimer's disease. Opportunities exist for development of strong collaborations within the facility and across Harvard Medical School and Partners HealthCare System, including the Massachusetts General Hospital and Brigham and Women's Hospital.

Applicants should have a Ph.D. and/or professional doctorate, appropriate postdoctoral experience and a publication record indicative of a demonstrated expertise in the area of specialization. The positions offer new, fit-out laboratory space, affiliation with a large clinical and neuroscience research program, and extensive research support infrastructure.

The successful candidates will be expected to develop competitive, independent, and largely externally funded programs. Salary and recruitment packages offered will be commensurate with qualifications and experience.

Applicants should submit a curriculum vitae, a concise statement of research interests and the names and addresses of three references to the search committee co-chairs:

**Bruce M. Cohen, MD, PhD**  
**Joseph T. Coyle, MD**  
Neuroscience Search Committee  
McLean Hospital  
115 Mill Street  
Belmont, MA 02178



McLean Hospital



Review of applications will begin April 1, 1998  
and continue until the positions are filled.

*McLean Hospital is an Affirmative Action/  
Equal Employment Opportunity/ADA Employer.*

A member of the **PARTNERS** HealthCare System

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS AVAILABLE

**Austin Cooney, Ph.D.:** Orphan receptor function and ligand identification strategies.

**Franco DeMayo, Ph.D.:** Lung cancer progression using transgenic mouse models.

**Carolyn L. Smith, Ph.D.:** Coactivators and estrogen receptor function, selective estrogen receptor agonists, and maintenance of bone density in microgravity.

**Sophia Tsai, Ph.D. and Ming-Jer Tsai, Ph.D.:** Mouse vascular, neural, and pancreatic development, and mammary gland tumorigenesis.

**Nancy L. Weigel, Ph.D.:** Vitamin D and the prevention of microgravity-induced bone loss; vitamin D, androgens, and androgen receptor mutations in prostate cancer.

Interested Ph.D.'s with experience in molecular biology, biochemistry, developmental biology, tumor biology, or related fields should send curriculum vitae and the names and addresses of three references to the appropriate faculty at: **The Department of Cell Biology, Baylor College of Medicine, Houston, TX 77030.** Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

### Ph.D.—PHYSIOLOGY, BIOLOGY, OR RELATED FIELD

Critical Care Medicine Department, Clinical Center, National Institutes of Health is seeking a **POSTDOCTORAL-LEVEL** or **STAFF SCIENTIST-LEVEL INVESTIGATOR** to join a nationally recognized team investigating the pathophysiology of septic shock, focusing on cardiovascular physiology and immunology in animal models. Familiarity with radionuclide cineangiography and heart catheterization is preferred; record of ability to produce high-quality publications is sought.

The position is a Federal Executive Service Position, salary range \$55,000 to \$65,000, initial appointment up to two years with possible extensions. Excellent benefits package. To apply, send résumé to: **NIH, 10 Center Drive MSC 1662, 10/7D43, Bethesda, MD 20892-1662, ATTN: Dr. Charles Natanson.** NIH is an Equal Opportunity Employer. U.S. citizenship is required.

**POSTDOCTORAL and PREDOCTORAL POSITIONS** are available to participate in studies on the development of lentiviral and nonviral vectors for gene transfer, genetic analysis of chemokines as antiviral and chemotactic effectors, and molecular interaction between HIV-1 and HIV-2 *in vitro* and *in vivo* models. Candidates with one to two years of experience in molecular biology, especially molecular retrovirology and cytokine biology, are preferred. Send curriculum vitae and names of references to: **Suresh K. Arya, Ph.D., Basic Research Laboratory, National Cancer Institute, National Institutes of Health, Bethesda, MD 20892.** FAX: 301-496-8394. An Equal Opportunity Employer.

### POSTDOCTORAL POSITIONS IN GENE THERAPY

Positions open to develop practical applications of AAV-mediated gene therapy targeting neurological disorders or cancer. Applicants should have significant experiences in molecular/cellular biology or virology. Contact: **Dr. Ernest Terwilliger, Division of Experimental Medicine, Harvard Institutes of Medicine, #4 Blackfan Circle, Boston, MA 02115.** FAX: 617-859-7010; e-mail: [ernestt916@aol.com](mailto:ernestt916@aol.com).

**POSTDOCTORAL POSITION** for Ph.D.-M.D. to study neural gene expression and regulation mechanisms from gene transcription through functional protein. Requires experience in molecular biology, biochemistry, neurosciences, and *in vitro* and *in vivo* methodologies. Salary commensurate with experience. Send curriculum vitae and three letters of reference to: **Dona Lee Wong, Ph.D., Nancy Pritzker Laboratory, Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, MSLS Building, P. 106, Stanford, CA 94305-5485.**

### POSTDOCTORAL POSITION CONTROL OF RETINOID SIGNALING

Explore the function of the alcohol dehydrogenase and aldehyde dehydrogenase enzyme families in conversion of vitamin A to the active ligand retinoic acid. Ongoing studies include gene knockouts in mice and manipulation of *Xenopus* embryos. Contact: **Dr. Gregg Duester, Burnham Institute, 10901 North Torrey Pines Road, La Jolla, CA 92037.** E-mail: [duester@burnham-inst.org](mailto:duester@burnham-inst.org).

## POSITIONS OPEN

### POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE University of Colorado Health Sciences Center

To study pathways regulating apoptosis in prostate cancer cells and integrating protein kinase and phosphatase pathways into cell death cascades. Experience in molecular/cellular biology is highly desirable. Please send curriculum vitae to: **Dr. Andrew S. Kraft, Chief, Division of Medical Oncology, 4200 East 9th Avenue, Denver, CO 80262.** FAX: 303-315-5502.

University of Colorado Health Sciences Center is an Equal Opportunity/Affirmative Action Employer.

### STAFF SCIENTIST AND POSTDOCTORAL POSITIONS IN TUMOR IMMUNOLOGY

Argonex Pharmaceuticals is seeking **CELLULAR/MOLECULAR IMMUNOLOGISTS** who will be responsible for the establishment of primary tumor cell cultures; the establishment and characterization of TIL and CTL lines; and the assessment of TIL and CTL activity against tumor cells and peptide-treated cell lines. The ideal candidates will be highly motivated individuals capable of performing innovative research in an interdisciplinary team environment. A Ph.D. in immunology or a related field is required, as is a minimum of three to five years of hands-on experience with human T cell culture.

