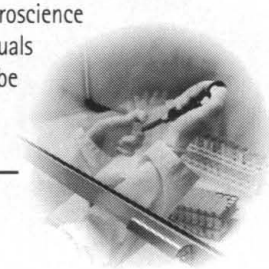


W E D E P E N D O N T H E



It takes world-class employees to make a world-class company.

At Abbott Laboratories, our professionals are researching, developing and marketing the health care products that will make a significant impact on generations to come. As we expand our research efforts, the Neuroscience Research Area of our Pharmaceutical Products Division is seeking creative, highly motivated individuals for several positions within a multi-disciplinary drug discovery team. The ideal candidates will be team-oriented individuals with a record of accomplishments as evidenced by publications, and a background in pharmaceutical drug discovery.



#### **MOLECULAR BIOLOGIST**

You will be responsible for the cloning and expression of novel ligand-gated ion channel and G-protein coupled receptors. The ideal candidate will be a Ph.D. scientist with 2-5 years of postdoctoral experience in molecular biology and demonstrated expertise in DNA cloning and gene expression. Research experience in neurobiology/neuropharmacology is preferred. (Job #96-JLW-0396)

#### **BIOCHEMICAL PHARMACOLOGISTS**

The ideal candidates will have a Ph.D. in Pharmacology, Biochemistry or Neurobiology with 3+ years of postdoctoral experience. Research experience in biochemical pharmacology, including enzyme and radioligand binding assays, and functional assays in isolated tissues/cultured cells relevant to ligand-gated ion channels and G-protein coupled receptors is essential. (Job #96-JLW-0418)

#### **ELECTROPHYSIOLOGIST**

The successful candidate will be a Ph.D. scientist with 2-5 years postdoctoral experience in electrophysiology. Demonstrated expertise in patch and voltage clamping and extracellular recording methodology and experience with oocyte expression systems is essential. Research experience in neurobiology/neuropharmacology is preferred. (Job #96-JLW-0703)

#### **ASSOCIATE ELECTROPHYSIOLOGIST**

The ideal candidate will have a B.S./M.S. in Biology with at least 2-5 years laboratory experience in electrophysiology. Research experience in patch and voltage clamping and extracellular recording techniques, as well as oocyte expression systems is required. A knowledge of neurobiology and pharmaceutical drug discovery experience would be an advantage. (Job #96-JLW-0704)

#### **NEUROBIOLOGIST**

The ideal candidate will have a Ph.D. in Neurobiology with 3+ years of postdoctoral experience. Research experience in biochemistry, cell biology and pharmacology is desirable. Demonstrated expertise in the isolation and characterization of novel receptors/signal transduction mechanisms is essential. (Job #96-JLW-0417)

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## **TRANSGENIC MODELS/ES CELL RESEARCH SCIENTIST (THOUSAND OAKS, CA)**

The successful candidate will assist in developing technology for screening the function of novel gene products and will establish a strong research program in an area of company interest. Candidates must have a Ph.D. in Molecular Biology or related discipline, post doctoral training, and typically up to 2 years' experience working with transgenic models and ES cells. Experience with gene-trap and/or YAC/BAC technology is desirable. (Job Code TPSC9476)

## **ANTI-INFLAMMATORY/ RESEARCH SCIENTIST (BOULDER, CO)**

We seek a Research Scientist to join our anti-inflammatory drug discovery team. Qualified candidates will have a Ph.D. in Biochemistry, or related field and previous post-doctoral training. Candidate must have proven experience in protein purification and characterization, as well as mammalian cell culture. Preferred candidates will have a record of research accomplishments and previous industry experience. (Job Code BPSC2466)

## **POST DOCTORAL FELLOW (BOULDER, CO)**

The requirements for this position include a Ph.D. in the Life Sciences or a related field. The applicant will have typical academic experience in the areas of cell culture, animal handling, hemopoietic assays, and cell biology. Advanced scientific analysis and technical writing are key elements of your responsibility. General knowledge of intercellular pathways involved in TNF signalling and expertise in cDNA library construction and screening are preferred. (Job Code BPSC2893)

## **RESEARCH SCIENTIST (BOULDER, CO)**

The requirements for this position are a Ph.D. in the Life Sciences or the equivalent, and post doctoral training or related experience. Additionally, the applicant should typically have two years of experience in a research or laboratory setting designing and conducting complex experiments. Advanced scientific analysis skills and troubleshooting skills, and advanced laboratory work skills are essential. Knowledge of IND's and NDA's, and previous experience in inflammation research transduction, gene cloning and expression are a must. (Job Code BPSC3201)

## **RESEARCH ASSOCIATE/ RESEARCH SCIENTIST (BOULDER, CO)**

The Quantitative Biology group of Inflammation Research seeks highly motivated scientists at the bachelor, master, and doctoral level who have typically 3-5 years' experience doing industrial assay development and high throughput screening. Qualified candidates will have substantial working experience developing and implementing high throughput screening assays using ORCA, Tecan, Packard, Beckman, Hamilton, and/or Zymark robotic systems. Knowledge of multiple assay types is expected, including ELISA's, RIAs, enzyme assays, receptor binding assays, cell adhesion, activation and/or signal transduction assays. (Job Code BPSC2727)

We offer a highly competitive compensation and benefits package. For immediate consideration, please mail your resume to: Amgen, Job Code: (see above), P.O. Box 2569, Thousand Oaks, CA 91319-2569. E-mail: [jobs@amgen.com](mailto:jobs@amgen.com). Please consult our on-line Job Bulletin Board at <http://amgen.bio.com> for information on other career opportunities available at Amgen. Principals only, please.

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## POSITIONS OPEN

### TENURE-TRACK FACULTY POSITION Mammalian Cellular Physiologist

The Department of Animal and Nutritional Sciences in the College of Life Sciences and Agriculture at the University of New Hampshire (UNH) invites applications for an academic year tenure-track **ASSISTANT PROFESSOR** position (60% teaching; 40% research) in the area of mammalian cellular physiology, starting August 1996. The successful candidate will be expected to teach 12 credit hours of course work per year, to include a one semester undergraduate cell physiology course and, on alternating years, one semester of an existing undergraduate general biology course and a one semester graduate course in the area of specialty. The candidate should have research expertise that utilizes contemporary approaches to investigate physiological processes, and complements existing strengths, which include adipocyte physiology, cancer biology, vascular or reproductive physiology, and nutritional biochemistry. We seek candidates with a Ph.D. and postdoctoral experience. The successful candidate must have a strong commitment to excellence in teaching, and is expected to establish an independent research program that actively involves graduate (Ph.D. and M.S.) and undergraduate students. Candidates should send a curriculum vitae, a statement of teaching experience and philosophy, a description of research interests including accomplishments and future directions, and names and addresses of at least three references to: **Search Committee Chair, University of New Hampshire, Department of Animal and Nutritional Sciences, Kendall Hall, Durham, NH 03824. FAX: 603-862-3758.** The closing date for applications will be April 30, 1996. *Women and minorities are encouraged to apply. UNH is an Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITIONS PHARMACOLOGY AND TOXICOLOGY Medical College of Wisconsin

The Department of Pharmacology and Toxicology is seeking highly qualified applicants to fill full-time, tenure-track positions for **ASSISTANT PROFESSOR**. Applicants must have a doctoral degree in a relevant area and a minimum of two years of postdoctoral experience. They should have a strong record of research accomplishments, be committed to developing an independent, extramurally funded research program, and be willing to participate in graduate and medical team teaching. Preference will be given to applicants applying modern methods of biochemistry, molecular biology, and cell biology to receptor mediated mechanisms, signal transduction, or toxicology. Facilities include core laboratories for peptide/DNA synthesis, sequencing and analysis, flow cytometry, LC/GC/MS, NMR, ESR, and cell culture. Competitive salaries, space, and start-up funds are available. Applicants should send a curriculum vitae, statement of research interest and plans, three relevant publications, and names of three references to: **William B. Campbell, Ph.D., Chairman, Department of Pharmacology and Toxicology, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226.** *Medical College of Wisconsin is an Affirmative Action/Equal Opportunity Employer.*

**FACULTY POSITION** in drug delivery/cellular drug transport technology, College of Pharmacy and Allied Health Professions, Wayne State University (WSU). The Department of Pharmaceutical Sciences is seeking candidates for a tenure-track position anticipated to be available October 1, 1996 in drug delivery/drug transport technology with focus on cellular, molecular and biochemical aspects of drug delivery and transport systems. Candidates for position are expected to establish a funded research program and will be responsible for dosage form design and biopharmaceutics instruction. Applicants should possess a Ph.D. and/or M.D. degree in pharmacology, pharmaceutical sciences, immunology, cell biology, or a related discipline and have postdoctoral experience. Rank and salary commensurate with experience. Qualified candidates should send a curriculum vitae and the names and addresses of three references to: **Fusao Hirata, M.D., Ph.D., Interim Chair, Department of Pharmaceutical Sciences, College of Pharmacy and Allied Health Professions, 528 Shapiro Hall, Detroit, MI 48202.** *Wayne State University is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply. All buildings, structures and vehicles at WSU are smoke-free. Wayne State University—People working together to provide quality service.*

## POSITIONS OPEN

### UNIVERSITY OF PENNSYLVANIA MEDICAL SCHOOL

#### Department of Pharmacology and

#### The Center for Neurobiology and Behavior

The Center for Neurobiology and Behavior and the Department of Pharmacology are recruiting a senior-level, tenure-track **FACULTY** member to add strength in behavioral and molecular pharmacology at the Penn Medical School. Candidates must have M.D./Ph.D. or Ph.D. in neurobiology or pharmacology, and they must have an established research program. Candidates should be employing cellular and molecular biological techniques to study changes in behavior induced by stress and/or pharmacological manipulation. Areas of interest might include regulation of neurotransmitter receptors, control of the hypothalamic-pituitary axis, and the effect of stress or drug abuse on neurotransmission.

The Center is interdisciplinary and is an integral part of the Institute for Neuroscience, complementing and extending the programs of the Departments of Neuroscience, Pharmacology, and Psychiatry with an integrated systems approach to mammalian and human behavior.

Renovated laboratory space and generous start-up funds are available. This position is a tenured one.

Applicants should submit a cover letter, a curriculum vitae, selected reprints or preprints, a statement of research interests, and three letters of recommendation to:

**Chairman's Office  
Department of Pharmacology  
Medical School of the University of Pennsylvania  
Philadelphia, PA 19104-6084**

*The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are especially encouraged.*

The Department of Cell Biology at the University of New Mexico School of Medicine invites applications for a tenure-track appointment in molecular virology at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level. Applicants are required to hold a Ph.D. in a related field of study and should have at least two or more years of postdoctoral training. Candidates will be expected to demonstrate evidence of originality and the ability to maintain a vigorous, externally funded research program, as well as a record of research productivity. Candidates should also possess effective teaching skills for participation in Graduate training programs. The Department consists of nine faculty applying the techniques of molecular biology and genetics to the study of cells and viruses. We seek an individual with compatible interests who will contribute to the growth of a stimulating, intellectual environment. Applicants should send a curriculum vitae, description of research plans, and names of three references to: **Charlene Golden, Search Coordinator, Faculty Search Committee, Department of Cell Biology, Cancer Research and Treatment Center, University of New Mexico School of Medicine, Albuquerque, NM 87131.** Deadline for receipt of application is June 1, 1996. *The University of New Mexico is an Affirmative Action/Equal Opportunity Employer.*

### PHYSICAL SCIENCES LIBRARIAN

California State University, Long Beach. Provides a full range of professional services to students and instructional faculty in a highly automated general reference environment: instruction, collection development, reference/consultation. Appointment will be made at the **SENIOR ASSISTANT or ASSOCIATE LIBRARIAN** rank (\$38,016 to \$78,588). A detailed position description and application materials are available from: **University Library and Learning Resources Administrative Office, Telephone: 310-985-7839.** *An Equal Opportunity/Affirmative Action/Title IX Employer.*

**TEACHERS** needed for 1996-97 school year at new urban public high school. Only pioneers need apply! Must have degree in one of the following: physics/physical science, biology, math, or computer science; must also be willing to work toward Louisiana certification. Our students are chosen for their interest in and aptitude for science/math. Our school has a support organization of scientists who provide additional resources including state-of-the-art equipment and materials. Résumés to: **Barbara MacPhee, Principal, New Orleans Science and Math High School, 980 Navarre Avenue, New Orleans, LA 70124. FAX: 504-483-1832.**



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## **Research Officer**

**Plant Biotechnology Institute (PBI)  
Saskatoon, Saskatchewan**

### **Your Challenge**

In consultation with other members of the Cereal Biotechnology Group, you will be a major contributor to ongoing research to develop cereal genetic transformation methodologies as well as wheat and barley transgenics with improved agronomic performance and/or value-added traits. You will also see to the development, adaptation and/or optimization of in vitro regeneration protocols and genetic transformation protocols for various genotypes of wheat and barley. In addition, you will participate in project planning and reporting, create research and development interactions with outside collaborators including industry, and manage the financial, human and physical resources associated with a research laboratory.

### **Your Credentials**

You must have a PhD in a specialization related to plant biotechnology, with emphasis on plant improvement using in vitro regeneration and genetic transformation. In addition, you require extensive experience, as evidenced by publications, in the research of in vitro regeneration, the genetic transformation of cereals such as wheat or barley, and the analysis and inheritance of transgenes in transgenics. You must also be experienced in biological research and the associated planning of laboratory experimentation, the interpretation of results, the preparation of research publications, and the use of various biochemical and molecular techniques to assay and analyze inserted genes.

Knowledge of English is essential, and an enhanced reliability check will be conducted.

Salary range: Commensurate with qualifications. Relocation costs may be negotiable.

To explore this opportunity, send your application by May 31, 1996, indicating reference number PB-96-03-SC, to the: **Recruitment and Staffing Group, National Research Council Canada, Montreal Road, Building M-58, Ottawa, Ontario K1A 0R6.**

*NRC is an equal opportunity employer. We thank all those who apply and advise that only those selected for further consideration will be contacted.*

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*Bayer Corporation, Pharmaceutical Division, located near Raleigh, NC is seeking to establish a new research team specializing in the areas of Virus Detection and Inactivation, and Biochemistry Research to meet the needs of our expanding Biological Products business. Several scientific openings exist.*

## **BIOCHEMISTRY RESEARCH SCIENTISTS**

These positions will be dedicated to the identification and development of therapeutic proteins from human plasma. Both positions require a Ph.D. in Biochemistry, Hematology, or a related field with a minimum of 2-4 years of relevant research experience. Successful candidates will have demonstrated their expertise as independent investigators in one of the specialty areas listed below as well as a thorough knowledge of enzyme kinetics. Experience in cell culture techniques is highly desirable. Candidates will be expected to initiate novel, product-directed research and to function effectively in a team-oriented environment. In addition to a strong intramural program, significant collaborations with academic research laboratories are anticipated.

**Position 95-42:** This individual will focus on the purification and characterization of coagulation proteins, as well as other serine proteases and plasma proteins.

**Position 95-43:** This individual will focus on the purification and characterization of complement proteins, as well as other serine proteases and plasma proteins.

## **VIROLOGY RESEARCH SCIENTISTS**

The Viral Research group is dedicated to the research and development of novel methods for viral detection and inactivation. Both positions require a Ph.D. in Virology, Molecular Biology, or Biochemistry. The specifics are identified below. In addition to a strong intramural program, significant collaborations with academic research laboratories are anticipated.

**Position 94-107:** This position requires a minimum of 5-7 years of relevant experience in the characterization of molecular interactions at the protein or nucleic acid level; experience in molecular and biological analytical methods is required. Responsibilities include the establishment and operation of rapid high throughput screens for the detection of viral inactivating compounds and methods employing biochemical based strategies. In addition, the incumbent will be expected to provide technical leadership and laboratory supervision.

**Position 95-39:** This position requires a minimum of 4 years of relevant experience in the development of in vitro tissue culture methods to evaluate virus infection. Experience with the culture of non-enveloped viruses is desirable.

*These positions offer an attractive compensation package commensurate with qualifications. Send resume with position number clearly identified to: **Human Resources Manager, Bayer Corp., P.O. Box 507, Clayton, NC 27520.***

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## POSITIONS OPEN

### SCIENTIFIC DIRECTOR THE MIAMI PROJECT TO CURE PARALYSIS

The Miami Project to Cure Paralysis at the University of Miami School of Medicine, a multidisciplinary research effort to develop strategies to improve function after spinal cord injury, has initiated a search for the position of Scientific Director. Candidates must hold an M.D. and/or Ph.D. degree, have an internationally recognized reputation for excellence in scholarly activities in the field of neuroscience, and have research and teaching experience commensurate with the rank of **PROFESSOR**. Administrative experience or demonstrated leadership potential preferred. Primary appointment will be in the Department of Neurological Surgery and, if appropriate, in a basic science department. The Scientific Director is responsible for the overall direction of the 12 laboratories within the Miami Project and the development of new scientific initiatives relating to the treatment of spinal cord injury. The Director must promote national interest in spinal cord injury, develop liaisons with laboratories doing related research, direct the efforts to find financial support from federal and private sources, and relate to media seeking information regarding spinal cord injuries. Interested individuals should send curriculum vitae, a letter describing interests and qualifications, and names and addresses of three references by April 30, 1996 to: **Dr. Bernard J. Fogel, Dean Emeritus, The University of Miami School of Medicine, P.O. Box 016099, Miami, FL 33101.** *The University of Miami is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR Department of Pathology University of California, Irvine

The Department of Pathology, College of Medicine, University of California, Irvine seeks candidates to fill a junior (tenure-track) faculty position at the **ASSISTANT PROFESSOR** level. The individual selected should be trained in one of the disciplines in clinical pathology with special expertise in laboratory informatics, and show strong potential for developing an outstanding, independent research program. We seek a specialty board eligible/certified individual who is also eligible to receive a California Medical License. The candidate will be engaged in clinical practice in laboratory medicine and the teaching of medical students and residents. Both M.D. and Ph.D. degrees preferred. Send curriculum vitae, statement of future research interests, and references by April 30, 1996, to: **Yutaka Kikkawa, M.D., Professor and Chairman, Department of Pathology, University of California Irvine College of Medicine, Irvine, CA 92717.** *The University of California, Irvine: rooted in education, enriched by diversity.*

### CELL BIOLOGIST/MICROBIOLOGIST

We have approval for a one-year **REPLACEMENT POSITION** starting July 1996. Ph.D. required and teaching experience is desirable. The successful candidate will team-teach courses in cell biology in fall and spring. Also, the person will teach a 400 level seminar course in Advanced Cell Physiology and an introductory microbiology course. There also may be opportunities for directing undergraduate students in research. Please forward a letter of application with curriculum vitae, statement of teaching philosophy, and three letters of recommendation by April 22, 1996 to: **Dr. Randy Fuller, Chair, Biology Department, Colgate University, Hamilton, NY 13346-1398.** *Women and minorities encouraged to apply.*

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### JOHN SLOAN DICKEY CENTER DIRECTOR

Dartmouth College is seeking to fill the position of **DIRECTOR** of the John Sloan Dickey Center for International Understanding. The College seeks a distinguished scholar with extended experience in international affairs and connections with international research and policy networks.

Review of applications will begin on May 1, 1996. For a full description of the advertisement, please write: **Chair, Dickey Center Search Committee, Office of the Provost, 6004 Parkhurst Hall, Room 204, Dartmouth College, Hanover, NH 03755-3529.**

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

## POSITIONS OPEN

### ASSISTANT TO THE CHAIR AND INSTRUCTOR

The University of Illinois (UI) College of Medicine at Peoria invites applications for the dual position of **INSTRUCTOR** (50% time) and **ASSISTANT TO THE CHAIR** of the Department of Biomedical and Therapeutic Sciences (50% time). Responsibilities will include: (1) formulation and interpretation of academic/administrative policies and judgments; (2) representation of the Chair of the Department; (3) enhancement of relationships with institutions and agencies; (4) membership on committees; (5) assistance in recruiting faculty; (6) development of administrative procedures for maximizing academic achievements; (7) participation in teaching; and (8) implementation of biomedical research projects in neuroscience. The appointee will have a doctorate in a discipline pertinent to biomedical sciences. Achievements will include publications in peer-reviewed scientific journals, experience in biostatistics, neurochemistry, intracerebral microdialysis, and teaching. Other requirements for the position include: administrative experience in health-related programs and with professional personnel; experience in the utilization and theoretical aspects of research laboratory equipment and classroom instruction; and qualification for appointment in the UI College of Medicine as an Instructor in a basic biomedical science. The dual position will be available May 1, 1996. Send résumé and names of three references to: **Phillip C. Jobe, Ph.D., Chair, Department of Biomedical and Therapeutic Sciences, University of Illinois College of Medicine at Peoria, P.O. Box 1649, Peoria, IL 61656.** *The University of Illinois is an Equal Opportunity/Affirmative Action Employer and encourages applications from members of minority groups and women.*

**ASSISTANT PROFESSOR** of biology. A full-time faculty position is available August 1996 in the Department of Biological Sciences, St. Mary's University, San Antonio, Texas. St. Mary's is a private school of 4,000 students, founded in 1852 and operated by the Catholic order of The Society of Mary. The Department of Biological Sciences specializes in the undergraduate education of students pursuing careers in the health professions, especially medicine. The successful candidate will be required to have a Ph.D., to teach courses in introductory biology for majors and non-majors, to develop upper-division courses in the area of molecular developmental biology, to establish a research program involving undergraduates, and to secure external funding. Important factors are: a strong commitment to teaching, advising students, and aiding in their professional development; and leadership in research and grant-writing activities. All qualified candidates are welcome; *minorities and women are encouraged to apply.* Applicants should submit a letter of application, a complete curriculum vitae, typical publications, undergraduate and graduate transcripts, and the names, addresses, and telephone numbers of three former supervisors who will provide references to: **Dr. Rosemarie Wahl, Chair, Department of Biological Sciences, St. Mary's University, One Camino Santa Maria, San Antonio, TX 78228-8511.** Application deadline: June 1, 1996.

### THE RICHARD STOCKTON COLLEGE OF NEW JERSEY

Richard Stockton College's expanding, ACS certified chemistry program invites applicants with spark, insight, and commitment to undergraduate education. Three tenure-track **ASSISTANT PROFESSORS**, to join nine-person, ethnically diverse faculty, fall 1996. 1) Organic (interest in environmental and/or bioorganic preferred). 2) Environmental or bioanalytical (familiarity with environmental or biological applications of chromatography and instrumental analysis). 3) Biochemistry (focus on molecular techniques; reopened search). Ph.D. required. Stockton is state-supported, liberal arts, in the Pine Barrens, one hour from Philadelphia. All faculty teach introductory courses and labs, plus general education courses, and sponsor student research. Salary range: \$33,737 to \$38,799. Salary may be higher depending on qualifications and experience, and increases in the appropriately established compensation plan. Screening begins April 22, 1996. Send letter of application, three recommendations, and documentation of doctorate to: **Dr. Barbara Byrne, Dean, Natural Sciences and Mathematics, Richard Stockton College of New Jersey, AA29, Pomona, NJ 08240.** *Stockton is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.* R604226

## POSITIONS OPEN

### STAFF POSITION FOOD AND DRUG ADMINISTRATION Center for Devices and Radiological Health

Responsibilities include conducting applied research on the performance of biodegradable and biopolymers, especially the mechanisms and rates of their degradation; contributing to technical support for Center regulatory decisions on medical devices, such as engineered tissue, that incorporate biodegradable polymers; making written and oral presentations to various groups; and working in an interdisciplinary setting.

A degree in polymer chemistry, biotechnology, materials science, or biomedical engineering is required with demonstrated laboratory research experience with macromolecules. Experience with biopolymers, polylactides, polysaccharides, polyanhydrides, or biomimetic materials is desirable. Familiarity with one or more of the following: hydrolysis, oxidation, chemical kinetics, macromolecular interactions, GPC, surface microscopy, or other methods of analytical chemistry, will be needed.

Appointment will be at the GS-12/13 level (\$44-\$67K) depending upon experience.

For additional information please contact: **Dr. LeRoy W. Schroeder, Chief, Materials Chemistry, Division of Mechanics and Materials Science, HFZ-150, 12200 Wilkins Avenue, Rockville, MD 20852.** Telephone: 301-443-7003; FAX: 301-443-5259; Email: [LYS@FDA.CDRH.FDA.GOV](mailto:LYS@FDA.CDRH.FDA.GOV). *FDA is an Equal Opportunity Employer and is a smoke-free workplace.*

### FACULTY POSITION University of Texas Medical Branch at Galveston

Applications are requested for a tenure-track faculty position at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR** in the Sealy Center for Oncology and Hematology, a newly established biomedical research facility at the University of Texas Medical Branch in Galveston. Active research areas at the Center include viral oncogenesis, transcriptional regulation, and the role of protein kinases in hematopoietic signal transduction. The candidate should hold a Ph.D. and/or M.D. degree and should have an established, productive research program, preferably in the field of cell cycle regulation. Applicants should send curriculum vitae and a description of research interests to: **Dr. Alan P. Fields, Faculty Search Committee, Sealy Center for Oncology and Hematology, University of Texas Medical Branch, Medical Research Building, Room 9.104, 301 University Boulevard, Galveston, TX 77555-1048.** *Equal Opportunity/Affirmative Action Employer. Minorities/Females/Disabled/Veterans. Hires only employees authorized to work in the U.S.*

### HARVARD UNIVERSITY Appointment in Earth Science

The Department of Earth and Planetary Sciences, Harvard University, plans to make two appointments in areas dealing broadly with paleoclimate and surficial or near-surface processes.

The appointments will ordinarily be made at the junior level, although in exceptional circumstances a senior appointment may be considered.

In addition to carrying out an active research program, the successful candidate will be expected to teach at both the undergraduate and graduate level. The appointments are expected to start in the spring or fall of 1997.

Applicants should send curriculum vitae, descriptions of research and teaching interests, and names of three references to: **Geology Search Committee, Department of Earth and Planetary Sciences, Harvard University, 20 Oxford Street, Cambridge, MA 02138.** Applications are due by 1 May 1996. *Harvard University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

### ECOLOGIST/LIMNOLOGIST

**FACULTY POSITION.** The Department of Biology at Viterbo College invites applications for a tenure-track position: Ph.D. required. The successful candidate should have experience in teaching ecology, limnology, and zoology. Application, curriculum vitae, three letters of reference, and transcripts should be sent to: **Chairperson, Department of Biology, Viterbo College, 815 South 9th Street, LaCrosse, WI 54601.** *Equal Opportunity/Affirmative Action Employer.*

## National Library of Medicine National Institutes of Health

### Director, Lister Hill National Center for Biomedical Communications (LHNCBC)

The National Library of Medicine, Bethesda, Maryland, is seeking an outstanding research scientist with extensive expertise in biomedical communications to direct the research programs of the Lister Hill National Center for Biomedical Communications. Salary range — \$90,090 – \$120,000.

The Director, LHNCBC, will have full responsibility for directing and coordinating research in the computer representation, storage, retrieval and dissemination of biomedical information as text, graphs, diagrams and images in support of biomedical research and the improvement of health care. Examples include the use of artificial intelligence, natural language processing, decision theory and the Unified Medical Language System to create internet access to textual and image databases; the computer representation of the anatomic structures of the human; and the facilitation of computer to computer communications.

Position requires: doctoral level education in one or more of the following: medicine, medical informatics, computer science and engineering; research productivity in the linguistic and cognitive aspects of medical informatics; managerial experience in directing a multidisciplinary research team; and peer recognition of outstanding national and international research accomplishments and scientific contributions.

For more information contact Rita Sweeney at (301) 496-4943. Please forward a current curriculum vitae and a complete bibliography, including a list of at least five of your most significant publications to:

**Rita Sweeney**  
National Library of Medicine  
Office of Personnel Management  
Building 38, Room 2N05  
8600 Rockville Pike  
Bethesda, Maryland 20894

**APPLICATIONS MUST BE POSTMARKED BY  
APRIL 26, 1996.**

Selection for this position will be based solely on merit, without discrimination for non-merit reasons such as race, color, religion, sex, national origin, politics, marital status, sexual orientation, physical or mental handicap, age, or membership or non-membership in an employee organization. U.S. citizenship is required.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

Cell Therapeutics Inc. (CTI) is a privately held, Seattle-based pharmaceutical company developing a class of drugs that selectively regulate the metabolism of phosphatidic acid (PA), an intracellular pathway activated in cancer and immune disease. As employees are our most important asset, we have created an environment that fosters teamwork, achievement, recognition and responsibility. If you are looking for an exciting opportunity in a progressive atmosphere, consider the following:

### Senior Scientist, Oncology

Responsible for the design and implementation of in vitro and in vivo efficacy screening for novel antineoplastic agents. Requires a Ph.D. in Cell Biology or related field with 3-5 years' pharmaceutical experience. Ref #JS396S

### Senior Scientist, Immunology

Responsible for establishing, directing and performing activities in the evaluation of immunologic signaling targets in T and B lymphocytes. Requires a Ph.D. in Immunology and 2-3 years' cellular immunology laboratory experience. Ref #BL396S

### Animal Lab Biology Supervisor

Responsible for managing the operations of internal laboratory animal research. Requires a B.S. in Biological Sciences and 3+ years' experience performing animal studies. AALAS certification required. Ref #SL396S1

### Research Scientist(s)

Responsible for the design, implementation, performance and reporting of internal animal studies. Requires a Ph.D./D.V.M./M.S. with 5 years' experience with emphasis in toxicology. Experience in a regulated environment (GLP) required. Ref #SL396S2

### Chemistry Operations Lab Manager

Responsible for managing chemistry laboratory operations; including SOPs; instrument validation; sample tracking and data storage; planning, staffing and budgeting. Requires a B.S. in Chemistry or related field plus 3-5 years' industry experience in a regulated environment (GMP and/or GLP). Ref #SL396S3

Located in Metropolitan Seattle, CTI is in the heart of the technology corridor within one of the world's most spectacular natural settings. Our competitive reward programs are tailored to encourage and recognize outstanding contributions and achievements. **We will have additional opportunities throughout the year.** Please call our Job Line at: (800) 656-2355, or see our job postings on the Internet on Bio Online at: <http://www.bio.com> Qualified candidates are invited to send or FAX their CV, referencing the appropriate job number to: **Human Resources, Cell Therapeutics, Inc., 201 Elliott Avenue West, Suite 400, Seattle, WA 98119. FAX: (206) 284-6206.** We are an equal opportunity employer.



**cti**

Discovery • Treatment • Recovery



## DISCOVERY RESEARCH GROUP

SmithKline Beecham, a world leader in pharmaceutical research, currently has openings for a biochemical engineer and a microbial physiologist in our Discovery Research Group. Significant hands-on laboratory work is required for both positions. It is important that both candidates maintain timely and effective communication with the scientists in SmithKline Beecham with whom they are working.

### Biochemical Engineer

The biochemical engineer will be required to optimize fermenter and bioreactor conditions to improve product yield. Qualifications include a PhD in biochemical engineering or related field plus at least one year relevant experience or a MS with 8 years' relevant experience. Background in fermenter and bioreactor operations and experience optimizing agitation, fluid flow and gas utilization is required. Experience culturing mammalian, insect and microbial cells is also required. Refer to Job Code H6-0066.

### Microbial Physiologist

The microbial physiologist will be required to work on laboratory or pilot plant environment to develop or support development of microbial fermentation processes for the production of proteins for use as targets, reagents or agents, and assume leadership role in the direction of the research work. The candidate must have a BS degree in an appropriate field and 6 years' related experience or a MS degree and 4 years' related experience. Refer to Job Code H6-0065.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package and a stimulating work environment. Interested applicants should forward their resumes, indicating desired job code, to our reply center at: SmithKline Beecham Pharmaceuticals, P.O. Box 2645, Job Code \_\_\_\_\_, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.



**SmithKline Beecham**  
Pharmaceuticals

Challenging the natural limits.

## PROFESSOR AND CHAIR Department of Biomathematical Sciences

Mount Sinai School of Medicine of the City University of New York invites applications and nominations for the position of Chair of the Department of Biomathematical Sciences.

**Mount  
Sinai**

SM

The nationally recognized candidate will assume responsibility for directing a basic science department providing special expertise in informatic genomics as well as other emerging biomathematical and computational areas important to bioscience. The department is actively involved in graduate education and has an extensive research program.

Candidates must have preeminent academic credentials, demonstrated excellence in research and education, and have proven administrative and leadership skills.

Please forward your curriculum vitae and nominations to: **Kurt Hirschhorn, M.D., Chairman, Biomathematical Sciences Search Committee, Box 1497, The Mount Sinai Medical Center, One Gustave L. Levy Place, New York, NY 10029-6574.** Mount Sinai is an affirmative action/equal opportunity employer and encourages applications from women and minority candidates.

**The Mount Sinai Medical Center**



### Postdoctoral Fellowships Neuroscience and Aging Institute Loyola University Chicago Stritch School of Medicine

The Neuroscience and Aging Institute of Loyola University Chicago has a new opening for a Postdoctoral Fellowship position. Recent recipients of a Ph.D. and/or M.D. degree seeking further training in Neuroscience are encouraged to apply. Stipend includes a salary of \$25,000 in the first year, \$26,000 in the second year, plus \$8,000 in additional funding for supplies and travel each year. Liberal benefits included.