Argonex is utilizing the DIRECT® technology developed by **Dr. Donald Hunt** and **Dr. Victor Engelhard** of the University of Virginia to identify antigenic peptides that are candidates tumor vaccines. The work environment features a recently renovated laboratory as well as state-of-the-art instrumentation and equipment for cell culture and assays, cellular immunology, protein chemistry, and mass spectrometry. Argonex offers a highly competitive salary and benefits package.

Qualified candidates should forward their curriculum vitae, a one- to two-page summary of their previous research experience, and the names and addresses of three references to: **Dr. Kevin T. Hogan, Argonex Pharmaceuticals, Suite 1, 706 Forrest Street, Charlottesville, VA 22903.** An Equal Opportunity Employer.

Two **POSTDOCTORAL POSITIONS** are available to investigate virulence mechanisms of *Haemophilus ducreyi*, the etiologic agent of chancroid. Emphasis will be placed on genetic analysis of bacterial products involved in the formation of genital ulcers, especially toxins (see *PNAS* 94:4056, 1997) and other bacterial factors that interact directly with the host environment. 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. First position available after June 1, 1998. Second position available after January 1, 1999. Send curriculum vitae and the names and telephone numbers of three references to: **Dr. Eric J. Hansen, Department of Microbiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9048.** FAX: 214-648-5905. e-mail: [hansen01@utsw.swmed.edu](mailto:hansen01@utsw.swmed.edu). University of Texas Southwestern is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** is immediately available for the development of triplex-forming oligonucleotide-peptide conjugates for therapeutic applications. Experience in nucleic acid and protein biochemistry is preferred. Send curriculum vitae and names of three references to: **Dr. Vladimir Potaman, c/o Diana Taylor, Institute of Biosciences and Technology, Texas A&M University, 2121 West Holcombe Boulevard, Houston, TX 77030.** E-mail: [vpotaman@ibt.tamu.edu](mailto:vpotaman@ibt.tamu.edu); website: <http://www.tamu.edu/ibt/ibt.htm>.

Texas A&M University is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION** available for three years to study molecular biology of cellular uptake of folates and antifolate drugs such as methotrexate. Experience with molecular techniques and cell biology is essential. Send curriculum vitae and e-mail addresses of references to: **Jeffrey A. Moscow, M.D., Chief, Pediatric Hematology-Oncology, University of Kentucky, Kentucky Clinic Room J457, 740 South Limestone, Lexington, KY 40536-0284.** FAX: 606-257-6048.

## POSITIONS OPEN

### POSTDOCTORAL FELLOW NATIONAL HUMAN GENOME RESEARCH INSTITUTE National Institutes of Health

The positional cloning section of the Genetics and Molecular Biology Branch at the National Human Genome Research Institute, NIH, is seeking an outstanding Postdoctoral Fellow in molecular genetics, with experience in positional cloning, to start April 1, 1998. The successful candidate will join an enthusiastic group working on the genetics of non-insulin dependent diabetes mellitus (NIDDM). The study utilizes an affected sib-pair strategy and has completed a genome scan on over 500 affected sib pairs from Finland. The Postdoctoral Fellow will be expected to contribute to the fine mapping and eventual positional cloning of genes predisposing to NIDDM.

Please send curriculum vitae with names and addresses of three references to:

**Dr. Soumitra Ghosh, M.D., Ph.D.**  
Building 9, Room 1W108  
9000 Rockville Pike  
Bethesda, MD 20892  
Telephone: 301-496-7826  
FAX: 301-480-9667

The NIH is an Equal Opportunity Employer. Applications from women and minorities are encouraged.

### POSTDOCTORAL POSITION

A Postdoctoral position is available to study fundamental functional and molecular properties of heart cells. The research focus is to understand the role of cellular receptors and intracellular signal transduction mechanisms on contractility and growth in normal and aging heart models. The project uses an integrated strategy involving biochemistry, molecular biology, gene transfection, microfluorescent imaging of  $Ca^{2+}$ , and confocal microscopy. Successful candidates must have a Ph.D. with a strong background of publishing in molecular sciences or physiology and a commitment to training in molecular approaches. Send curriculum vitae and names of three references to: **Dr. Terry B. Rogers, Department of Biochemistry, University of Maryland School of Medicine, 108 North Greene Street, Baltimore, MD 21201.** FAX: 410-706-6676.

### POSTDOCTORAL RESEARCH FELLOW BIOCHEMISTRY/MOLECULAR PATHOLOGY

Postdoctoral positions (two, NIH-funded) are available immediately to study molecular mechanisms of transcriptional regulation of the cytochrome P450 genes in bile acid and cholesterol metabolisms. Applicants should have a Ph.D. in biochemistry or molecular biology with experience in gene cloning, sequencing, and expression; tissue culture; protein purification; yeast two-hybrid system; and DNA-protein interaction. Please submit curriculum vitae to:

**Human Resources**  
Northeastern Ohio Universities College of Medicine  
4209 S.R. 44, P.O. Box 95  
Rootstown, OH 44272-0095

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Two **POSTDOCTORAL POSITIONS** to study effects of nutritional intervention (calorie restriction) on aging in nonhuman primates. One position in energy metabolism focusing on glucoregulation and the other in reproductive physiology focusing on bone loss/menopause. Whole animal physiology experience required. Research background in gerontology is preferred. U.S. citizenship or permanent residency status required. Send curriculum vitae, references, and statement of research interests to: **Dr. Mark A. Lane, Building 103, Room 1B04, NIH Animal Center, P.O. Box 56, Poolesville, MD 20837.** E-mail: [mlane@vax.grc.nia.nih.gov](mailto:mlane@vax.grc.nia.nih.gov). NIH is an Equal Opportunity Employer.

**POSTDOCTORAL POSITION** in AIDS vaccine research available May, 1998. Applicants are sought who have a strong background in immunology/virology and cell culture. The successful candidate will be part of the Central Immunology Laboratory for AIDS vaccine clinical trials in humans and nonhuman primates. Research will focus on vaccine design and neutralizing antibodies, with a secondary focus on the complement system. Interested candidates should send a brief synopsis of their research experience, curriculum vitae, and references to: **Dr. David C. Montefiori, Center for AIDS Research, Department of Surgery, Box 2926, Duke University Medical Center, Durham, NC 27710.**

**DIRECTOR OF RESEARCH  
AND DEVELOPMENT  
Sperm Physiology**

XY, Inc. is a new biotechnology company devoted to commercializing sexed semen for use in non-human mammals. We seek a Ph.D. with strong management experience who also has an extensive background in working with mammalian semen *in vitro*. The incumbent will be responsible for coordinating the activities of a cadre of talented people while interfacing to the Scientific Director and President of the company. The position involves directing the company's scientific activities, including cell sorter development, optimization of sperm care (collection through insemination), optimizing bovine *in vitro* fertilization procedures, cryopreservation of sexed semen, and supporting field trials with cattle. In addition, this position will require "hands-on" experimentation.

XY, Inc. has a close affiliation with Colorado State University and is located in the foothills of the Rockies in Fort Collins, Colorado. Please submit résumé and addresses and phone numbers of three references to: **Personnel Director, XY, Inc., 400 E. Horsetooth Road, Fort Collins, CO 80525.**



**CASE WESTERN RESERVE UNIVERSITY  
Doctoral and Postdoctoral Training in  
Nutritional Biochemistry/Metabolism and  
Molecular Nutrition**

The Department of Nutrition of Case Western Reserve University School of Medicine, Cleveland, Ohio, is expanding its training programs in Nutritional Biochemistry/Metabolism and Molecular Nutrition. Our department is one of the leaders in NIH-sponsored nutrition research. Fellowships for postdoctoral and predoctoral (tuition + stipend) trainees are available with the following faculty:

**Henri Brunengraber:** metabolic regulation, noninvasive techniques for probing metabolic pathways with stable isotopes, design of artificial nutrients, preventors of reperfusion injury and accelerators of alcohol metabolism.

**Paul E. Ernsberger:** metabolic and cardiovascular alterations in obesity, control of metabolism by the autonomous nervous system, phospholipid signaling pathways.

**Jacob E. Friedman:** insulin receptor signaling and hormonal regulation of hepatic PEPCK gene promoter in diabetes; molecular control of obesity genes; gestational diabetes.

**Maria Hatzoglou:** molecular sites of control of gene expression as it relates to amino acid transport, cell growth and differentiation, and gene therapy of metabolic diseases.

**Janos Kerner:** fatty acid oxidation, effects of carnitine on aging skeletal muscle.

**Laura E. Nagy:** ethanol and signal transduction, regulation of glut 4 vesicle traffick and glucose transport in adipose and muscle.

**Kou-Yi Tserng:** metabolism of unsaturated fatty acids.

We seek candidates with strong basic science background and drive for research. Detailed information on the departmental research programs, postdoctoral positions, and application forms to the Ph.D. program are available at <http://www.cwru.edu/med/nutrition/home.html>.

*CWRU is an Equal Opportunity Employer. Members of minority groups are invited to apply.*

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Fax: (+81) 3 3235-5852

**AUSTRALIA:** Keith Sandell  
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Fax: (+61) 02 922-1100



## POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIPS MOLECULAR PHYSIOLOGY OF ORGAN SYSTEMS FUNCTION

The most important questions facing contemporary biology concern how specific genes regulate cell and organ systems function, the physiological responses to environmental stress, development, and disease processes. We are seeking outstanding candidates to begin an exciting career studying the role of genes (channels, ion pumps, signaling enzymes, transcription factors, etc.) in mediating physiological and pathophysiological function in mammalian cells and gene-manipulated mice. A multi-laboratory NIH training grant supports these positions. Multidisciplinary training is designed to prepare Fellows to investigate the molecular basis of physiological function and disease. The Department of Molecular and Cellular Physiology is one of the top funded programs in the use of molecular approaches to study physiological processes. Interested U.S. citizens and permanent residents should send their résumé and three letters of reference to: **c/o Ms. Rhonda Hentz, Department of Molecular and Cellular Physiology, University of Cincinnati, P.O. Box 670576, Cincinnati, OH 45267-0576.**

### PREDOCTORAL AND POSTDOCTORAL POSITIONS IN AN INTERDISCIPLINARY PROGRAM

Positions on an NIH-funded Interdisciplinary Training Grant are available to individuals interested in intracellular signaling, gene transcription, mitogenesis, lipid metabolism, and several other biological processes involved in a variety of cardiovascular diseases. Visit our website: <http://www.utmcm.edu/pharmacology/training> for details. Applicants must be U.S. citizens or permanent residents. Please send résumé with names of three references to: **Dr. Tarun B. Patel, Department of Pharmacology, University of Tennessee, Memphis, 874 Union Avenue, Memphis, TN 38163. E-mail: tpatel@physiol.utmcm.edu; FAX: 901-448-7300.** University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer. Minorities and women are especially encouraged to apply.

### POSTDOCTORAL FELLOW/ FACULTY MEMBER

Position available to a Postdoctoral Fellow or junior faculty member to study the molecular mechanisms responsible for increased scavenger receptor expression in human macrophages activated by ox-LDL-immune complexes. Experience in molecular biology, including DNA-protein interactions and cell culture is desirable. Joint appointment at the VA and the Medical University of South Carolina will be sought. The candidate will join a research group investigating immune-mediated mechanisms of atherosclerosis. Salary commensurate with experience. Please send curriculum vitae with names, addresses, and telephone numbers of three references to: **Dr. Maria Lopes-Virella, M.D., Ph.D., Ralph H. Johnson VA Medical Center (151), 109 Bee Street, Charleston, SC 29403. FAX: 803-953-6432.**

**POSTDOCTORAL RESEARCH ASSOCIATE.** Molecular biology. Position available for Ph.D. or M.D. with experience in RT-PCR, molecular cloning, transfection, etc. for Molecular Biologist who will join multidisciplinary group studying ion channels in neurological disorders. Send curriculum vitae, letter of interest, and three letters of reference to:

**Stephen G. Waxman, M.D., Ph.D.**  
Department of Neurology  
Yale University School of Medicine  
P.O. Box 208018  
New Haven, CT 06520-8018