Successful applicants will select a mentor from among the more than 70 members of the Neuroscience and Aging Institute and its Division for Research on Drugs of Abuse. These members include faculty from the Departments of Cell Biology, Neurobiology and Anatomy, Molecular and Cellular Biochemistry, Neurological Surgery, Neurology, Pharmacology, Physiology and Psychiatry, and also from the Parly Hearing Institute and the Hines VA Hospital. A listing of Neuroscience faculty and their particular research interests is available upon request.

Areas of research focus include: **neurodegenerative diseases; neurodevelopment; neuroendocrinology/neuroimmunology; neuroregeneration/neuroplasticity; neurotoxicity; neurotransmitter/neuropeptide receptor systems; and sensory neuroscience.**

Candidates should forward a letter of interest, including future research interests, career goals, and curriculum vitae, and arrange for 3 letters of reference to be sent to:

**Neuroscience and Aging Institute Fellowships Committee, c/o Paula Griffin-Arnold, Building 117, Room 29, Loyola University Medical Center, 2160 South First Avenue, Maywood, Illinois 60153. (708) 216-6755. E-mail address: pgriffi@luc.edu**

Information must be received and file completed by June 15, 1996.

Please visit our home page on the WWW at: <http://www.meddean.luc.edu/lumen/DeptWebs/nsai/index.htm>

*Loyola University Chicago employs without regard to race, color, age, sex, national or ethnic origin, or religion, and is an equal opportunity employer. Qualified persons are not subject to discrimination on the basis of handicap.*

### CALIFORNIA INSTITUTE OF TECHNOLOGY

#### Faculty Position in Environmental Engineering Science

The Environmental Engineering Science program at Caltech is renewing its search for a tenure-track faculty appointment in Environmental Engineering Science. EES is an interdisciplinary graduate program bringing together engineers and scientists working on novel approaches to environmental problems, primarily concerned with air and water. We are particularly interested in applicants in the areas of environmental microbiology and biochemistry and environmental transport processes and fluid mechanics. Any candidate must have a strong interest in environmental applications, research accomplishment in one or more of the relevant areas, evidence of ideas for a highly productive and innovative research program, and a strong commitment to teaching. An initial assistant professor appointment is normally for four years and is contingent upon completion of Ph.D. Exceptionally well qualified applicants may also be considered at the associate or full professor level. Applicants should send a curriculum vitae and list of publications with refereed articles clearly marked, the names of at least three references, and a statement of research and teaching objectives to: **Professor J.J. Morgan, EES Search Committee Chairman, Environmental Engineering Science, Keck Laboratories 138-78, California Institute of Technology, Pasadena CA 91125.** Caltech is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

### Chair in Orthopaedic Research and Director of Research

The University of South Florida College of Medicine and the Shriners Hospital for Crippled Children, Tampa Unit, are seeking a senior scientist to fill the Berry-Shrine Chair in Orthopaedic Research. This individual will also serve as Director of Research at the Shriners Hospital. The individual sought must hold an M.D. or Ph.D., be qualified for the rank of professor in an appropriate academic department, and be capable of leading a program in musculoskeletal biology. He or she should have a distinguished record of research contributions in the field of molecular biology, molecular genetics, cell and developmental biology, biochemistry, or bioengineering. Preference will be given to individuals who have a history of sustained extramural funding and who are interested in both basic and clinically relevant research. Interested applicants should forward a current curriculum vitae to: **Dr. Reginald R. Cooper, Chair, Search Committee for Shrine Chair/Research Director, c/o Department of Biochemistry and Molecular Biology, University of South Florida College of Medicine, MDC 7, Tampa, Florida 33612.** Applications and nominations will be accepted until June 1, 1996.

*USF is an Equal Opportunity/Affirmative Action/  
Equal Access Institution.*



### OREGON HEALTH SCIENCES UNIVERSITY Director, Transgenics Service Lab

Oregon Health Sciences University invites applications for the position of **DIRECTOR** of a newly established Transgenics Service Lab partially funded by an award from the Howard Hughes Medical Institute. Candidates must possess an M.D., Ph.D., D.V.M. or equivalent doctoral degree and have considerable experience in the generation of transgenic mice by both pronuclear injections and blastocyst injections/morulae aggregation of recombinant embryonic stem cells. The director will manage the lab and breeding colonies and provide transgenic mice and homologous recombination in ES cells on a fee-for-service basis to investigators throughout the University. The successful candidate may hold a primary academic appointment in the Department of Animal Care and a secondary appointment in a basic science department depending on qualifications and experience. The position is available immediately and the successful candidate should be prepared to assume responsibility by the summer of 1996. The closing date for applications is May 10, 1996. Please submit a letter of application, curriculum vitae with bibliography, and the names and addresses of three references to:

**Transgenic Search Committee  
Dept. of Biochemistry & Molecular Biology, L224  
Oregon Health Sciences University  
3181 S.W. Sam Jackson Park Road  
Portland, OR 97201-3098**

*OHSU is an Affirmative Action/Equal Opportunity  
Employer*

### Director Biomedical Engineering and Instrumentation Program National Center for Research Resources National Institutes of Health

The National Center for Research Resources (NCRR) is seeking applicants for the position of Director Biomedical Engineering and Instrumentation Program (BEIP), NCRR. This is a permanent full-time position, at the GS-15 level, with a salary of \$73,486 to \$95,531 per annum (includes 6.04% locality pay), located in Bethesda, MD. Physicians may be eligible for an annual Comparability Allowance of up to \$20,000.

A recruitment bonus of up to 25 percent of base pay may be available to a non-Federal applicant selected for this position, subject to individual approval.

A relocation bonus of up to 25 percent of base pay may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval.

The Director for BEIP, NCRR, will direct, manage, and oversee the research and development efforts of engineers and scientists on staff who collaborate with the basic and clinical research investigators of the NIH, to advance critical technologies. Among these technologies are NMR imaging and spectroscopy, analytical electron microscopy, analytical ultracentrifugation, mass spectroscopy, image processing, biological materials, laser technology, physiological monitoring, and clinical chemistry to name a few. The Director, BEIP, provides leadership in planning, implementation and evaluation of the effectiveness and efficiency of the programs. Applicants for this position must have a Doctor of Medicine or Ph.D. in Biomedical Engineering or one of the health sciences (or equivalent combination of experience and training). Applicants may submit any of the following documents: 1) a resume/curriculum vitae and bibliography; 2) employment application (SF 171 or OF 612); 3) or any other written format which provides the required information. Applicants are encouraged to submit a narrative related to the mandatory qualification requirements. Send applications to **Mr. Eugene McDougal, National Institutes of Health, National Research Resources (NCRR), 9000 Rockville Pike, Building 31, Room 3B38, MSC 2130, Bethesda, MD 20892.** For application forms and a copy of the requirements contact Mr. McDougal at NCRR on (301) 496-1524. Job duties, qualifications required, etc. can be retrieved via FAX by calling (301) 594-2953 (local) or 1-800-728-JOBS (long distance); the FAX-ID# is 5818. *Applicants must be U.S. citizens.* Deadline for application is 05/06/96.

*Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, sex, national origin, politics, marital status, people with disabilities, age, sexual orientation, or membership or non-membership in an employee organization.*

*The NIH is an Equal Opportunity Employer.*



## Sr. Medical Writer

Johnson & Johnson, with over \$18 billion in annual sales, is the world's largest and most comprehensive manufacturer of health care products serving consumer, professional, diagnostic and pharmaceutical markets. We have an immediate opportunity in CENTRAL NEW JERSEY with Johnson & Johnson Consumer Products companies for a Senior Medical Writer with 3+ years experience in medical/pharmaceutical writing and either a BA in writing/science writing or a BS with heavy writing experience. Your background must demonstrate: the ability to interface effectively as an integral member of a therapeutic area team; knowledge of on-line literature searching; understanding of the scientific method and biostatistical analyses; compliance with regulatory guidelines; and WP skills.

Responsibilities include preparing investigational drug brochures, summarizing clinical trial results, and other summary documents for NDAs/product license applications/international registrations. Will also assist in preparing/editing manuscripts for publication, as well as protocols and other documents.

We offer a competitive salary and comprehensive benefits including medical/dental insurance, 401(k) plan and our LIVE FOR LIFE Wellness Program with on-site fitness center. Please forward a copy of your resume, including salary requirements, suitable for scanning into our database (i.e., clean/clear, no graphics, and preferably unfolded) to: Dept. 624, Johnson & Johnson Recruiting, P. O. Box 16597, New Brunswick, NJ 08906-6597.

We are an equal opportunity employer and support diversity in the workplace.

**Johnson & Johnson**

"Leadership Beyond Compliance"

**M**uch of the success of Bayer Corporation, Pharmaceutical Division, is based on innovation and research. At the same time, all of our success is based on the talent and drive of our people. As an integral part of Bayer, a \$26.8 billion global leader, we have the resources to provide our employees with a supportive, state-of-the-art, multidisciplinary environment that encourages their professional growth and makes our success possible. Join our dedicated team of professionals in the following position:

### Scientific Editor

You will plan, develop, write, revise, produce and place articles and other publications in the scientific press and medical literature based on Bayer strategies and objectives. You will also plan, develop and implement continuing education programs and materials in accordance with Bayer strategies and in conjunction with professional societies and continuing education agencies, as well as develop and implement appropriate US components of the international publication strategies and objectives.

A strong scientific/medical background, a PhD or PharmD in a scientific/medical discipline, plus a minimum of five years of experience in a related scientific/medical/pharmaceutical area required. A minimum of four years of experience must include medical writing. Demonstrated ability to interpret scientific and clinical trial data, strong scientific writing ability and excellent editorial and interpersonal skills essential. Must be independent, creative, innovative and able to juggle a variety of projects. Must also be a self-starter and able to maintain a high level of productivity with minimal supervision. Ability to supervise consultants and motivate individuals along with knowledge of computerized bibliographic, abstract, and database services necessary.

We offer attractive compensation and generous benefits. For immediate consideration, please forward a resume, including salary history, to: **Bayer Corp., Pharmaceutical Division, Dept. MO-MI-AB, 400 Morgan Lane, West Haven, CT 06516.** No phone calls please. An Equal Opportunity Employer M/F/D/V. Bayer Corp. is committed to creating and maintaining cultural diversity within our work environment.

**Bayer**  
Pharmaceutical  
Division

## Research Scientist I

Genetic Therapy, Inc., is a leader in the development of human therapy products for genetic and acquired diseases. Founded in 1986, GTI and its collaborators represent one of the largest groups of scientists dedicated to research and development in the field based in the Washington D.C. area. GTI is expanding its research activity in the area of *in vivo* adenoviral vector-mediated gene transfer to the lung. This program will complement existing activities in adenoviral vector development for treatment of cystic fibrosis and other lung diseases and will provide collaborative interaction with research groups working to develop gene therapies for genetic and acquired diseases.

Applicants should have a Ph.D. in a scientific discipline and experience in gene therapy or a related field. In addition, applicants should have extensive laboratory experience in working with murine or rat animal models including working skills in small animal surgery. Experience in working with models of administration and evaluation of experimental agents to the lung is highly desirable. Good communication skills are required and a strong publication record is desired.

GTI offers a stimulating and challenging research environment with an excellent salary and benefits package. Please specify position when applying. Fax or send resume to:

**Genetic Therapy, Inc.**

**938 Clopper Road**

**Attn: 82-013-7**

**Gaithersburg, Maryland 20878**

**Fax: (301) 948-0503**



*Equal Opportunity Employer*

## Laboratory Supervisor

This position is responsible for the safe operations and management of modern research laboratories in Antarctica and supervision of associated support staff. The laboratory supports scientists from several disciplines, funded by the National Science Foundation, conducting basic and applied research in Antarctica. Laboratories to be operated and maintained safely may include: analytical chemistry, computer, general use, ice processing, lidar, microbiology, microscopy, molecular biology, radioisotope, rock processing, seawater aquaria, and seismic. Preseason planning of laboratory support for scientists and recruiting of personnel are conducted in Englewood, CO followed by deployment to Antarctica for up to six months (Sept-Feb) each year.

An advanced degree in one of the natural sciences, minimum of five years experience in the operation and management of a modern research laboratory, and supervision of a diverse laboratory staff are required. Experience working with the OSHA Laboratory Standard and Implementing Chemical Hygiene Plans is also required. Experience working in an academic research environment is highly desirable.

Proof of US citizenship is required. All applicants must be able to pass strict physical and dental exams. Salaries are comparable to Denver Metro salaries.

For consideration, please fax or mail resume with letter of introduction no later than April 30, 1996.



**ANTARCTIC SUPPORT ASSOCIATES**

**ATTN: LAB/SK**

**61 Inverness Drive East, Suite 300**

**Englewood, CO 80112**

**FAX: (303) 790-9130**

**EOE**

## RNA VIROLOGIST

SmithKline Beecham Pharmaceuticals, a worldwide leader in pharmaceutical research, is seeking an investigator for our Molecular Virology and Host Defense Department. This department works on projects which encompass basic and applied research in many aspects of virology, including viral replication, pathogenesis, host-virus interaction, and the discovery of novel anti-viral compounds as well as the immunology of infectious diseases including immunomodulators, hematoregulatory cytokines and stromal cell biology.

In conjunction with other scientists, the selected candidate will plan, implement and supervise research aimed at the discovery, evaluation and development of novel therapeutic anti-viral agents for Hepatitis C and related positive strand RNA viruses. The candidate will apply virological, molecular, and biochemical skills to identify viral molecular targets, develop screens for anti-viral agents, assist in the development and running of animal disease models of viral infection, explore mechanisms of anti-viral drug action and help to select lead compounds as a member of a multi-discipline team. The candidate will have the opportunity to present results of this work at scientific meetings and by publication.

Qualified candidates will have a PhD in virology, a minimum of 2 years' postdoctoral experience in positive-sense RNA viruses and an excellent record of scientific achievement as evident from publications, patents and presentations. Excellent communication skills and the ability to work effectively with individuals of varied backgrounds and disciplines are required, with supervisory experience desirable.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package. For confidential consideration, please forward resume and salary requirements to: SmithKline Beecham Pharmaceuticals, Job Code H4-0058, P.O. Box 2646, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.



**SmithKline Beecham**  
Pharmaceuticals

Challenging the natural limits.

As the established world leader in gene discovery, HGS has utilized automation and high throughput DNA sequencing to establish the largest database of human and microbial genes and to analyze patterns of gene expression under defined conditions of cell activation and development. From this rich source of information, our goal is to identify novel protein pharmaceuticals with therapeutic potential for imminent medical needs.

## BIOINFORMATICS SCIENTISTS

Our Bioinformatics Department is seeking highly motivated and creative scientists to design and develop sequence analysis tools for gene discovery. Successful candidates will have a Ph.D. in Computational Biology, Biophysics, Bioinformatics or related discipline and 2 or more years of postdoctoral experience. Candidates must have a thorough knowledge of sequence similarity software and motif analysis. Proficiency using large sequence database and programming expertise on UNIX machines are required. Experience in molecular modeling, protein folding and data visualization techniques is highly desirable.

HGS offers an excellent salary and benefits package which includes medical/dental coverage and 401(k). Please send your curriculum vitae to Human Resource Department, Human Genome Sciences, Inc., Attn: Position BI-03, 9410 Key West Avenue, Rockville, MD 20850-3331. An Equal Opportunity Employer.

**HGS**

Human Genome Sciences, Inc.

Dedicated To Discovery For Health

Vical, Inc., a leader in the development of gene-based pharmaceutical products, is expanding its Gene Delivery program. Opportunities exist for highly motivated scientists to contribute original research toward the design and development of advanced gene delivery systems.

### Research Scientists -

Successful candidates will have experience in Drug Delivery Research and an understanding of the factors that influence bioavailability of drugs in cultured cells and in vivo. Experience with cell culture and the development and implementation of bioanalytical assays is essential. A working knowledge of the field of liposome research, use of biofunctional cross-linker technology, and knowledge of the analytical characterization of liposomes are desirable. Ph.D. and two years' experience or equivalent related experience are required.

### Research Associate -

Successful candidate should have experience with cell culture and small animal handling, development and implementation of analytical and biochemical assays. Minimum requirements are a B.S./M.S. and the ability to carry out complex experimental protocols and to conduct experiments with analytical endpoints. Strong organizational and record keeping skills required.

Please send your resume to Vical Incorporated, Human Resources, 9373 Towne Centre Drive, Suite 100, San Diego, CA 92121 or fax to (619) 453-5885. EOE M/F/D/V.