*Yale University is an Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available to study the role of aberrant DNA methylation in the inactivation of tumor suppressor and other genes in human carcinogenesis. Experience in molecular biology techniques and cell culture preferred. Send curriculum vitae and the names of three references to: **Paula M. Vertino, Ph.D., Division of Cancer Biology, Department of Radiation Oncology, Emory University School of Medicine, 145 Edgewood Avenue, Atlanta, GA 30335. E-mail: pvertin@emory.edu.**

*Emory University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**POSTDOCTORAL POSITION** in cardiovascular development available immediately to study the role of Pax3 in heart and muscle. Experience in molecular biology and developmental biology preferred. Send curriculum vitae and names of three references to: **Jonathan Epstein, Stellar Chance 809, University of Pennsylvania, 422 Curie Boulevard, Philadelphia, PA 19104. E-mail: epsteinj@mail.med.upenn.edu.**

### POSTDOCTORAL TRAINING PROGRAM IN THE CELLULAR AND MOLECULAR BIOLOGY OF ARTERIOSCLEROSIS

Advanced research training positions are available to join an established group studying lipid and lipoprotein metabolism, as related to atherosclerosis and heart disease. The approach is multidisciplinary and collaborative, drawing from cell biology, molecular biology, enzymology, physical biochemistry, protein chemistry, and vascular physiology. Areas of investigation include: apolipoprotein structure, function, and gene expression; cellular cholesterol and triglyceride metabolism; lipid signaling pathways; lipoprotein biosynthesis; transport and function of lipid antioxidants; absorption and transport of lipids and fat-soluble vitamins; cholesterol and arterial wall function. Candidates should be U.S. citizens or permanent residents, committed to a career in research, and hold a Ph.D. or M.D. degree. Appointments are normally for two years. Send curriculum vitae, a short summary of research experience and future research objectives, and names of three references to: **Dr. Michael C. Phillips, Department of Biochemistry, Allegheny University of the Health Sciences, 2900 Queen Lane, Philadelphia, PA 19129. Allegheny University of the Health Sciences is an Affirmative Action/Equal Opportunity Employer.**

### POSTDOCTORAL RESEARCH POSITIONS

Newly funded Postdoctoral Research positions will be available in the Laboratory of Cellular and Molecular Cerebral Ischemia beginning spring/summer 1998. Research focuses on the basic mechanisms that determine neuronal plasticity such as programmed cell death, peptide growth factors, signal transduction pathways, metabotropic glutamate receptors, and gene regulation. Successful applicants must have a Ph.D. and/or M.D. with expertise in cellular and molecular biology. Please send or e-mail a curriculum vitae, a summary of research interests, and names of three references to: **Kenneth Maiese, M.D., Departments of Neurology and Anatomy and Cell Biology, 6E-19 UHC, Wayne State University School of Medicine, 4201 St. Antoine, Detroit, MI 48201. E-mail: kmaiese@med.wayne.edu; website: World Wide Web, search "maiese".** Wayne State University is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** available for a recent Ph.D. in molecular microbiology or related field to study the role of envelope proteins in virulence of the obligate intracellular bacterial pathogen, *Chlamydia trachomatis*. Experience in standard molecular biology techniques and protein analysis is required. Some expertise in tissue culture is preferred. Send curriculum vitae and the names, addresses, and telephone numbers of three references to: **Jane E. Raulston, Ph.D., Department of Microbiology and Immunology, University of North Carolina School of Medicine, 804 M. E. Jones Building, CB #7290, Chapel Hill, NC 27599-7290.** Women and minorities are encouraged to apply and to identify themselves. The University of North Carolina at Chapel Hill is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** for experimental tumor therapy projects to study radioimmunoconjugates and chemotherapeutics in animal models, hematopoietic toxicity and recovery, tumor vascular physiology, and application of immunodetection and immunotherapy to non-tumor pathophysiological conditions. Ph.D. with zero to three years of experience and knowledge in several of the following areas: immunology, cell biology, hematology. Starting salary is \$22,000 to \$28,000, depending on experience, with possible future faculty opportunity. Position available after February 1, 1998. Send curriculum vitae and three references to: **Dr. Rosalyn Blumenthal, Director of Tumor Biology, Garden State Cancer Center, 520 Belleville Avenue, Belleville, NJ 07109. FAX: 973-844-7020.**

## POSITIONS OPEN

### POSTDOCTORAL POSITION

A position is available to study the role of the transcription factors MTF and E2F-1 in melanocyte differentiation and immortalization. Applicants should have a Ph.D. or M.D. with a strong molecular biology/biochemistry background. Experience in *in vitro* transcription/translation, analysis of DNA binding protein function, yeast two-hybrid assays, etc. is desired, but all strong candidates will have a Postdoctoral appointment in the Department of Cell Biology. Please send curriculum vitae, summary of research interest, and three letters of recommendation to:

**Estela E. Medrano, Ph.D.**  
Associate Professor  
Baylor College of Medicine  
Huffington Center on Aging  
One Baylor Plaza  
Houston, TX 77030  
FAX: 713-794-7978  
E-mail: medrano@bcm.tmc.edu

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### POSTDOCTORAL POSITION NEUROGENETICS, MOLECULAR BIOLOGY, AND NEUROPHARMACOLOGY

The Brain Function Research Institute (BFRI) is seeking laboratory staff to join fundamental research of dementia and related brain disorders. BFRI was newly founded in 1997 and is supported by the government. The main project is to make fundamental research for developing new antedementia drugs. Positions are available for individuals with Ph.D. in biochemistry or related field with experience in protein chemistry and/or molecular biology and interest in brain cell damage. BFRI offers a reasonable salary. For additional information, please contact: **The Brain Function Research Institute, Executive Director: Tohru Sawada, M.D., Ph.D., c/o National Cardiovascular Center, 5-7-1 Fujishirodai, Suita, Osaka 565 Japan. Telephone: +81-6-834-7646; FAX: +81-6-872-8761.**

**POSTDOCTORAL ASSOCIATE.** National Center for Ecological Analysis and Synthesis (NCEAS)/University of California, Santa Barbara: to work with a group on the dynamics and value of ecosystem services. The goal of the working group (under **Dr. Robert Costanza**) is to develop comprehensive ecological economic models that incorporate complex interdependencies between ecosystems and economic systems to determine the value of ecosystem services. Candidate should have Ph.D. in ecology, economics, or related discipline and research interests in ecosystem services, valuation, dynamic modeling, and related topics. The position is funded for up to two years beginning May 1998 and all work will be conducted at NCEAS. Details regarding the application procedure are available at website: [www.nceas.ucsb.edu](http://www.nceas.ucsb.edu). Equal Opportunity/Affirmative Action Employer.

### MOLECULAR IMMUNOLOGY

**A POSTDOCTORAL POSITION** available for studies of human immunogenetics and autoimmune diseases, focused on MHC/TCR interactions, mechanisms of T cell activation. The candidate should have experience with manipulation of transgenic mice and molecular biology. Highly interactive environment. Send curriculum vitae and names of three references to: **Dr. William Kwok, Virginia Mason Research Center, 1000 Seneca Street, Seattle, WA 98101. E-mail: bkwok@vmcc.org.**

**SENIOR POSTDOCTORAL RESEARCH FELLOWSHIP** available for a Ph.D. in biochemistry/cell biology for studies on bone growth factors. Experience in protein purification, growth factor signaling, and basic molecular biology techniques desirable. Candidate must have good publication record and good writing skills (papers and grants). Salary and benefits competitive; possible long-term position. Send cover letter and curriculum vitae to: **Dr. S. Mohan, P.O. Box 7210, Loma Linda, CA 92354.**

**POSTDOCTORAL RESEARCH FELLOWSHIP.** Positions are available for Postdoctoral Fellows experienced in immunology and/or molecular biology. The studies involve viral and immunological features of HIV and HHV-8 pathogenesis. Must be U.S. citizen. Send curriculum vitae to: **Jay A. Levy, M.D., Division of Hematology/Oncology, University of California, San Francisco, CA 94143-1270. University of California, San Francisco is an Equal Opportunity Employer.**



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Robert C. Gallo

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### GLOBAL CAREER OPPORTUNITIES

#### **Principal Investigator and Research Fellow Positions**

Available for

**The Preparatory Office of Inst. of  
BioAgricultural Sciences  
Academia Sinica, Taipei, Taiwan**

We are seeking to appoint several qualified applicants to serve as Principal Investigators, ranking from assistant, associate, to full research fellows. There are five areas within our IBAS Preparatory Office: disease-resistant transgenic plants, bioreactors, aquaculture, animal vaccines, and environmental/industrial enzymes. New recruits can start in May 1998.

Requirements for the applicants include a Ph.D. or an equivalent degree. Principal Investigators are required to engage in programmatic project, serving as project leaders and/or as collaborative research scientists. The project leader and the senior research scientist must have at least 10 years of research experience with demonstrated abilities in applied and/or basic research in one of the biotechnology areas indicated above, evidence of creativity and organizational skills. They would greatly benefit from their familiarity with Taiwan's cultural environment and language. The junior research scientists must have at least 2 years of postdoctoral training. Applicants are expected to conduct research in the above selected areas of biotechnology. Application should include a cover letter, a complete curriculum vitae, as well as the names, addresses, and telephone numbers and fax numbers of 5 references. Review of applications will begin around March 1998, and will continue until suitable candidates are recruited.

Applications should be addressed to:

Ms. S. W. Wang  
The Preparatory Office of Inst. of BioAgricultural Sciences  
Academia Sinica  
Taipei 11529, Taiwan, R.O.C.

#### **His Highness Shaikh Zayed Bin Sultan Al-Nehayan Chair of Environmental Sciences "Biodiversity and Conservation of Wildlife" Arabian Gulf University - Bahrain**

##### **Background:**

Being a regional educational institution located in Bahrain sponsored by the six states of the Gulf Cooperation Council, the Arabian Gulf University (AGU) is serving part of the educational needs of the GCC Countries. AGU since its establishment has given priority to environmental issues in its educational, research, and other academic activities. Sustainable use and conservation of biodiversity, ecosystems, and habitats endemic to the Arabian Gulf Region has become the focus of interest during the last decades and will do so in future.

AGU is therefore seeking applications for his Highness Shaikh Zayed Bin Sultan Al-Nahayan Chair of Environmental Sciences according to the following terms of reference:

##### **Job Description:**

The candidate is expected to undertake and contribute to the following activities:

1. Teach and develop new courses on environment studies according to the needs of undergraduate and graduate programmes at AGU, especially in the fields of Biodiversity and Conservation of Wildlife.
2. Supervise projects and theses of graduate students in the fields related to the above-mentioned subjects.
3. Conduct and supervise research on these and other relevant subjects.
4. Conduct training courses workshops and organize conferences in the different environmental fields of interest.
5. Establishment of a centre at AGU for Environmental Information Systems (EID).

##### **Qualifications:**

1. Ph.D. degree in Environmental Sciences (Animal or Plant)/ Biodiversity/ Conservation of Wildlife with a post-Ph.D. experience of not less than 10 years in the fields of specialization.
2. Good record of conducting and leading multidisciplinary research activities and publication in the fields of Biodiversity and Conservation of Wildlife, with special reference to the Arabian Gulf Region.
3. Good experience in teaching and supervising research projects of graduate students in the above-mentioned fields.
4. Experience with the international organizations dealing with Biodiversity and Conservation of Wildlife and the regional and international agreements and conventions.
5. Holding an academic position of Professor at a reputable university/research institution.

##### **Benefits:**

- Monthly salary: ranges from 1,450 to 2,050 BD (1BD=US \$2.65), depending upon years of experience.
- Business class returns air tickets annually for faculty member and family, up to five tickets.
- Monthly transport allowance.
- Furnished accommodation at the University Campus, or accommodation allowance.
- End-of-service gratuity.
- Free public medical care covering family, available at government hospitals and health centers.
- 60 days paid annual holiday.
- Children education allowance.

Applications, including curriculum vitae and scientific career, documentation of teaching experience and other professional activities, three references, and list of publications, should be addressed to: Dean of the School of Graduate Studies, Arabian Gulf University, P.O. Box 26671, Manama, Bahrain. Deadline: February 20, 1998.