**HUMAN GENE THERAPY  
RESEARCH INSTITUTE**  
An Iowa Health System Affiliate

### Postdoctoral Fellows

The Human Gene Therapy Research Institute has available postdoctoral positions for research in gene transfer systems and their application to the treatment and prevention of human disease. Laboratory focus is on translational research with a long term goal of improving gene transfer into humans. Backgrounds in molecular virology, cancer biology, immunology, and microbiology are preferred. But all candidates with evidence of skills in molecular biology, cell biology, and mammalian biology will be considered. Positions are available immediately.

HGTRI is a not-for-profit, academic research group funded by the Central Iowa Health System of Des Moines. Laboratories provide state-of-the-art equipment, animal facility, and administrative and technical support. Applicants should submit a curriculum vitae, outline of current and future research interests and three references to: Charles J. Link, Jr., M.D., Director Gene Therapy Program, Iowa Health System, 1313 High Street, Suite 111, Des Moines, IA 50309.

EOE/AA/M/F/D/V



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

ALSAC • Danny Thomas, Founder

## Postdoctoral Fellowship

St. Jude Children's Research Hospital, a premier research center for children's catastrophic diseases and biomedical research, offers fellowships in many different specialties.

Fellowships are open to junior investigators, M.D. or Ph.D degree, who would like to gain further experience in one of the laboratory or clinical research specialties offered at St. Jude. Stipends are highly competitive.

### Send inquiries to:

Academic Programs Office  
Postdoctoral Fellowships

St. Jude Children's Research Hospital  
P.O. Box 318

Memphis, Tennessee 38101-0318

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# EXPLORATORY TECHNOLOGY

## Scientist/Sr. Scientist Biochemistry/Biophysics

Join a multi-disciplinary team focused on integrating state-of-the-art analytical technologies into the drug discovery process. Working in close collaboration with the Automation, Drug Discovery and Bioinformatics Teams at The R. W. Johnson Pharmaceutical Research Institute, our goal is the development of systems which provide direct insights into the processes of signal transduction in an HTS (high throughput screening) setting.

The successful candidate will bring skills in bioanalytical methods, protein biochemistry and the dynamics of protein structure to the team. We will look to you to drive a collaborative effort to adapt and develop advanced biophysical methodologies, with the goal of integrating important pharmaceutical target classes into innovative and efficient "generic" screening systems.

Qualifications include a Ph.D. in Biochemistry or related discipline, at least 2 years postdoctoral experience and a record of publication demonstrating your accomplishments. Good communications skills are required, as each team member will be responsible for maintaining collaborations with other Scientists in the Johnson & Johnson technology community as well as with our outside academic and commercial partners. In addition, experience in molecular biology is a strong plus.

We offer an excellent salary, comprehensive benefits and a campus-like facility in central New Jersey, midway between New York City and Philadelphia. Please forward a copy of your resume suitable for scanning into our database to: Dept. 617, Johnson & Johnson Recruiting, P. O. Box 16597, New Brunswick, NJ 08906-6597.

We are an equal opportunity employer and support diversity in the workplace.



**THE R.W. JOHNSON  
PHARMACEUTICAL RESEARCH INSTITUTE**  
*a Johnson & Johnson company*

## POST-DOCTORAL FELLOW SURGERY BRANCH, NCI

The Surgery Branch, National Cancer Institute, National Institutes of Health has postdoctoral positions available immediately to study tumor proteins and peptides recognized by CD4+ T cells. Applicants for one position must have a strong background in protein purification and molecular biology and for the second position in cellular immunology. Less than five years postdoctoral experience required.

Selections for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, or membership or non-membership in an employee organization. The NIH is an Equal Opportunity/Affirmative Action Employer.

Send cover letter, CV, and statement of research interests to:

**DR. SUZANNE L. TOPALIAN**  
SURGERY BRANCH  
NATIONAL CANCER INSTITUTE, NIH  
10/2B47, BETHESDA, MD 20892-1502  
PHONE: (301) 496-4269  
FAX: (301) 402-0922

Applied Biosystems, a leading Bay Area supplier of systems and tools for biotechnology research, is seeking a Molecular Biologist for a Chemical Manufacturing position in its Consumables Development and Manufacturing Department (CDM).

## MOLECULAR BIOLOGIST

The Molecular Biologist will be responsible for the analysis and release of DNA sequencing and DNA fragment analysis formulations using automated DNA sequencing techniques. The position will include participation on new product teams, development and validation of new QC methods, process improvement on existing products and providing technical input to R&D, Marketing and other CDM departments. Requirements include knowledge and proven skills in basic molecular biology techniques, good communication skills (both written and oral) and a desire to work in an interdisciplinary team environment. Automated DNA sequencing experience is highly desirable. Educational requirements include a BS in Molecular Biology or related discipline with at least 2 years of relevant experience.

We offer a competitive salary and generous benefits package. Please send your resume to: Applied Biosystems Division of Perkin Elmer, Attn: Human Resources, Ref. #SC3959, P.O. Box 61765, Sunnyvale, CA 94088. We are an equal opportunity employer.

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For more information on us and all our job opportunities,  
see our home page on the WWW at <http://www.perkin-elmer.com/abd/>

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**PERKIN ELMER**

**Applied Biosystems Division**



The ONR Personnel Optimization and Biomolecular Science and Technology Department (covering the Biological, Biomedical, Cognitive and Neural Science and Technology Divisions) announces a change in proposal due dates. Investigators who seek funding for a new start in fiscal year 1997 (1 October 1996 to 30 September 1997) or who wish to renew proposals for grants ending before 30 September 1997 are encouraged to submit proposals to ONR **no later than 15 July 1996**. For more specific information about our programs you are encouraged to consult our World Wide Web site: [www.onr.navy.mil](http://www.onr.navy.mil).



*As the pioneer and leader in carbohydrate-based biopharmaceutical product development, Alpha-Beta Technology's R&D staff faces some of the most challenging questions in the industry. With our lead product, BETAFACTIN<sup>®</sup>, now in Phase III clinical trials, we're developing effective solutions for the prevention and treatment of infection.*

*To support the commercialization of our new drug and ongoing research efforts, we are establishing Process Science groups within our Process Development Department. We offer experienced, hands-on scientists the opportunity to develop and lead the two key new Process Science groups below.*

## Process Biochemistry Group

As lead Scientist of the group, your responsibilities will include development of robust and scalable process biochemistry and chromatography purification steps for the recovery of soluble carbohydrate-based products, support of purification manufacturing and research activities including conformer purification, enzymes for B-glucan derivitization, hydrolysis and characterization.

This position requires an experienced professional with a Ph.D. in Chemistry, Biochemistry or a related field; 5-7+ years' industrial experience with a focus on process biochemistry and purification development of GMP processes for the production of biopharmaceuticals; research training in biopolymer purification (preferably with experience in carbohydrates); demonstrated working knowledge of GMPs and their impact on process design and overall process architecture; expertise in analytical techniques (chromatography, gel electrophoresis, HPLC, IEF, spectroscopy, etc.) and technical supervisory/management experience.

## Bioprocess Group

The lead Scientist of this group will be responsible for the development and optimization of fermentation and primary recovery processes in the production of carbohydrate-based products. Related responsibilities will include: development/selection of new yeast, microbial or fungal strains for manufacturing; development of fermentation media formulations; kinetic analyses; identification of critical control parameters; and supporting company-wide microbiology efforts as needed.

Qualified candidates will have a Ph.D. in Microbiology or Biochemical Engineering or related discipline in fermentation process development with extensive experience in industrial microbiology or fermentation research in the pharmaceutical/biotech industry. Also required; extensive experience with yeast, fungal and bacterial cell cultures; working knowledge of primary and recovery steps and downstream purification as it relates to fermentation performance and optimization of product formation and minimization of contaminant profile; strong background in validation principles; and previous technical supervisory/management experience.

**Both of the above positions will involve extensive interface with our Research, Drug Discovery, Bioprocess Engineering and Clinical Manufacturing groups and will assist chemical engineers in scale-up to manufacturing.**

## Scientist - Hematology

In this position, you will establish and direct the research effort investigating the hematopoietic effects of novel carbohydrate immunomodulators. Requirements include a Ph.D. and postdoctoral experience with a broad-based background in cell biology and hematopoiesis; and expertise in stem/progenitor cell separation/isolation, cell receptor expression and signal transduction.

Alpha-Beta offers competitive salaries and a strong benefits package that includes a 401(k) Plan, tuition reimbursement and 3 weeks' vacation your first year. Please reference position of interest by title and send your resume in confidence to: **Alpha-Beta Technology, Human Resources Department, Code: SM, One Innovation Drive, Worcester, MA 01605.** Alpha-Beta is an equal opportunity employer.

**ALPHA-BETA  
TECHNOLOGY**

### The University of North Texas Health Science Center at Fort Worth

Chair, Departments of Biochemistry and Molecular Biology and Microbiology and Immunology

We are seeking applications for the position of **Chair** of the combined Departments of Biochemistry and Microbiology. The chairperson is expected to provide leadership and direction to both Departments in research and curriculum development. The chairperson will also have a considerable latitude in the overall organization of the two Departments. A generous start-up package will enable the successful candidate to fill several positions. Candidates should have demonstrated administrative skills, a distinguished record of scholarly activity, and a well-funded, internationally recognized research program, preferably in the area of molecular genetics, but other subspecialties will be considered. A Ph.D. or equivalent degree and qualifications for appointment at the rank of professor are required. The Health Science Center is fully accredited by the Southern Association of Colleges and Schools. In addition to the College of Osteopathic Medicine, the Center has a Graduate School of Biomedical Sciences, Masters Program in Public Health, and approval to begin a Physician Assistant program. The Departments of Biochemistry and Microbiology currently occupy approximately 20,000 ft<sup>2</sup> of space and are well equipped to support faculty research programs. Most faculty are funded by extramural grants. The review of applications will begin immediately with initial interviews planned for the fall of 1996. The search will continue until the position is filled. Send a letter of application, curriculum vitae, and names and addresses of four references to:

**James E. Turner, Ph.D.**  
Chair, Search Committee  
UNT Health Science Center  
Department of Anatomy and Cell Biology  
3500 Camp Bowie Blvd.  
Fort Worth, Texas 76107-2699

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## MOLECULAR IMMUNOLOGY

### Postdoctoral Scientist

SmithKline Beecham, a world leader in pharmaceutical research, has an immediate opening for a Postdoctoral Scientist to join our multidisciplinary research group in the area of molecular immunology.

The selected individual will conduct research in the area of cytokines and stress signal transduction, including the isolation of new kinases and the characterization of key regulatory interactions in signalling cascades (see *Nature* 372:739 [1994]). Expectations would also include significant interaction with other staff in discussion and interpretation of results in departmental seminars and external meetings and publications.

The successful candidate will have a PhD in Molecular Biology, Biochemistry or closely related discipline, along with practical experience in recombinant DNA technology, a background in cytokines or signal transduction, and a strong record of scientific publication. Use of radioactive reagents will be necessary.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package. For confidential consideration, please forward resume and salary requirements to: SmithKline Beecham Pharmaceuticals, Job Code H6-0112, P.O. Box 2645, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.



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*Direct All Inquiries to:*

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Pittsburgh Supercomputing Center  
4400 Fifth Avenue, Suite 230C  
Pittsburgh, PA 15213  
[biomed@psc.edu](mailto:biomed@psc.edu) or 412-268-4960

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## Research Entomologist

**FMC Corporation**, a leader in the Agricultural Chemical Industry, has a variety of positions available in our state-of-the-art research facility in Princeton, New Jersey. FMC has an enthusiastic, diverse group of scientists leading the growth initiatives of our Agricultural Products Group.

We have an immediate opening for a Research Entomologist in our Discovery Research team. This position will coordinate field testing programs which define the market opportunity for experimental insecticide molecules. All aspects of coordination will be required, including program design, management of contract research programs, sample shipment, data summary, and production of written technical reports. A background in the use of statistical procedures and their application to experimental design and data analysis for field trials with agricultural chemicals is preferred.

FMC is looking for a bright, well organized, problem solving individual with a Ph.D. in Entomology and experience in economic entomology - especially field evaluation of insecticides. Industrial experience is considered a strong plus. Effective communication and interpersonal skills are expected, along with the ability to do some travel, including international travel.

FMC Agricultural Group is a growing organization that offers employees a challenging work environment along with competitive compensation and benefits. Interested individuals should send a cover letter and resume, including salary history, to: **Employment Coordinator - Dept. 96-10, FMC Corporation, Box 8, Princeton, NJ 08543.** All resumes will be handled confidentially. FMC is an Equal Opportunity Employer.

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## POSTDOCTORAL FELLOWSHIPS

Postdoctoral Fellowships funded by a training grant from NINDS are available to support research training at SUNY STONY BROOK in Molecular, Cellular, Systems and Behavioral Neuroscience. Applicants must be U.S. citizens or permanent residents. Women and minorities are especially encouraged to apply. Competitive salary based upon established NIH guidelines.

For further information concerning opportunities, contact faculty members listed below or the Program Director, Dr. Lorne Mendell, Department of Neurobiology & Behavior, State University of New York, Stony Brook, NY 11794-5230, Tel. 516-632-8616, Fax 516-632-6661. Detailed information on Neurobiology at Website <http://life.bio.sunysb.edu/>. Affirmative Action/EEO employer.

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David McKinnon  
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Susan McLaughlin  
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**STONY BROOK**  
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 **THIRD WAVE TECHNOLOGIES, INC.**

### THIRD WAVE TECHNOLOGIES, INC. Associate Director, Technology Development & Assay Development Scientists

Third Wave Technologies, Inc., a biotechnology company developing nucleic acid diagnostic products, is recruiting an Associate Director of Technology Development as well as assay development scientists. Applicants for Associate Director should have a Ph.D. in molecular biology, medical microbiology, biochemistry or a related field. Applicants should have 3 or more years of postdoctoral experience as well as at least 3-5 years of experience developing DNA probe assays for microbial pathogens in an industrial setting. Scientists should have 2 or more years of postdoctoral experience related to development of nucleic acid detection assays for pathogenic microorganisms. Candidates should have demonstrated knowledge of all mechanics of nucleic acid hybridization and amplification technologies. The Associate Director will assume leadership of a group developing novel nucleic acid detection and amplification technologies for the detection and quantitation of microbial and viral pathogens. Applicants for Associate Director should have demonstrated ability to supervise and successfully lead a group of scientists. Formal project management skills are an asset but are not required. Third Wave Technologies, Inc. offers an attractive benefit and relocation package including stock options. Qualified candidates should send their resume to **Human Resources Department, Third Wave Technologies, Inc., 2800 S. Fish Hatchery Road, Madison, WI 53711.**

**MINORITY RESEARCH OPPORTUNITIES  
DEPARTMENT OF DERMATOLOGY  
HARVARD MEDICAL SCHOOL**

The Department of Dermatology of Harvard Medical School is seeking to increase minority participation in its research programs. The National Institutes of Health can provide current research grantees with supplemental grants for qualified minority applicants. A number of researchers in the Department of Dermatology have indicated an interest in adding minority postdoctoral researchers to their NIH-funded programs, and will work with applicants in preparing an application. Currently opportunities exist in the following broad areas:

**Cutaneous Biology  
Cell Cycle/Keratinocytes  
Molecular Pharmacology  
Cutaneous Photobiology  
Photochemistry  
Photodynamic Therapy  
Extracellular Matrix in Morphogenesis**

Interested candidates should send a letter of inquiry indicating your area of interest and a C.V. to: Ms. Diane Kovacev, Department of Dermatology, Warren 501, Massachusetts General Hospital, 32 Fruit Street, Boston, MA 02114.

*The Department of Dermatology, Harvard Medical School and its affiliated hospitals are equal opportunity employers.*

**Job Opportunities in The Chemical  
Science and Technology Division**

**TECHNICAL STAFF MEMBER** to provide professional level support of thermal ionization mass spectrometry. Primary responsibilities will be to over-see the daily operations of the Clean Chemistry and Mass Spectrometry Facility. Insure that current commitments for actinide element determinations are met, and to actively develop new areas of research and funding. **Job #961430-CST96033.**

**TECHNICIAN** to perform a wide variety of assignments relating to the ultra-sensitive analysis of actinide elements. Primary responsibilities will include the operation of NBS 12-90 and VG 54-30 thermal ionization mass spectrometers. **Job #961431-CST96034**

To formally apply for the above positions, interested candidates should forward a resume indicating Job # to: Human Resources Division, MS P286, (Job #), Los Alamos National Laboratory, Los Alamos, NM 87545.

**POSTDOCTORAL POSITIONS** in the area of uranium-series geochemistry and geochronology are available. Requirements are experience with isotope geochemistry at either high or low temperature, experience in clean room chemical separations at very low levels, and the ability to work well in a team.

For consideration: submit TWO COPIES of a resume and publication listing to: Postdoctoral Program, **Job #PD96025**, MS P290, Los Alamos National Laboratory, Los Alamos, NM 87545.

For more information: <http://www.hr.lanl.gov/html/jobs/external/or/postdoc/>. Affirmative Action/Equal Opportunity Employer. Individuals with disabilities needing reasonable accommodation should call (505) 667-8622. A Teletype Device for the Deaf (TDD) is available by calling (505) 665-5357. Los Alamos National Laboratory is operated by the University of California for the U.S. Department of Energy.

**Los Alamos**  
NATIONAL LABORATORY

**Scientist**  
**Immunological Diseases**

At Boehringer Ingelheim, our commitment to innovative research and scientific exploration has played a key role in our positioning as a major international pharmaceutical company. Currently, we are looking for a dedicated scientist to contribute to our research.

As a member of our Immunological Diseases research team, you will be involved in the expression, isolation and analysis of proteins and enzymes found essential for activation of cells in the immune system. The successful candidate will possess a B.S or M.S. degree in Biochemistry, Molecular Biology, or a closely related field and have three or more years of relevant laboratory experience. Experience with the PCR amplification and expression of known genes in prokaryotic systems is essential. Additionally, experience in the isolation and kinetic characterization of recombinant enzymes is a plus.

Boehringer Ingelheim, located in a campus-like setting in a beautiful area of Western Connecticut, offers excellent facilities and a supportive, challenging work environment. For consideration, please send your resume and salary history to: **Dept. MH-29-835, Boehringer Ingelheim Pharmaceuticals, Inc., 900 Ridgebury Road, P.O. Box 368, Ridgefield, CT 06877-0368.** We are an equal opportunity employer (m/f/d/v). As a progressive employer, we have a non-smoking environment.



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The  
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**POSTDOCTORAL  
RESEARCH FELLOWSHIP**

A two year Postdoctoral Fellowship in basic medical science is available in July, 1996 for a Ph.D. or M.D. The following research training opportunities are available:

**Molecular Oncology - Paul G. Rothberg, Ph.D.**

We are exploring alterations in gene expression during the butyrate induced differentiation of colon carcinoma cell lines. Currently under study are the c-myc family of DNA binding proteins and the cyclin dependent kinase inhibitors. Reference: *J Biol Chem* 268:20466, 1993

**Molecular Biology and Genetics - Robert White, Ph.D.**

The focus of research in this laboratory is on the role of defective cytoskeletal proteins in hereditary disease using the mouse as our model organism. We are currently studying 1) the function of retinal dystrophin, 2) the molecular basis of a group of platelet diseases, and 3) the genetic defect in a hemolytic anemia mutation. Reference: *Nature Genetics*:80, 1992

**Cancer Pharmacology - Al Leyva, Ph.D.**

The focus of research in this laboratory is improving cancer chemotherapy. We are currently studying the cellular and molecular pharmacology of novel natural product compounds using both *in vitro* and *in vivo* solid tumor models. Reference: *Cancer Letters* 96:55, 1995

**Molecular Endocrinology - Jill Jacobson, M.D.**

Our research is on the role of a hypothalamic hormone, gonadotropin-releasing hormone (GnRH), in immunity and autoimmunity. We have shown that GnRH exacerbates murine lupus independently of gonadal steroids. One ongoing project utilizes a GnRH-deficient mutant mouse to study the direct and indirect actions of GnRH on the immune system. Reference: *Endocrinology* 134:2516, 1994

Applicants should have a strong background in molecular and cellular biology techniques. Salary and laboratory supply budget commensurate with NIH standards. More information can be found at [WWW.CMH.EDU/Research/Postdoc.HTM](http://WWW.CMH.EDU/Research/Postdoc.HTM)

To apply send your curriculum vitae and a one page description of professional/research goals along with the names, addresses, and telephone numbers of three references to:

Donald W. Thibeault, M.D.  
Children's Mercy Hospital  
2401 Gillham Road  
Kansas City, MO 64108

phone: 816-234-3596  
fax: 816-234-3590  
email: [dthibeault@cmh.edu](mailto:dthibeault@cmh.edu)  
[WWW.CMH.EDU](http://WWW.CMH.EDU)

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**Wanted: Committed, ambitious scientist. Must be a team player with a vision for the future. M.D./Ph.D., Ph.D., M.S. or B.S. degree necessary.**

***Does this describe you?***

If it does, then plan to attend the bioSCIENCE Career Fairs sponsored by SCIENCE. The bioSCIENCE 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.

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***1996 bioSCIENCE Career Fairs***

San Francisco, CA on the Stanford Campus in Palo Alto, May 3-4.  
May 3: 11am - 4pm; May 3 Seminar: 11 - 11:30am.  
May 4: 12 noon - 4pm.

Just added! **Careers in Biomedical Research:** Join leaders from both industry and academia for a panel discussion sponsored by the Biomedical Association of Stanford Students on May 3, 12 - 1:30 p.m. at the Fairchild Auditorium. The panel discussion focuses on careers in biomedical research.

La Jolla, CA at The Scripps Research Institute, October 4-5.

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To pre-register, please submit your resume or CV via fax: (202) 289-6742, or via e-mail: [bioscience@aaas.org](mailto:bioscience@aaas.org). Please indicate to which bioSCIENCE Career Fairs you would like to have it distributed. Please remember to bring multiple copies of your CV or resume with you to the Career Fairs.

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# POSTDOCTORAL RESEARCHERS



**The Genentech  
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sists of more than  
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**is a vibrant and inten-  
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entific training. Postdoctoral  
Researchers conduct basic research  
in the areas of our scientific inter-  
est, publish in scientific journals,  
attend and present work. All candi-  
dates should have a PhD and/or MD  
degree with a strong background in  
the appropriate field.**

## **Cardiovascular Research:**

**Two positions are available.** One position will be responsible for defining the role of plasma carboxypeptidase in regulating fibrinolysis. A general knowledge of the molecular basis of fibrinolysis and blood coagulation is highly desirable and a protein chemistry, cell and molecular biology background required. See J. Clin. Invest. 96, 2534-2538 (1995); Biochemistry 34, 5811-5816 (1995); J. Biol. Chem. 266, 21833-21838. Manager: Dr. Dan Eaton. Reference: PDDE

The other position will focus on cardiac hypertrophy and heart failure using novel cloning approaches, combined with mouse gene knockout and transgenic technology. Manager: Dr. David Lowe. Reference: PDDL

## **Pharmacokinetics & Metabolism**

A position is available to study the mechanisms of uptake and intracellular transport of growth factors, focusing on understanding the

specific function(s) that ligands targeted to the nucleus play(s) in the overall biological response of the cell. Manager: Dr. Gilbert Keller. Reference: PDGK

## **Endocrine Research**

A position is available to explore the metabolic consequences of hormonal gene knockout or attenuation in animal models of human disorders. See Journal of Clinical Investigation 95:2258-2265 (1995); Endocrinology, Vol 1 (3rd ed), pp 280-302 (1995). Manager: Dr. Michael Cronin. Reference: PDMC

## **Bioanalytical Development**

This position will work on a project to elucidate morphological and functional heterogeneity of human monocyte/macrophage system. Training in cell and molecular biology required and experience in fluorescence microscopy techniques preferred. See Mol. Cell Biochem. 124, 67-79 (1993); Prog. Lipid Res., 30, 237-243 (1991); Atherosclerosis 38, 175-184 (1991); Atherosclerosis 77, 221-225 (1989). Manager: Dr. Eugen Koren. Reference: PDKO

## **Antibody Engineering**

Positions are available to identify novel tumor and tumor vasculature antigens using antibody phage and to engineer human neutrophil elastase for ADEPT. Prior training required in two or more of the following areas: molecular biology, phage display, protein biochemistry or cancer biology. See PNAS 89 (1992); J. Exp. Med. 175 (1992) 217; PNAS 92 (1995) 1327; Cancer Research 55 (1995) 63; Chemistry and Biology 2 (1995) 223. Manager: Dr. Paul Carter. Reference: PDPC

## **Immunology**

A position is available to investigate lymphocyte cell surface protein interactions with endothelial cells associated with inflammatory diseases. See J. Immunol. 155:5257 (1995); J. Cell Biology 125:1395 (1994); J. Biol. Chem. 269:14411 (1994). Manager: Dr. Sherman Fong. Reference: PDSF

## **Cell Biology**

Postdoctoral fellow to work on the regulation of development of pancreatic protodifferentiated cells into islets using an in vitro approach in collaboration with molecular biologists and physiologists. See Endocrinology 136:849 (1995); Ann Rev. Physiol. 57:219 (1995). Manager: Dr. Jennie Mather. Reference: PDJM

## **Molecular Biology**

Positions are available to identify novel cell surface receptors and their ligands and to study receptor biology and cell signaling in variety of systems, including growth hormone, flt4, and gpl30 receptor systems. See PNAS 92, 1142 (1995); JBC 270, 10915 (1995); JBC 270:7021 (1995); and Science 253, 1278 (1991). Manager: Dr. William Wood. Reference: PDWW

Genentech offers an excellent salary and benefits package which includes free health club membership and fully paid medical, dental and vision coverage. **Please send your resume to Genentech, Inc., Human Resources, Attn: Reference XXXX (see code in above job descriptions), 460 Pt. San Bruno Blvd., South San Francisco, CA 94080.** Genentech is an Equal Opportunity Employer. We value the contributions of our diverse workforce.

**Genentech, Inc.**

# STA FELLOWSHIP PROGRAM

## Postdoctoral Fellowships in Japanese National Laboratories

### Introduction

The Science and Technology Agency (STA), an administrative organ of the Government of Japan, established the STA Fellowship Program in 1988 in order to offer opportunities for promising young foreign researchers in the fields of science and technology to conduct research at Japan's national laboratories and public research corporations (excluding universities and university-affiliated institutes).

The Program is also a response to calls from the international community of science and technology for greater international cooperation through the exchange of promising researchers.

Since Oct. 1, 1989, the Program has been managed by the Research Development Corporation of Japan (JRDC), a statutory organization under the supervision of STA, in cooperation with the Japan International Science and Technology Exchange Center (JISTEC). JRDC also has the strong support and cooperation of the Responsible Organizations listed in Table 1.

### Fellowship Qualifications

The fellowships are open to PhD holders of under 35 in principle, (N.B.: Any age is acceptable for Short-Term Fellowships), from universities, research councils, government research laboratories and industry. Any science or engineering discipline will be considered except military R & D.

Applicants should be of sufficient good health to pursue research activities in Japan.

Have sufficient language ability to pursue research activities in Japan, Japanese language ability is preferable, but English is sufficient in most cases. With the agreement of the host research institute, other languages may suffice.

### Tenure and Field of Research

The tenure will be from 6 months to 2 years (Long-Term Fellowship), or 1–3 months (Short-Term Fellowship), to be decided upon through negotiation between the candidate and the host institute. The field of research will also be decided upon through negotiation between the candidate and the host institute, the results of research activities produced during the tenure will be subject to the regulations of the host institute.

Research field include: Mathematics; Physics; Geology; Electricity; Electrons; Information Engineering; Mechanics; Engineering Works; Architecture; Erosion Control; Landscaping; Chemistry; Metals; Resources Engineering; Medical Science; Pharmaceuticals; Agricultural Technology; Farming; Forestry; Fisheries; others in the Natural Science.

### FELLOWSHIP AWARDS

Fellowships include round-trip air tickets (economy class; not available for dependents) and the following allowances:

- 1) Living allowance: 270,000 a month
- 2) Family allowance: 50,000 a month if Fellows are accompanied by one or more dependents during their tenure.
- 3) Housing: Apartments will normally be provided to awardees. The apartment floor area is 40m<sup>2</sup> for awardees unaccompanied by their family and 60m<sup>2</sup> for awardees to stay with their family in other than metropolitan areas such as Tokyo. If an awardee prefers to use a larger apartment because of the family size or otherwise 106,000 maximum per month may be paid as housing allowance; any shortfall is to be borne by the awardee.
- 4) An initial international settling-in allowance: 200,000 (This amount is less in case of short stays.)
- 5) An annual allowance of up to 115,000 for travel within Japan related to research activities.
- 6) Medical insurance (N.B. not available for dependents)

### Assistance for Fellows

If they wish, Fellows may take advantage of the following assistance:

- 1) Free Japanese language courses for Fellows whose host research institutes are in Tsukuba area. Fellows whose institutes are located elsewhere are entitled to reimbursement of reasonable amounts for language tuition at a private school. (N.B. not available for dependents);
- 2) Since most apartments in Japan are unfurnished, basic furniture and electric appliances will be provided free of charge to Fellows;
- 3) Counseling on problems relating to such aspects of daily life as children's schooling, medical care and shopping, is available for Fellows living in Tsukuba area.

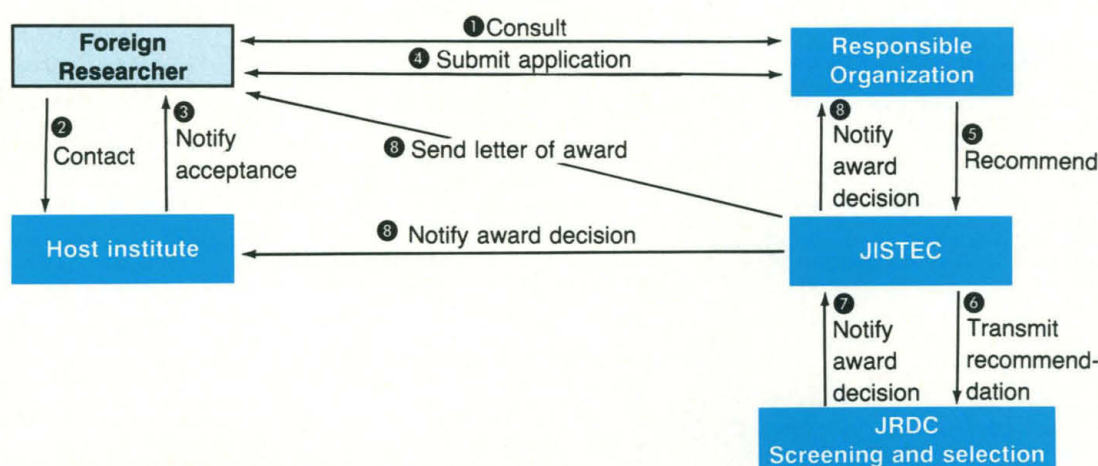
### APPLICATION PROCEDURE FOR STA FELLOWSHIP (Fig 1)

Applicants possessing the nationality or citizenship or permanent resident status of a country listed in Table 1 should:

- 1) Contact the Responsible Organization in their country to obtain an application form and information about the host research institutes.
- 2) Communicate with host research institutes of interest to ascertain their suitability for the applicant's area of specialization.
- 3) After agreeing with the prospective host institute on the subject of research, the length of tenure and starting date for the Fellowship, the applicant should obtain from the institute a formal letter of acceptance expressing its willingness to serve as a host.
- 4) Submit the completed application form and the letter of acceptance to the Responsible Organization concerned. The Responsible Organization will then screen applicants, and submit its recommendations for Fellowship candidates to JRDC through JISTEC, accompanied by a complete dossier on the candidates.
- 5) JRDC will then conduct a further screening and notify successful applicants by sending a Letter of Award through JISTEC. The Responsible Organization and the host research institute concerned will also be informed in this respect.