## POSITIONS OPEN

**POSTDOCTORAL POSITION** is available immediately for a recent graduate with a Ph.D. in molecular biology, genetics, biochemistry, or cell biology interested in the molecular genetics of signal transduction in the *Drosophila* visual system. Previous experience with *Drosophila* preferred. Send curriculum vitae and names of references to: **Dr. Nansi Jo Colley, Departments of Ophthalmology and Visual Sciences and Genetics, K6/460 CSC, University of Wisconsin, 600 Highland Avenue, Madison, WI 53792. FAX: 608-265-6021; e-mail: njcolley@facstaff.wisc.edu; website: http://www.wisc.edu/genetest/CATG/colley/index.html.**

**RESEARCH SPECIALIST POSITION** available immediately in a laboratory studying the molecular genetics of signal transduction in the *Drosophila* visual system. Candidates must have expertise in electron microscopy or molecular biology or genetics. Candidates must have strong organizational skills. Previous experience with *Drosophila* preferred. Send curriculum vitae and names of references to: **Dr. Nansi Jo Colley, Departments of Ophthalmology and Visual Sciences and Genetics, K6/460 CSC, University of Wisconsin, 600 Highland Avenue, Madison, WI 53792. FAX: 608-265-6021; e-mail: njcolley@facstaff.wisc.edu; website: http://www.wisc.edu/genetest/CATG/colley/index.html.**

### POSTDOCTORAL POSITIONS AVAILABLE FOR STUDIES OF MOLECULAR MECHANISMS IN SIGNAL TRANSDUCTION

Department of Immunology  
The Scripps Research Institute  
La Jolla, California

For summary of research, please see Kato, Y., et al., *EMBO J.* 16:7054, 1997; Jiang, Y., et al., *J. Biol. Chem.* 272:30122, 1997; Huang, S., et al., *Immunity* 6:739, 1997; Han, J., et al., *Nature* 386:296, 1997; Han, J., et al., *Science* 265:808, 1994; Han, J., *J. Biol. Chem.* 271:2886, 1996. Send applications to: **Richard Ulevitch, Ph.D., Department of Immunology, IMM-12, The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037. FAX: 619-784-8239; e-mail: chastain@scripps.edu.**

The Scripps Research Institute is an Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL FELLOWSHIP MOLECULAR IMMUNOLOGY

University of California, San Diego

Postdoctoral Fellowship positions available for Ph.D. (one) and M.D. (one) candidate to study eosinophil and lymphocyte trafficking in allergic inflammation. Project exposes trainee to generation of knockout mice, *in situ* hybridization, immunohistochemistry, intravital video-microscopy, and single cell adhesion assay. Candidates must be U.S. citizens or permanent residents, and may not have had more than two years of NIH T32 training grant funding. Send curriculum vitae and references to: **Dr. David Broide, University of California, San Diego, 9500 Gilman Drive 0635, La Jolla, CA 92093. E-mail: dbroide@ucsd.edu.**

**POSTDOCTORAL FELLOWSHIP** in cytokine signaling, Cell and Developmental Biology and Immunobiology Programs, Penn State. Opportunities to investigate novel cytokine regulated genes and their function in hematopoietic cell growth and survival using unique *in vitro* and transgenic models. Forward curriculum vitae and references to: **D. M. Wojchowski, 115 Henning, The Pennsylvania State University, University Park, PA 16802. E-mail: dmw1@email.psu.edu; Telephone: 814-865-0657. Affirmative Action/Equal Opportunity Employer.**

A **POSTDOCTORAL POSITION** is available immediately in the general area of DNA replication fidelity and DNA repair. Background in molecular biology and biochemistry desired. Please send curriculum vitae and the names of three references to: **Dr. Joann B. Sweasy, Yale University School of Medicine, 333 Cedar Street, P.O. Box 208040, New Haven, CT 06510. E-mail: joann.sweasy@yale.edu. Yale is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITIONS.** Synthesis and enzymology of novel nucleosides and nucleotides, antiviral compounds. Send curriculum vitae and at least two letters of recommendation to: **Prof. V. Nair, University of Iowa, Department of Chemistry, Iowa City, IA 52242. The University of Iowa is an Equal Employment Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.**

## POSITIONS OPEN

### POSTDOCTORAL POSITION

Available to study microtubule motor protein structure/cellular function. Training in molecular and cell biology preferred. Send curriculum vitae and names of three references to: **Dr. S. Endow, Department of Microbiology, Duke University, Durham, NC 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL POSITIONS

(1) A program to understand the role of gelsolin in transformation, motility, invasion, and apoptosis. Gelsolin is a substrate for caspase-3 (*Science* 1997), a critical effector of rac signaling (*EMBO J.* 1998), and is upregulated in a fraction of human lung cancers, where it is a dominant negative prognostic factor. We plan to investigate gelsolin's role *in vivo* in apoptosis, and examine whether its expression is upregulated as part of a coordinated motility induction event in lung cancer.

(2) A program to understand the function of the TSC1 and TSC2 genes and proteins in cell growth control. We recently cloned (*Science* 1997) the TSC1 gene, and have/are generating murine knockouts for both the TSC1 and TSC2 genes. TSC2 null embryos and cultured embryo fibroblasts are blocked in G1/G2, suggesting a critical function for TSC2 in cell cycle progression. Applicants should have a Ph.D. or M.D. degree with a strong background in cell biology, molecular genetics, and/or growth signaling.

Please send curriculum vitae and a description of research interests and career goals to: **Dr. David J. Kwiatkowski, Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, 221 Longwood Avenue, Boston, MA 02115. E-mail: kwiatkowski@calvin.bwh.harvard.edu. Applications from women and minorities are encouraged.**

### POSTDOCTORAL POSITION DEPARTMENT OF NEUROBIOLOGY THE SCRIPPS RESEARCH INSTITUTE

La Jolla, California

Applications are invited for a position of Postdoctoral Fellow to study mechanisms of neuron-glia interaction and regeneration in the central nervous system putting emphasis on methods of gene discovery such as differential display and subtractive hybridization and on the analysis on the neural cell surface protein and signaling. The position is available immediately. Please submit a curriculum vitae including a statement of research experience/interests and arrange for letters of reference to be sent to: **Kathryn L. Crossin, The Scripps Research Institute, Department of Neurobiology, 10550 North Torrey Pines Road, SBR-14, La Jolla, CA 92037. The Scripps Research Institute is an Affirmative Action/Equal Opportunity Employer.**