**Fig. 1 Procedural Flow from Contact to Receipt of Award**



**Table 1 RESPONSIBLE ORGANIZATIONS**

<b>Country</b>	<b>Contact</b>		
<b>AUSTRALIA</b>	THE AUSTRALIAN ACADEMY OF SCIENCE Ms. Bonnie Bauld International Exchange Officer GPO Box 783, Canberra ACT 2601 Tel: 61-6-247-3966 Fax: 61-6-257-4620	<b>NEW ZEALAND</b>	MINISTRY OF RESEARCH, SCIENCE AND TECHNOLOGY Ms. Lisa Goodman International Science Officer P.O. Box 5336, Wellington Tel: 64-4-472-6400 Fax: 64-4-471-1284
<b>AUSTRIA</b>	FEDERAL MINISTRY FOR SCIENCE AND RESEARCH Ms. Susanna Peterka Administrative Officer, International Affairs Minoritenpl atz 5, A 1014 Vienna Tel: 43-222-531-20-6794 Fax: 43-222-531-20-6205	<b>NORWAY</b>	THE RESEARCH COUNCIL OF NORWAY Ms. Else Boon Advisor P.O. Box 2700 ST. Hanshaugen 0131 Oslo Tel: 47-2-2037000 Fax: 47-2-2037001
<b>CANADA</b>	NATURAL SCIENCE AND ENGINEERING RESEARCH COUNCIL Ms. Patricia Houston Program Officer, International Programs Constitution Square, Tower II 350 Albert Street, Ottawa, Ontario K1A 1H5 Tel: 1-1613-947-0190 Fax: 1-613-992-5337	<b>SWEDEN</b>	NUTEK Ms. Leena Holappa Administrative Program Officer Liljeholmsvägen 32, S-117 86, Stockholm Tel: 46-8-681-9100 Fax: 46-8-681-9625
<b>GERMANY</b>	ALEXANDER VON HUMBOLDT-STIFTUNG Dr. Michal Meier Department Sponsorship Abroad Jean-Paul-Str. 12, D-53173 Bonn Tel: 49-228-833-101 Fax: 49-228-833-199	<b>SWITZERLAND</b>	SWISS NATIONAL SCIENCE FOUNDATION Dr. Benno G. Frey Head of the Fellowship Section Wildhainweg 20, CH-3012, Bern Tel: 41-31-27-22-22 Fax: 41-31-23-30-09
<b>FINLAND</b>	THE ACADEMY OF FINLAND Ms. Kaija Siitari Exchange Program Secretary P.O. Box 57, SF-00551 Helsinki Tel: 358-0-7748-316 Fax: 358-0-7748-379	<b>UNITED KINGDOM</b>	THE ROYAL SOCIETY Ms. Vida Cody Head of Japan Exchanges 6 Carlton House Terrace, London SW1Y 5AG Tel: 44-71-839-5561 Fax: 44-71-930-2170
<b>FRANCE</b>	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE Ms. Flora Gheno Mission of International Relations 3-5 rue Michel-Ange, 75781 Paris Cedex 16 Tel: 33-1-44-96-46-91 Fax: 33-1-44-96-49-10	<b>UNITED STATES</b>	NATIONAL SCIENCE FOUNDATION Japan Programs, Room 935 Division of International Programs 4201 Wilson Blvd. Arlington, VA 22230 Tel: 1-703-306-1701 Fax: 1-703-306-0476 or 0477
<b>ITALY</b>	MINISTERO DELL'UNIVERSITÀ E DELLA RICERCA SCIENTIFICA E TECNOLOGICA Dr. Antonella Carrisa Department for International Relations-UFFICIO III Piazzale J.F. Kennedy 20-00144 Roma Tel: 39-6-59912819 Fax: 39-6-59912967		NATIONAL INSTITUTES OF HEALTH Dr. David A. Wolff Chief, International Research Awards Branch Fogarty International Center Bldg. 31, Rm. B2C39 Bethesda, Maryland 20892 Tel: 1-301-496-1653 Fax: 1-301-402-0779
<b>NETHERLANDS</b>	STICHTING VOOR DE TECHNISCHE WETENSCHAPPEN (STW) Dr. C. A. M. Mombers Program Officer Postbus 3021, 3502 GA Utrecht Van Vollenhovenlaan 661, Utrecht Tel: 31-30-923275 Fax: 31-30-961536	<b>EUROPEAN UNION</b>	EUROPEAN COMMISSION Mr. Mario Merla Directorate-General for Science, Research and Development DG XII-G-3 200 Rue de la Loi, 1049 Brussels, Belgium Tel: 32-2-295-39-90 Fax: 32-2-296-33-08

Further information regarding the STA Fellowship and host institute is available from the responsible organizations, JISTEC and JRDC. (See below)

Japan International Science and Technology Center (JISTEC)  
20-5, Takezono, 2-chome, Tsukuba City, Ibaraki Pref. 305 Japan  
Tel: 81-298-53-8250 Fax: 81-298-53-8260

Research Development Corporation of Japan (JRDC)  
Kawaguchi Center Building 1-8, Hon-cho 4-chome, Kawaguchi-city, Saitama Pref. 332, Japan  
Tel: 81-48-226-5634 Fax: 81-48-226-5652

## POSITIONS OPEN

### BIOLOGY POSITIONS

St. Olaf College invites applications for two anticipated one-year, with possibility of renewal, **ASSISTANT PROFESSOR** appointments beginning September 1, 1996. Teaching responsibilities will include introductory cell biology and genetics and microbiology for one position and organismic biology and invertebrate zoology for the second position. Qualifications for the positions include a Ph.D. and demonstrated experience and ability in teaching. Send curriculum vitae, undergraduate and graduate transcripts, statements of teaching and research interests, and three letters of recommendation to: **Dr. Kathleen Shea, Chair, Department of Biology, St. Olaf College, Northfield, MN 55057** by April 19, 1996. St. Olaf College is a co-educational liberal arts college of the church in the Lutheran tradition (ELCA). *St. Olaf is an Equal Opportunity Employer.*

### EVOLUTIONARY BIOLOGY AND IMMUNOLOGY

Search reopened: Applications are invited for tenure-track **ASSISTANT PROFESSOR** faculty positions in Evolutionary Biology and Immunology. The Division of Life Sciences offers the Ph.D. with an emphasis in neurobiology. Requirements include a doctoral degree in the appropriate discipline and postdoctoral experience. Candidates must have demonstrated research accomplishments and a strong commitment to undergraduate and graduate teaching. Candidates who have research interests in neurobiology or neuroimmunology are preferred. Set-up funds and laboratory space are available. Send curriculum vitae, a letter describing research interests, selected publications, and the names, addresses, and telephone numbers of three people who will write reference letters to: **Dr. Joe L. Martinez, Jr., Director, Division of Life Sciences, The University of Texas at San Antonio, San Antonio, TX 78249-0662**, by May 6, 1996. Positions are pending budget approval. *University of Texas at San Antonio is an Affirmative Action/Equal Opportunity Employer. Minorities and women are especially encouraged to apply. Applicants who are not U.S. citizens must state current visa and residency status.*

### CHAIR IN BASIC CANCER RESEARCH

Tulane University Medical Center and the Tulane Cancer Center seek an outstanding basic scientist with an active research focus in cancer biology to fill the Marguerite Main Zimmerman Chair in Basic Cancer Research. The successful candidate will also be the **ASSOCIATE DIRECTOR** for Basic Research of the Tulane Cancer Center and will play a major role in shaping the Cancer Center's programs, identifying and recruiting junior faculty with the chairpersons of the basic science departments, and allocating resources and space in support of cancer research program development. Interested candidates should forward their curriculum vitae and letter of application to: **Roy S. Weiner, M.D., Director, Tulane Cancer Center, 1430 Tulane Avenue, SL-68, New Orleans, LA 70112**. *Affirmative Action/Equal Opportunity Employer.*

### RESEARCH SCIENTIST (CELL BIOLOGY)

AASTROM Biosciences, Inc., a growing cell therapy and medical products company, has a position open for a **RESEARCH SCIENTIST—Cell Biology**. Requirements include a Ph.D. in cell biology or related field, and a minimum of three years' experience in hematopoietic research. The selected candidate will participate in a research program focused on *ex vivo* human stem cell production and hematopoiesis. Candidates must have experience with human hematopoietic cell culture, stem cell selection and characterization, molecular biology techniques, and flow cytometric and cytologic assays. Competitive compensation and benefit package. Please send résumé to:

**Cell Biology Recruitment  
AASTROM Biosciences, Inc.  
P.O. Box 376  
Ann Arbor, MI 48106-0376  
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### TECHNICIAN

**Department of Medicine, Columbia University**

**TECHNICIAN** needed for studies involving tissue culture relevant to lipoprotein metabolism. Methods used include radio-labeling, gel electrophoresis, and autoradiography. Molecular biology methods will be used to assist investigators transfecting cultured cells and making vectors for transfection studies employing a full spectrum of RNA techniques. Send curriculum vitae to: **Ms. Irene Franck, Administrator, Division of Preventive Medicine and Nutrition, Columbia University, 630 West 168th Street, 9-510, New York, NY 10032**. *We take Affirmative Action toward Equal Opportunity.*

## POSITIONS OPEN

### UNIVERSITY OF MIAMI SCHOOL OF MEDICINE Sylvester Comprehensive Cancer Center

**POSTDOCTORAL ASSOCIATE:** A recent Ph.D. with training in experimental chemotherapy/cellular pharmacology/molecular biology of drug resistance. We have well-equipped labs in support of a multidisciplinary lab/clinic translational program in monitoring and modulation of drug resistance in cancer patients. Send résumé with names of three referees to: **Awatar Krishan, Ph.D., Associate Director, C/O Desiree Uptgrew, Sylvester Comprehensive Cancer Center (D-1), P.O. Box 016960, Miami, FL 33101**. *Affirmative Action/Equal Opportunity Employer.*

**PROGRAM MANAGER**, Associated Western Universities, Inc. (<http://online.awu.org/>), administrator of science education programs since 1959, seeks **MANAGER** for postsecondary programs at Salt Lake City office. Advanced science or engineering degree; teaching or research experience in a university, government, or industry required. Send résumé to: **R. B. Green (info@nw.awu.org), AWU NW, 723 The Parkway, Suite 100, Richland, WA 99352** by April 15, 1996.

**PROTEIN/MOLECULAR BIOCHEMIST:** Postdoctoral position in neuroscience research, including glutamatergic neurotransmission, membrane transporters, intracellular transduction mechanisms, employing mammalian/baculovirus expression cloning. Must be capable of using and maintaining FPLC, HPLC, Western blot. NIH scale salary. Molecular expertise (e.g., plasmid ligations, PCR) a desirable asset. **John Lehmann, Ph.D., Associate Professor, Department of Neurosurgery, MS 407, Medical College of Pennsylvania and Hahnemann University, Broad and Vine, Philadelphia, PA 19102-1192**.

### SENIOR WETLAND RESTORATION SPECIALIST

Well-established San Francisco Bay ecological consulting firm seeks tidal wetland **RESTORATION SPECIALIST**, with minimum of five to ten years of experience, for project manager position. Doctorate in associated discipline (wetland ecology, botany, aquatic biology, etc.) preferred, although Master's degree with excellent pertinent experience will be considered. Experience must include restoration and monitoring design and implementation, project management, wetland permitting and regulation. Very competitive salary and benefits package; compensation commensurate with education and experience. Send detailed résumé to: **Daniel Stephens, H.T. Harvey and Associates, P.O. Box 1180, Alviso, CA 95002**. Telephone: 408-263-1814. Closing date: July 30, 1996.

### TWO TENURE-TRACK FACULTY POSITIONS

- 1) Plant Metabolic Engineering/Molecular Physiology
  - 2) Molecular Genetics
- Department of Agronomy, University of Kentucky**

These positions offer exceptional opportunities to develop a strong academic research program while participating in biotechnology initiatives. The positions include full academic appointment, and are 12-month, **TENURE-TRACK**. Excellent facilities, core support services, a strong start-up package, and highly competitive compensation and benefits are available. The successful applicants will conduct research in plant molecular genetics and physiology at the Tobacco and Health Research Institute, which is aggressively expanding its plant research efforts to develop engineered tobacco germplasm for entirely new applications. While the primary objective will be to further our fundamental knowledge of plant physiology and genetics, these faculty will also be expected to maintain a strong interest in the application of their findings to the development of new and useful plant germplasm.

Candidates for position 1 should have a Ph.D. in a plant science field, preferably with postdoctoral experience in molecular genetic approaches to investigate plant physiology. For position 2, experience with higher plant systems is advantageous but not essential, and postdoctoral experience with state-of-the-art methodology in molecular genetics is required. By May 28, 1996, send curriculum vitae, transcript copies, and names and addresses of three references to: **M. Scott Smith, Department of Agronomy, University of Kentucky, Lexington, KY 40546**. Contact: **H. Maelor Davies, Tobacco and Health Research Institute, Cooper and University Drives, Lexington, KY 40546**. Telephone: 606-257-5798; Email: [mdavies@pop.uky.edu](mailto:mdavies@pop.uky.edu) for more information and a formal position description.

## POSITIONS OPEN

### MEDICAL COLLEGE OF PENNSYLVANIA/ HAHNEMANN UNIVERSITY The Edward Jekkal Muscular Dystrophy Association Fellowship

The Medical College of Pennsylvania and Hahnemann University (MCPHU) announces the Edward Jekkal Muscular Dystrophy Association **FELLOWSHIP** funded through the generosity of the Muscular Dystrophy Association and the late **Edward Jekkal**. This program has been established to strengthen the training program for senior postdoctoral fellows about to move into faculty positions or junior research faculty members, including physician scientists, interested in neuromuscular disease research at MCPHU. The fellowship carries an annual stipend of \$35,000 plus fringe benefits, and in addition offers a research expense fund of \$5,000. The duration of the award will be two years.

Applicants are expected to identify a sponsor from within the training faculty at MCPHU and to prepare an application with the sponsor, who will provide the research support and, if appropriate, a salary supplement. The research project should be in an area consistent with the objectives of the Muscular Dystrophy Association.

Application forms and a description of the training faculty may be obtained by writing to: **Dr. Donald S. Faber, Professor and Chair, Neurobiology and Anatomy, Medical College of Pennsylvania and Hahnemann University, 3200 Henry Avenue, Philadelphia, PA 19129**. Completed applications (with two letters of recommendation) should arrive at MCPHU by July 1, 1996.

### POSTDOCTORAL POSITION

Applications are invited for an NEI-funded position to study the role of gap junctions in retinal circuitry. Experience in molecular biology or electrophysiology is required. Send curriculum vitae, short statement of research interests, and the names of three references to: **Stephen C. Massey, Ph.D., Department of Ophthalmology and Visual Science, University of Texas Medical School, 6431 Fannin, Houston, TX 77030**. Email: [smassey@gsbs.gs.uth.tmc.edu](mailto:smassey@gsbs.gs.uth.tmc.edu). *The University of Texas is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

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## POSITIONS OPEN

### UNIVERSITY OF UTAH MEDICAL CENTER POSTDOCTORAL POSITION

A two to three year position is available in the molecular genetics laboratory of **Bill Byerley** in the Department of Psychiatry.

The position will focus on identifying a schizophrenic gene(s) in a geographically and genetically isolated population. Methods may include linkage analysis, linkage disequilibrium, mutation scanning, and DNA sequencing. Applicants (Ph.D. and/or M.D.) should have training and experience in some of the following areas: genotyping, physical mapping, gene identification, and DNA sequencing. Salary range is \$25,000 and up depending on training and experience. The University of Utah offers a competitive benefits package.

Please write, fax, or Email a letter of application including research background and interests, a copy of your curriculum vitae, and the names of three references to: **Bill Byerley, Department of Psychiatry, University of Utah Medical Center, 50 North Medical Drive, Room 5R278, Salt Lake City, UT 84132. Email: byerley@hoodoo.med.utah.edu; FAX: 801-581-8040. The University of Utah is an Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL or RESEARCH ASSOCIATE** position available immediately to study the pathobiology of progressive renal disease in animal models and in cell culture. Techniques include Northern and Western analysis, reverse transcription PCR, in situ hybridization, ELISA detection of cytokines, immunohistochemistry, cell and tissue culture. Send curriculum vitae to: **Jonathan R. Diamond, M.D., Division of Nephrology, The Milton S. Hershey Medical Center, P.O. Box 850, Hershey, PA 17033. For your health, Hershey Medical Center is a smoke-free campus. The Pennsylvania State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

**POSTDOCTORAL POSITION** available immediately to study the role of RNA binding proteins and NDK in translation. Familiarity with molecular biology and biochemical techniques is required. Preference will be given to applicants with experience in eukaryotic translation. Send curriculum vitae and names of three references to: **Dr. William Walden, Department of Microbiology/Immunology (M/C 790), University of Illinois at Chicago, 835 South Wolcott, Chicago, IL 60612-7344. University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.**

Two **POSTDOCTORAL POSITIONS** in theoretical molecular biophysics. The first involves the study of water and ion movement in self-assembling peptide nanotubes by molecular dynamics and related techniques. The second involves the modeling of solvent effects and electrostatic interactions in biological molecules by quasimacroscopic electrostatic models with the resulting partial differential equations solved by finite methods. A strong background in the relevant physics is required, and proficiency in C++ programming is desirable. Send curriculum vitae, brief summary of research accomplishments and aims, and three letters of reference to: **Donald Bashford, MB-1, The Scripps Research Institute, 10666 North Torrey Pines Road, La Jolla, CA 92037. Email: bashford@scripps.edu.**

**POSTDOCTORAL RESEARCH ASSOCIATE**, Molecular Biology: position available in Department of Neurology, Yale Medical School for Ph.D. or M.D. with training in molecular biology, to join ongoing studies on ion channel expression. Broad experience in molecular biology techniques is essential. Please send curriculum vitae and three letters of reference to: **S. G. Waxman, M.D., Ph.D. or S. Dib-Hajj, Ph.D., Neuroscience Research Center, 127A, Building 34, VA Hospital, West Haven, CT 06516. Equal Opportunity/Affirmative Action Employer.**

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**POSTDOCTORAL RESEARCH POSITION(S)** available immediately to use molecular and genetic approaches to study the role of extracellular matrix molecules and cell surface proteoglycans in the morphogenesis of cartilaginous structures and skin. The position requires a Ph.D. or M.D./Ph.D. and experience in molecular techniques. Salary is negotiable according to experience and institutional guidelines. Send curriculum vitae and names, addresses, and telephone and FAX numbers of three references to:

**Paul F. Goetnick, Ph.D.  
Massachusetts General Hospital  
Cutaneous Biology Research Center  
Building 149, 13th Street  
Charlestown, MA 02129**

*The Massachusetts General Hospital/Harvard Cutaneous Biology Research Center is a committed Equal Opportunity/Affirmative Action Employer. Minorities, women, disabled persons, and veterans are encouraged to apply.*

**POSTDOCTORAL POSITION** available to pursue studies in signal transduction in T cells. Emphasis will be on characterizing the alterations in protein tyrosine kinase expression and function in lymphocytes from patients with cancer and in normal T cells and T cell lines exposed to tumors and their products. Will use biochemical and molecular biology approaches to examine these defects and identify potential mechanism of induction. Strong background in signal transduction is important and preference will be given to individuals with two years of postdoctoral experience. Send curriculum vitae and names of three references to:

**Dr. James Finke, Ph.D.  
Department of Immunology  
Research Institute  
Cleveland Clinic Foundation  
9500 Euclid Avenue  
Cleveland, OH 44195**

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**POSTDOCTORAL and RESEARCH** positions available immediately for recent Ph.D.s or M.D./Ph.D.s with experience in molecular genetics/molecular biology/biochemistry. Research, as part of a highly interactive group, involves identification of molecular mechanisms of neuronal degeneration in disorders of motor neuron and gene targeting and delivery in models of neurodegeneration. Send curriculum vitae and names of three references to: **Dr. Teepu Siddique, Department of Neurology, Tarry 13-715, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611. FAX: 312-908-0865. Equal Opportunity/Affirmative Action Employer. Minorities and women encouraged to apply.**

A **POSTDOCTORAL FELLOW or RESEARCH ASSOCIATE** position is immediately available to participate in immunology and cell biology research on neuroblastomas. Requires M.D. or Ph.D. degree, experience in tissue culture, cellular immunology, and molecular biology or protein biochemistry. Prior work with antigenic peptides is very desirable. Send curriculum vitae, summary of research interests and experience, and at least three references to: **Jed G. Nuchtern, M.D., Texas Children's Hospital, Hematology-Oncology, 6621 Fannin Street, MC 3-3320, Houston, TX 77030-2399. FAX: 713-770-4276. Email: nuchtern@bcm.tmc.edu. Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer. Women and minorities are encouraged to apply.**

**POSTDOCTORAL RESEARCH ASSOCIATE:** Wetlands Ecologist beginning 1 June 1996, renewable pending the availability of funds. Experience with constructed wetlands and environmental monitoring. Proficiency in statistical analysis desired. By 1 May 1996, send résumé or curriculum vitae and names, addresses, and telephone numbers of five references to: **Dr. Stephen A. Bortone, Director—Institute for Coastal and Estuarine Research, University of West Florida, Pensacola, FL 32514. Telephone: 904-474-3251; FAX: 904-474-3496; Email: sbortone@castaway.cc.uwf.edu. University of West Florida is an Equal Opportunity/Access, Affirmative Action Employer.**

**POSTDOCTORAL POSITION** to study the molecular genetics of human DNA replication. Epstein-Barr and papilloma virus sequences and immunoglobulin, globin, and *myc* gene families are being used as model systems both *in vivo* and *in vitro* to define mammalian origins of replication and to study their cell cycle regulation. Apply by mail and a FAX copy to: **Dr. Carl Schildkraut, CH 416, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, New York, NY 10461. FAX: 718-430-8574; Email: schildkr@acom.yu.edu. Equal Opportunity Employer.**

## POSITIONS OPEN

### UCSF AND CHIRON BIOICINE Cellular and Molecular Immunology

**POSTDOCTORAL POSITION** in cellular and molecular immunology available for up to two years beginning July 1, 1996, to work jointly at Chiron Biocine and Department of Anatomy/Cardiovascular Research Institute at the University of California, San Francisco (UCSF). Studies will exploit adjuvants as probes of the immune system and elucidate the mechanisms of action of novel clinically relevant vaccine adjuvants. Experience in cellular and molecular immunology and strong interest in applying novel fluorescence and confocal microscopic techniques and FACS to study the adjuvant-stimulated immune system in mice are essential. Two or more years of previous postdoctoral experience strongly recommended. Send curriculum vitae, summary of current research, and names of three references to: **Professor Donald M. McDonald, Box 0452, Department of Anatomy, University of California, San Francisco, CA 94143-0452. FAX: 415-476-4845; or Dr. Gary Ott, Chiron Corporation, 4560 Horton Street, Emeryville, CA 94608. FAX: 510-601-2586. UCSF and Chiron Corporation are Equal Opportunity/Affirmative Action Employers.**

**POSTDOCTORAL FELLOW**—Molecular Immunology: A motivated, self-starting Ph.D. scientist with track record in molecular biology is sought for a funded postdoctoral position. Develop and analyze transgenic mice. Investigate transduction of signals from IL-4 receptor to transcription factors; protein purification skills helpful. Background in immunology or signal transduction is desirable. Address letter, curriculum vitae, and references to: **Dr. Mark Boothby, Department of Microbiology and Immunology, Vanderbilt University, Nashville, TN 37232-2363. Email: mark.boothby@mcmail.vanderbilt.edu.**

### CANCER RESEARCH POSTDOCTORAL TRAINING Case Western Reserve University Cancer Center

NIH-funded cancer research **POSTDOCTORAL** positions for individuals holding the M.D., M.D./Ph.D. or Ph.D. degrees. Research focuses include:

Apoptosis, breast cancer, molecular virology, radiation biology, cellular adhesion, retroviral oncogenesis, gene regulation, gene therapy, DNA repair, mutagenesis, immunology, cutaneous oncology, regulation of cell growth, neurooncology, steroid hormone action, and molecular biology of colon cancer.

Send curriculum vitae and statement of research interests to: **Dr. Clark Distelhorst, School of Medicine (BRB), Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4937. Must be U.S. citizen or permanent resident. Minorities and women are encouraged to apply.**

**POSTDOCTORAL POSITION** available immediately to study molecular mechanisms by which estrogen modulates endothelial cell migration and differentiation. Well-funded lab group emphasizes open interaction and sharing of ideas. Training in cell and molecular biology is essential (less than four years from Ph.D.). Send curriculum vitae and names of three references to: **William Schnaper, M.D., Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611-3008. Telephone: 312-503-1180; FAX: 312-503-1181; Email: hws124@nwu.edu. Northwestern University is an Equal Opportunity/Affirmative Action Educator and Employer.**

**POSTDOCTORAL POSITIONS** available immediately to study molecular mechanisms mediating depolarization-dependent and synapse-specific expression of nicotinic acetylcholine receptor genes during development of the neuromuscular junction. Applicants should have a strong background in molecular biology and/or protein purification. Send curriculum vitae, statement of research interests and experience, along with names and addresses of three references to: **Daniel Goldman, University of Michigan, Mental Health Research Institute, 205 Zina Pitcher Place, Ann Arbor, MI 48109. The University of Michigan is an Equal Opportunity/Affirmative Action Employer.**



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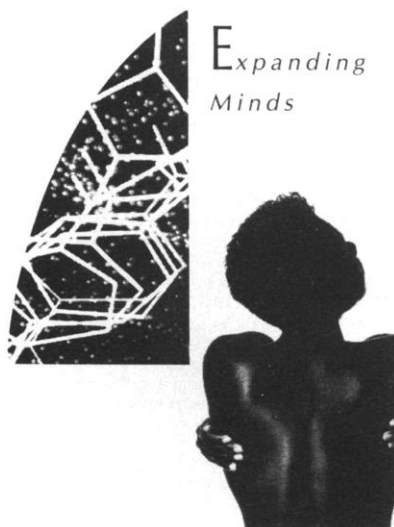
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## MINORITY YOUNG INVESTIGATOR AWARD

The University of Michigan Institute of Gerontology is a recent recipient of a Nathan Shock Center Grant for Research on the Basic Biology of Aging (John Faulkner, PI) from the National Institute on Aging. The major gerontological research themes of the Center faculty are *musculoskeletal frailty, integrity of protein molecules, and signal transduction*. As a part of the Center's research development initiatives we invite applications for a visiting faculty award in an amount up to \$5,000 in travel funds per year for five years for specified collaborative activities at the University of Michigan. The purpose of the MINORITY YOUNG INVESTIGATOR AWARD is to facilitate research career development by enabling the successful candidate to interact and collaborate with Center faculty, to utilize Center research resources, to participate in annual research workshops, and to compete for pilot research funds. Eligibility includes all minority investigators who are full time faculty members in a U.S. academic institution or research institute and at rank no higher than assistant professor. Complete applications must include a letter of interest, curriculum vitae, bibliography, and letters of recommendation from the applicant's department chairperson and two additional individuals. Forward all materials for arrival no later than April 30, 1996 to **Dr. Richard C. Adelman, Director, Institute of Gerontology, University of Michigan, 300 North Ingalls, Ann Arbor, MI 48109.**



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## Research Immunologist/Virologist Respiratory Virus Respiratory and Enteric Viruses Branch Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, Centers for Disease Control and Prevention

The Centers for Disease Control and Prevention is seeking qualified applicants for a staff position in the Respiratory Virus Section, Respiratory and Enteric Viruses Branch, Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases. The appointee will direct and participate in studies of the immunologic response to respiratory syncytial virus, parainfluenza viruses, and other respiratory viruses. Studies may comprise a broad range of experimental approaches including detection of cytokines or cytokine mRNA, characterization of cell surface markers, assessment of types of inflammatory cells, measurement of cytotoxic T cell activity and lymphoproliferative responses, etc., to evaluate the immune and inflammatory responses to vaccines and natural infection in animal models and humans. The principal aim of this program is to develop safe and effective vaccines and to better characterize the pathogenesis of disease. Immunologists or virologists with laboratory experience in viral immunology are being sought for this position.

Qualifications preferred include a doctoral degree, significant scientific accomplishments in one or more areas of relevant research, and the ability to provide leadership for support staff.

Salary range is GS-12 Step 1 - \$44,081 to GS-13 Step 10 - \$68,145.

Further information about the position may be obtained from Larry J. Anderson, M.D. at (404) 639-3596.

Interested candidates may send their curriculum vitae in confidence along with the names of three professional references by May 1, 1996, to **Janie L. Oddy, Human Resources Management Office, Centers for Disease Control and Prevention (K15), 4770 Buford Highway, Atlanta, GA 30341-3724.**

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## Postdoctoral/Research Associate Positions Cellular & Molecular Biology of Epithelia & Melanocytes

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Research may be carried out in the laboratories of the following investigators:

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- 2) **Seth J. Orlow, M.D., Ph.D.:** Cellular and molecular basis of cutaneous and ocular pigmentation; genetic basis of human skin disease;
- 3) **Tung-Tien Sun, Ph.D.:** Gene regulation and mesenchymal/epithelial interaction in hair follicle development; epithelial stem cells.

Interested candidates should submit a CV and the names and addresses of three references to:

**Irwin M. Freedberg, M.D.**  
**Professor and Chairman**  
**The Ronald O. Perleman Department of Dermatology**  
**New York University School of Medicine**  
**550 First Avenue, Room H100**  
**New York, NY 10016-6402**  
**Fax: 212-263-8752**  
**E-mail: irwin.freedberg@med.nyu.edu**  
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**THE CHINESE UNIVERSITY OF HONG KONG**

Applications are invited for:

**Department of Biology**

**Lecturer** (carrying the academic title of Assistant Professor or Associate Professor, as appropriate)  
(Ref. 96/010(665)/2)

Applicants should have a Ph.D. in plant molecular biology or plant physiology with appropriate postdoctoral research experience. The successful candidate will participate in the teaching of undergraduate courses in plant physiology, molecular biology and biotechnology, and biology of higher plants, and is expected to develop a vigorous and competitive research programme on plant growth and development or related areas. Preference will be given to applicants with experience in the application of molecular biological approaches and techniques to the study of plant growth and development processes such as differentiation, flowering, or plant growth hormones responses. Additional desirable qualifications include some experience in plant cell transformation and tissue culture.

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Starting salary will be commensurate with qualifications and experience.

Benefits include leave with full pay, medical and dental care, education allowance for children, housing benefit for eligible appointee (with appointee contributing 7.5% of salary toward the provision of housing). Under regular contract, retirement benefits are provided by the University, while fixed term contract carries where appropriate a contract-end gratuity (15% of basic salary).

**Application Procedure**

Please send full resume in duplicate and names and addresses of three referees, with copies of academic credentials (in duplicate) and recent publications to the **Personnel Office, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong (Fax: (852) 2603 6852)** before **April 9, 1996**. Please quote the reference no. and mark "Recruitment on cover".

**Directorship of the Institute of Molecular Biology****(Re-advertisement)**

Applications are invited for the post of Director of the Institute of Molecular Biology (RF-95/96-80), tenable immediately. The Institute was under the part-time Directorship of Professor Y W Kan, FRS until 1994. Following the completion of the 900m2 building, the University now seeks to recruit a full-time director. Appointment will be made on a 5-year fixed-term contract, but consideration may also be given to appointment on superannuable terms.

Applicants must possess a doctorate degree, have a proven track record in biomedical research using molecular and cell biology techniques and have significant internationally recognized achievements in this area. The Director is expected to lead one research team as well as to manage and oversee the other research teams in the Institute. A successful record in research and in supervision of postgraduate students and management of large research groups would be preferable.

The University reserves the right not to fill the post or to fill the post by invitation or to make an appointment at a lower level.

**Annual salary** [non-superannuable but attracting 15% (taxable) terminal gratuity] will be within the professional range, of which the minimum is HK\$1,007,220 and the average is HK\$1,245,780 (approx. US\$130,808 & US\$161,790 respectively; US\$ equivalent as at 4 March 1996), with starting salary depending on qualifications and experience.

At current rates, salaries tax will not exceed 15% of gross income. Housing at a charge of a percentage of salary, currently 7.5%, children's education allowances, leave, and medical benefits are provided.

**Further particulars and application forms** may be obtained from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (Fax (852) 2540 6735/2559 2058; E-mail: APPTUNIT@REG.HKU.HK), or on WWW at <http://www.hku.hk>.

Closes **31 May 1996**.

**UNIVERSITY OF OXFORD**

Department of Zoology

**University Lectureship in Zoology in association with Merton College**

Applications are invited for the above post, tenable from 1 October 1996 or as soon as possible thereafter. Stipend according to age on the scale £15,154 to £28,215 per annum. The successful candidate may be offered a fellowship at Merton College.

Candidates will be expected to have a strong research record in either animal behaviour or ecology or both. The person appointed will be expected to contribute to undergraduate teaching in Biological Sciences under the aegis of the Department of Zoology, with particular input into either animal behaviour or ecology or both.

**Further written particulars containing details of the duties and the full range of emoluments attaching to both the university and college posts can be obtained from Professor R.M. Anderson, Department of Zoology, University of Oxford, Oxford OX1 3PS. Telephone: (01865) 271277; Fax: (01865) 310447, to whom completed applications (8 typed copies, or one from candidates overseas), containing a curriculum vitae, a list of publications and statement of research, and the names of three referees should be sent by 19 April 1996. Candidates will be notified if they are required for interview.**

The University exists to promote excellence in education and research, and is an equal opportunities employer.

**6th International Meeting on Chemical Sensors**

Availability of Travel Grants Through Support of the National Science Foundation and the Office of Naval Research.

The meeting is scheduled for July 22-25, 1996 at The National Institute of Standards and Technology, Gaithersburg, Maryland. There is sufficient funds for approximately 15-20 young investigators from accredited U.S. Universities or Institutes to participate in this meeting. Full-time graduate students and post-doctoral research fellows or associates within three years of receiving their doctoral degrees are eligible for support. We strongly encourage women and minority representation in the program. The young investigators will participate in oral or poster presentations as well as special workshops. This meeting will provide an opportunity for a deserving young chemical sensor researcher to discuss and learn about chemical and biosensor research with an international group of scientists and engineers.

Interested persons are requested to submit a 1-2 page abstract of their proposed presentation along with a short resume including educational background. A letter from the requestor's supervisor regarding the full-time status of the graduate student or post-doctoral fellow or associate must accompany the request. All requests must be received no later than May 3, 1996. A committee will review the applicants' requests. Grantees will be notified by the end of May 1996. The decision of the review committee will be final.