### POSTDOCTORAL POSITION

An NIH-funded position is available to study the signal transduction mechanisms of nitric oxide, associated with growth and motility in vascular smooth muscle cells. A Ph.D. in a life science and experience in the techniques of modern biochemistry, including molecular biology, is required. Preference will be given to individuals with a recent degree. Send curriculum vitae and the names of three references to: **Aviv Hassid, Ph.D., Department of Physiology and Biophysics, The University of Tennessee, 894 Union Avenue, Memphis, TN 38163. FAX: 901-448-7126; e-mail: ahassid@physiol.utm.edu. The University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ADA/ADEA Employer.**

### POSTDOCTORAL FELLOW YALE UNIVERSITY SCHOOL OF MEDICINE

Postdoctoral position available to examine B and T lymphocyte interactions in murine models of autoimmunity (SLE and multiple sclerosis). Experience in T cell immunology, antigen presentation, tolerance, and/or molecular biology helpful. Candidate must be a permanent resident or U.S. citizen. Please send statement of research interest, curriculum vitae, and reference letters to: **Mark Mamula, Ph.D., Yale University School of Medicine, 333 Cedar Street, LCI 610, P.O. Box 208031, New Haven, CT 06520-8031. E-mail: mark.mamula@yale.edu.**

## POSITIONS OPEN

### CENTER FOR NEUROVIROLOGY AND NEUROONCOLOGY Allegheny University of the Health Sciences

**POSTDOCTORAL POSITIONS.** Several Postdoctoral Fellow positions are immediately available for candidates interested in (1) studying regulation of HIV-1 gene expression in the central nervous system; (2) developing molecular therapeutic strategies against HIV-1 in the central nervous system; (3) investigating the role of cell cycle mediators in replication of HIV-1 and other human neurotropic viruses in brain; and (4) studying molecular pathogenesis of demyelinating diseases including multiple sclerosis. Candidates should have strong research background in molecular biology, biochemistry, and genetics.

All interested candidates should forward curriculum vitae and summary of their research interests to:

**Kamel Khalili, Ph.D., Director  
Center for NeuroVirology and NeuroOncology  
Broad and Vine Streets, MailStop 406  
Philadelphia, PA 19102  
E-mail: khalili@auhs.edu**

Allegheny University of the Health Sciences is an Equal Opportunity Educator and Employer.

**POSTDOCTORAL POSITIONS.** Molecular biology of bacterial pathogenesis. Postdoctoral positions are available immediately or during the summer or fall of 1998 in the Department of Microbiology at the University of Colorado Health Sciences Center to work on structure and function of cholera toxin or on characterization of the diphtheria toxin repressor and its regulon in *Corynebacterium diphtheriae*. A Ph.D. in microbiology, molecular biology, genetics, biochemistry, cell biology, or a related field is required. Research facilities and professional environment are excellent. Salary is commensurate with training and experience. Submit curriculum vitae, bibliography, and names of three professional references to: **Dr. Randall Holmes, Department of Microbiology, Campus Box B-175, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262. University of Colorado Health Sciences Center is committed to Equal Opportunity and Affirmative Action.**

**POSTDOCTORAL POSITION** to study the regulation of bacterial genes involved in *Agrobacterium tumefaciens* pathogenesis. A Ph.D. degree with strong background in bacterial genetics, molecular biology, and recombinant protein purification is required; experience with RNA polymerase genetics and microscopy desirable. Send curriculum vitae and three reference contacts to: **Dr. Stephen C. Winans, Section of Microbiology, Wing Hall, Cornell University, Ithaca, NY 14853. An Equal Opportunity/Affirmative Action Employer.**

## FELLOWSHIPS

### SEYMOUR S. KETY RESEARCH FELLOWSHIPS INTRAMURAL RESEARCH PROGRAM

National Institute of Mental Health  
National Institutes of Health

The National Institute of Mental Health Intramural Program is pleased to announce the availability of Intramural Research Training Awards in honor of **Seymour S. Kety, M.D.**, first Scientific Director of the NIMH Division of Intramural Research (1951 to 1956). Applications are invited from U.S. citizens or permanent residents with an M.D. and/or Ph.D. degree with less than five years of postdoctoral experience. Awards will be made for up to three years and will provide the opportunity to work in any of the Program's 22 Clinical Branches and Basic Research Laboratories located on the 306-acre NIH Campus in Bethesda, Maryland. The Program conducts a broad array of research activities that range from clinical investigation into the diagnosis, treatment, and prevention of mental illness to basic neuroscience investigation at the systems, cellular, and molecular levels (for description, see website: <http://intramural.nimh.nih.gov>). Deadline for applications is March 1st. To apply submit a cover letter expressing research interests, a curriculum vitae, and two letters of recommendation to:

**Barry B. Kaplan, Ph.D.  
Director of Fellowship Training  
National Institute of Mental Health  
NIH Clinical Center, Room 4N-222  
10 Center Drive  
Bethesda, MD 20892-1381  
Telephone: 301-496-4183  
E-mail: kaplanb@irp.nimh.nih.gov**

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**His Highness Shaikh Hamad Bin Khalifa Al-Thani Chair  
of Geographic Information Systems (GIS)  
Arabian Gulf University - Bahrain**

**Background:**

The pressing environmental problems and the need for the sustainable development and conservation of the scarce natural resources of the Arabian Gulf Region require applications of GIS technology for planning, allocation, and proper management of these natural resources.

The Arabian Gulf University (AGU), in its endeavor to advance the education and training of scholars and specialists of the region in the fields of knowledge most needed to meet the challenges of the 21st century is establishing a Chair for GIS Studies within the framework of the Desert and Arid Zones Sciences Programme, which will conduct studies for the Master of Science and postgraduate Diploma in addition to training and providing community services activities.

AGU is therefore seeking applications for His Highness Shaikh Hamad Bin Khalifa Al-Thani Chair of Geographic Information Systems (GIS), according to the following terms of reference.

**Job Description:**

- Teaching at the graduate level.
- Propose, organize, and participate in training programs to be offered to various professional and academic organizations.
- Supervise research activities leading to graduate degrees.
- Collaborate in R & D activities in cooperation with national institutes and regional organizations of the Gulf area.
- Promote and advance the understanding of GIS applications for various needs in the Gulf region.

**Qualifications:**

1. Applicant should have a Ph.D. degree in the field of Remote Sensing and GIS Technologies.
2. Applicant should have 8–10 years of experience in GIS applications in one or more of the following fields:
  - Management and development of natural resources of arid lands.
  - Assessment of desertification processes and environmental problems.
  - Management, planning, and monitoring of rural and urban areas for problem solving and decision making.
3. The applicant should hold an academic position of Professor at a reputable university or research institute.

**Benefits:**

- Monthly salary: ranges from 1,450 to 2,050 BD (1BD=US \$2.65), depending upon years of experience.
- Business class returns air tickets annually for faculty member and family, up to five tickets.
- Monthly transport allowance.
- Furnished accommodation at the University Campus, or accommodation allowance.
- End-of-service gratuity.
- Free public medical care covering family, available at government hospitals and health centers.
- 60 days paid annual holiday.
- Children education allowance.

**Applications, including curriculum vitae and scientific career, documentation of teaching experience and other professional activities, three references, and list of publications, should be addressed to: Dean of the School of Graduate Studies, Arabian Gulf University, P.O. Box 26671, Manama, Bahrain. Deadline: February 20, 1998.**



**RIKEN BRAIN SCIENCE INSTITUTE**

**LABORATORY HEAD IN NEURONAL FUNCTION RESEARCH**

RIKEN Institute (<http://www.riken.go.jp/>) launched the Brain Science Institute on October 1, 1997. The Brain Science Institute is expected to function as a core of the Age of Brain Science Initiative in Japan (*Science* 275:1562, 276:1011; *Nature* 382:105).

The Neuronal Function Research Group, a division of the Brain Science Institute, invites applicants for the position of laboratory head to begin April 1998. A qualified candidate should have a strong background in cellular and/or molecular neuroscience and is expected to conduct basic experimental studies for neuronal function research.

The laboratory head is expected to organize a research team by recruiting 5–10 postdocs and technicians, and will be assured of generous research grants during the term. He/she will be reviewed every 5 years by international review committee, as all the other laboratory heads, and can continue the laboratory if a good evaluation is given. Other heads in the Neuronal Function Research Group are: **Dr. Kensaku Mori** (olfactory system and neuronal recognition molecules), **Dr. Ryoji Yano** (molecular analysis of neurons and synapses) and **Dr. Takao K. Hensch** (visual cortex development and plasticity). Applicant should submit, as soon as possible, but prior to February 28, 1998, a curriculum vitae, bibliography, a brief (within 1,000 words) description of research plan in RIKEN, and three names for reference to:

**Search Committee #1**

**Brain Science Institute, RIKEN**

**2-1 Hirosawa, Wako, Saitama 351-0198, Japan**

**Fax: +81-48-467-2539**

**E-mail: search1@brain.riken.go.jp**

**ANNOUNCEMENT**

The Second

**Novartis Prize for  
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worth 50000 Swiss Francs, will  
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Applications and nominations should  
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to Hannes B. Staehelin, MD, Official Coordinator,  
Head of Geriatric Clinic, University Hospital,  
CH-4031 Basel, Switzerland.

Further information and details of the form  
of submission can be obtained from

The Secretary,

Novartis Foundation for Gerontological Research,  
CH-4002 Basel, Switzerland,

Fax: ++41-61-324 42 94

E-mail: [charles\\_studer@pharma.novartis.com](mailto:charles_studer@pharma.novartis.com)

 **NOVARTIS**

## POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIPS DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY AND WALTHER ONCOLOGY CENTER Indiana University School of Medicine

Positions are currently available with three investigators:  
**Ghalib Alkhatib:** Molecular determinants involved in the HIV-1 envelope glycoprotein/CD4/coreceptor interaction, and small molecules as blocking agents for HIV infection.

**Johnny He:** HIV infection and pathogenesis in the central nervous system, regulation of HIV gene expression, and interaction of HIV and hematopoietic progenitors.

**Mark Kaplan:** Biology of STAT proteins in the immune system using STAT-deficient mice.

Candidates should be highly motivated, possess a Ph.D. degree, and have experience in molecular biology techniques. Interested applicants should send their curriculum vitae along with the names, telephone numbers, and e-mail addresses of three references to: (Investigator's Name), Walther Oncology Center, Room 302, 1044 West Walnut Street, Indianapolis, IN 46202. Equal Opportunity Employer/Affirmative Action.

**POSTDOCTORAL POSITIONS** funded by NIH are available to study molecular biology of cardiac development and regional variations in cardiac cell types combined with cellular electrophysiology. Experience in molecular biology techniques such as PCR, Northern and Western blotting, and molecular cloning is required. Experience with patch clamp studies on isolated cells is desired. Send curriculum vitae, summary of research experience, and three references to: **Dr. Ronald W. Joyner**, Department of Pediatrics, Emory University, 2040 Ridgewood Drive N.E., Atlanta, GA 30322. E-mail: rjoyner@cellbio.emory.edu. Emory University is an Equal Opportunity Employer.

## COURSES & TRAINING

**MEDICAL UNIVERSITY OF SOUTH CAROLINA** offers programs leading to Ph.D. and M.D.-Ph.D. degrees in the basic biomedical sciences (biochemistry, microbiology/immunology, pathology, pharmacology, physiology) and molecular and cellular biology and pathobiology, biometry/epidemiology, and pharmaceutical sciences. Competitive stipends of \$15,000 available. Contact: **College of Graduate Studies**, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425-2501. Website: <http://www2.musc.edu/>.

## EUROPEAN CAREER OPPORTUNITIES

The Swiss Federal Institute of Technology Zurich (ETHZ) invites applications for an

### ASSISTANT PROFESSOR OF STRUCTURAL MOLECULAR BIOLOGY

We seek applications from outstanding young scientists who will develop a strong research program in structural molecular biology using protein X-ray crystallography. Participation in the teaching program of molecular biology will be required. The appointment in the Institute of Molecular Biology and Biophysics (website: <http://odin.ethz.ch/>) which is part of the Biology Department, is initially for three years, with the possibility of renewal for a second three-year period.

Applications including a curriculum vitae with a list of publications and a summary of current and future research interests are to be submitted no later than March 15, 1998, to: **The President of ETH Zurich**, Prof. Dr. O. Kübler, ETH Zentrum, Zurich CH-8092 Switzerland. ETHZ specifically encourages female candidates to apply with a view towards increasing the proportion of female professors.

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