Funds will be made available for transportation, food and lodging expenses as well as registration fees for the meeting.

Please send your abstract, short resume and supervisor's letter to:

**Howard H. Weetall**  
**Chairman, Organizing Committee**  
**6th International Meeting on Chemical Sensors**  
**National Institute of Standards and Technology**  
**Biotechnology Division**  
**Gaithersburg, MD 20899**  
**301-975-2628**  
**FAX: 301-330-3447**  
**E-mail: [howard.weetall@nist.gov](mailto:howard.weetall@nist.gov)**

**Max Planck Institute of  
Psychiatry  
Clinical Institute  
Group of Molecular  
Neurobiology, Munich**

Applications are invited for a **POSTDOCTORAL POSITION** in investigating interneuronal communication mechanisms in the CNS mediated by excitatory aminoacid transmitters, peptides and steroids. Research experience in electrophysiology and molecular biology of neuronal systems in vitro is required. Most advanced technologies for the analysis of interneuronal communication pioneered by this group (IR-videomicroscopy, laser-stimulation) will be available in addition to up-to-date molecular techniques.

Applications should be addressed to **Personnel Office, Max Planck Institute of Psychiatry, Clinical Institute, Kraepelinstr. 2-10, D-80804 Munich, Germany.**



**NATIONAL UNIVERSITY OF  
SINGAPORE  
National University Medical  
Institutes  
Faculty of Medicine  
RESEARCH SCIENTISTS**

(Cardiovascular and Oncology Research)

We seek experienced Research Scientists for the newly established National University Medical Institutes in the Faculty of Medicine, National University of Singapore. The successful applicants should have a strong background of independent research in the cellular or molecular aspects of either cardiovascular diseases or cancer and is expected to lead a research team as Principal Investigator. Interested applicants should submit a statement of research interests, curriculum vitae, list of publications, and the names of three referees to: **The Director, National University Medical Institutes, Blk MD11 #02-01, Clinical Research Centre, Faculty of Medicine, National University of Singapore, 10 Kent Ridge Crescent, Singapore 119260, Republic of Singapore.**

# Women and Minorities in Science

*See these full page recruitment  
advertisements beginning on  
page 1900.*

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# SCIENCE



## POSITIONS OPEN

Four **POSTDOCTORAL POSITIONS** are available as part of a multidisciplinary project to develop and exploit efficient and reliable methods for soybean transformation. Candidates should have demonstrated experience in one or more of the following areas: plant molecular biology; plant tissue culture and regeneration; plant transformation; microbial molecular genetics. The successful candidates will be based, depending on expertise, in the laboratories of **Drs. Andrew Bent, Stephen Farland, Lila Vodkin, or Jack Widholm**. Send curriculum vitae, copy of graduate school transcripts, and three letters of reference to: **Ms. Deborah Lee, Department of Crop Sciences, University of Illinois at Urbana-Champaign, 1102 South Goodwin Avenue, Urbana, IL 61801**. Apply preferably by May 1, 1996; positions open until filled. *Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available immediately to investigate expression of the flavonoid pathway in soybean and the molecular nature of mutations that affect seed and flower color variegation. Experience in molecular biology and genetics desired. Excellent laboratory facilities and equipment available. Apply preferably by May 1, 1996; position open until filled. Send a curriculum vitae including a cover letter outlining your research background and interests, a copy of graduate school transcripts, and three reference letters to: **Dr. Lila Vodkin, Department of Crop Sciences, University of Illinois, Urbana, IL 61801**. Telephone: 217-244-6147; FAX: 217-333-4777; Email: l-vodkin@uiuc.edu. *Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITIONS** are available, starting July 1, 1996 in the Division of Nephrology-Hypertension at University of California, San Diego. Candidates must hold an M.D. or Ph.D. degree and be U.S. citizens or permanent residents. Divisional research interests include renal physiology and pathophysiology, genetic and pharmacologic analysis of hypertension, autoimmunity, and cell biology. Send curriculum vitae (including the names of three references) to: **Roland C. Blantz, M.D., Division of Nephrology-Hypertension (111H), 3350 La Jolla Village Drive, San Diego, CA 92161**. FAX: 619-552-7549. *The University of California is an Equal Opportunity Employer.*

**POSTDOCTORAL ASSOCIATE:** Position available immediately for structural studies of salivary proteins and glycoproteins. Ph.D. required in biophysics/structural biology with experience in heteronuclear multidimensional NMR. Background in peptide synthesis also desirable. New 500 MHz spectrometer available. Please send curriculum vitae along with names, addresses, and telephone numbers of three references to: **M. J. Levine, Department of Oral Biology, SUNY/Buffalo, 109 Foster Hall, 3435 Main Street, Buffalo, NY 14214**. Email: mj\_levine@sdm.buffalo.edu. *An Equal Opportunity/Affirmative Action Employer.*

### MEMBRANE TRANSPORT

A **POSTDOCTORAL POSITION** is available for studies of the molecular structure and mechanism of a P-type ATPase. The neurospora plasma membrane  $H^+$ -ATPase has been crystallized and its structure is emerging. A high yield ATPase expression system is also available. Research will involve crystallographic or molecular biological approaches. Send curriculum vitae and names of three references to: **Dr. Gene A. Scarborough, Department of Pharmacology, CB Number 7365, F.L.O.B., University of North Carolina, Chapel Hill, NC 27599**. *Equal Opportunity Employer.*

### POSTDOCTORAL POSITION INSTITUTE FOR HUMAN GENE THERAPY

Study cellular and molecular mechanisms of atherosclerosis and its inhibition utilizing somatic gene transfer and cell biology techniques. Experience in molecular biology required. Please send or fax curriculum vitae and names of three references to: **Dr. Daniel J. Rader, University of Pennsylvania, 409 Stellar-Chance Laboratories, 422 Curie Boulevard, Philadelphia, PA 19104-6069**. FAX: 215-573-8606. *Affirmative Action/Equal Opportunity Employer/ADA.*

A **POSTDOCTORAL POSITION** is available to study transcriptional/post translational regulation of G protein-coupled receptors. The applicant should be a recent Ph.D. with strong background in molecular biology and/or protein biochemistry. Please send curriculum vitae and three reference letters to: **Dr. M. M. Kwatra, Duke University Medical Center, Box 3094, Durham, NC 27710**. *Duke University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS CELL CYCLE CONTROL

Applicants are invited for **POSTDOCTORAL POSITIONS** to study eukaryotic cell cycle control. Studies focus on the kinases and phosphatases that regulate cell cycle progression as well as their upstream regulators and downstream targets. Studies incorporate techniques in molecular biology, biochemistry, cell biology, and genetics.

Qualified candidates should possess either a Ph.D. and/or M.D. in a relevant field. Applicants should send curriculum vitae, a description of research experience, and three letters of recommendation to:

**Helen Piwnicka-Worms, Ph.D.**  
Department of Cell Biology and Physiology and  
Howard Hughes Medical Institute  
Washington University School of Medicine  
660 South Euclid Avenue Box 8228  
St. Louis, MO 63110  
Email: hpiwnicka@cellbio.wustl.edu

### POSTDOCTORAL POSITION Dana-Farber Cancer Institute Harvard Medical School

Our laboratory focuses on the molecular basis of childhood leukemia, with particular focus on the mechanism of action of oncogenic variants of the TEL protein (*Cell*, 77:307, 1994). Techniques involve assays of transcriptional regulation, signal transduction, and animal modeling. Applicants should have a Ph.D. with training in molecular biology. Send curriculum vitae and names of three references to: **Dr. Todd R. Golub, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115**.

Two **POSTDOCTORAL POSITIONS** are open for scientists interested in gene regulation during the development of red blood cells. Applicants must have a Ph.D. or M.D. degree with experience in molecular biology. Projects include erythropoietin signaling during apoptosis and proliferation, analysis of a transcriptional promoter utilized in erythroid cells, identification of growth factors in serum, and quantitation of heme biosynthetic enzymes during erythropoiesis. Send curriculum vitae, reprints, and names, addresses, and telephone numbers of three references to: **Dr. Terry R. Bishop, The Johns Hopkins University School of Medicine, Ross Building 1125, 720 Rutland Avenue, Baltimore, MD 21205**.

**POSTDOCTORAL POSITION(S)** available to study the pathogenesis of Alzheimer's disease using molecular, cellular, and transgenic animal systems. Minimum requirements: Ph.D. with experience in molecular and/or neurobiology, prefer ES cell experience. Salary based on experience: \$19,000 to \$30,000 plus fringe benefits. Send curriculum vitae and have three letters of reference sent to: **Ken Fukuchi, M.D., Ph.D., Department of Comparative Medicine, University of Alabama at Birmingham, 1670 University Boulevard, Birmingham, AL 35294-0019**. FAX: 205-975-5519.

### VIRUS ASSEMBLY

**POSTDOCTORAL POSITION.** Available May 1996 in virus assembly. Biochemical and recombinant DNA techniques will be used to study replication, recombination, and genomic packaging of dsRNA phage. See *Virology*, 212:204, 1995; *J. Virol.*, 69:5502, 1995. Send résumé and references to: **Dr. Leonard Mindich, Public Health Research Institute, 455 First Avenue, New York, NY 10024**.

**POSTDOCTORAL POSITION** available to study agonist activated ion channels and changes in intracellular calcium in megakaryocytes. Previous experience with patch clamp electrophysiological techniques and single cell fluorometry is highly desirable. Send curriculum vitae, a statement of research experience, and names, addresses, and telephone numbers of three references to: **Dr. Alan Fein, Department of Physiology, University of Connecticut Health Center, Farmington, CT 06030**. FAX: 203-679-1269; Email: afein@neuron.uchc.edu.

### POSTDOCTORAL POSITION New York University Medical Center

A **POSTDOCTORAL POSITION** is available to study the biology of malaria parasites and trypanosomes. Experience in molecular biology is necessary. *U.S. citizenship or permanent residency required.* Send application, including names of referees, to: **Dr. Victor Nussenzweig, New York University Medical Center, Department of Pathology, MSB 131, 550 First Avenue, New York, NY 10016**.

## POSITIONS OPEN

**POSTDOCTORAL POSITIONS** immediately available for basic and translational studies focusing on the multidrug resistance P-glycoprotein superfamily of traffic ATPases *in vitro* and *in vivo*. Experience in molecular biology/biochemistry desired for studies directed to characterization of function, substrates, and regulation of the transporters in heterologous expression systems. Experience in organic/inorganic chemistry desired for synthesis and structure function analysis of novel metallo-pharmaceuticals targeting multidrug resistance in cancer and infectious disease. Send curriculum vitae and names of three references to: **David Piwnicka-Worms, M.D., Ph.D., Departments of Molecular Biology and Pharmacology and Radiology, Washington University Medical School, Box 8225, 510 South Kingshighway Boulevard, St. Louis, MO 63110**. Email: piwnicka-worms@mirlink.wustl.edu. *An Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITIONS

Two openings in quantitative ecotoxicology and ecological risk assessment. One will develop quantitative methods and generate PC-based programs implementing the methods. The second will investigate bioaccumulation dynamics in aquatic biota. One position will begin immediately and the second will begin in September 1996. Twenty percent of time will be spent developing grant proposals. Highly motivated Ph.D.s with strong backgrounds in ecotoxicology, statistics, and programming (first position) should send curriculum vitae and names of three references to: **Dr. Michael C. Newman, Savannah River Ecology Laboratory, P.O. Drawer E, Aiken, SC 29802**. *An Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITION

**POSTDOCTORAL POSITION** available immediately at the Dana-Farber Cancer Institute. This project involves the generation and evaluations of DNA vaccines to prevent retroviral infection and disease. We are seeking a molecular biologist with experience in studying gene expression systems. Experience in virology and/or immunology is a plus. Send curriculum vitae and the names of three references to: **Dr. Ruth M. Ruprecht, Chief, Laboratory of Viral Pathogenesis, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115**.

**POSTDOCTORAL POSITION** available immediately for structure-function studies of photoreceptor cyclic nucleotide-gated ion channels. Molecular biology experience required. Position allows opportunity to learn and apply patch clamp methods to study expressed and native channels, as well as to learn about visual transduction. Current emphasis is on mechanisms of channel modulation. Please send curriculum vitae and names and addresses of three references to: **Dr. Anita L. Zimmerman, Box G-8327, Brown University, Providence, RI 02912**. FAX: 401-863-1222.

### MOLECULAR ENDOCRINOLOGY

**POSTDOCTORAL POSITION** available for study of the molecular biology and physiology of the glucagon-like peptides and their receptors. Applicants should ideally be within 12 months of completing a Ph.D. degree, with a strong background in molecular biology and physiology. Send curriculum vitae and list of three references to: **Dr. D. Drucker, The Toronto Hospital, 200 Elizabeth Street, Toronto M5G 2C4**. Internet: d.drucker@utoronto.ca.

**POSTDOCTORAL POSITION.** Immediate opening to study molecular biology of plasma membrane transport proteins. Applicants should have a Ph.D. degree with experience in molecular biology. Send curriculum vitae and names of three references to: **Alice Chow, M.D., Emory University School of Medicine, Digestive Diseases, Room 2101 WMB, 1639 Pierce Drive, Atlanta, GA 30322**. Telephone: 404-727-5638; FAX: 404-727-5767. *Emory University is an Equal Opportunity/Affirmative Action Employer.*

A **POSTDOCTORAL POSITION** is available immediately to study the molecular events involved in radiation induced fibrosis. A strong background in molecular biology and biochemistry is required. Please send curriculum vitae and three references to: **Elwood Armour, Ph.D., Department of Radiation Oncology, William Beaumont Hospital, 3601 West 13 Mile Road, Royal Oak, MI 48073**. FAX: 810-551-2443; Email: warmour@beaumont.edu. *An Equal Opportunity Employer.*

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Beginning on May 17, the topic of Scientists as Regulatory Affairs Specialists will be discussed in a two-month interactive career forum on SCIENCE's Next Wave, a new on-line publication. During that time, your organization's logo will appear on the first page of this forum and will be linked to a listing of your scientific career opportunities or your organization's homepage. Because this is on-line, you will have the flexibility to change the career opportunities posted throughout the two-month period. Only SCIENCE brings you this opportunity to make information about careers at your organization accessible to the thousands of scientists who visit SCIENCE's World Wide Web site every day.

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**Issue date: 14 June 1996 • Advertising space reservation deadline: 21 May**

On 14 June, SCIENCE will publish a special advertising section devoted to career opportunities for scientists with disabilities. This section will examine the steps being taken by employers to make their work environments accessible to all scientists.

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This issue will be distributed to the AAAS Resource Group of Scientists and Engineers with Disabilities.

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**SCIENCE**

## POSITIONS OPEN

### POSTDOCTORAL POSITION Dana-Farber Cancer Institute Harvard Medical School

A **POSTDOCTORAL POSITION** is open immediately to conduct research in the areas of ovarian cancer metastasis and chemotherapy-induced apoptosis. By using both *in vitro* and *in vivo* models of ovarian cancer cell implantation developed in our laboratory, the appropriate candidate would be involved in the identification and characterization of novel adhesion proteins which mediate ovarian cancer cell attachment to peritoneal mesothelium. A working knowledge of monoclonal antibody generation, animal handling, and molecular biology is essential for this component of the project. The role of apoptotic molecules in mediating the cytotoxicity of paclitaxel and platinum analogs is also an ongoing area of investigation. This work partly involves generation of ovarian cancer cell line transfectants and characterization of drug resistance profiles. Analysis of ovarian cancer tissue samples for abnormalities in the apoptotic pathway will be facilitated through access to multiple samples stored in our tissue bank. Interested investigators should provide three references and a curriculum vitae to: **Dr. Stephen A. Cannistra, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. FAX: 617-632-5148.**

### UNIVERSITY MEDICAL CENTER

**POSTDOCTORAL POSITION** is available immediately to study drug resistance and cancer. Candidate should have a Ph.D. or M.D. degree with background in drug resistance and molecular biology. Good salary, excellent working environment. Send curriculum vitae to: **Maria Claudia Mallarino, M.D., Texas Tech University Health Sciences Center, Oncology Division, Department of Internal Medicine, 3601 4th Street, Lubbock, TX 79430. Telephone: 806-743-3155; FAX: 806-743-3148.**

### POSTDOCTORAL POSITION

A position is available to study monocytes in the inflammatory response with focus on complement and cytokines. Background in molecular biology, immunology, and cell culture desired. Position results in dual appointment at Tufts University School of Medicine/New England Medical Center and Harvard University School of Medicine/Massachusetts General Hospital. Send curriculum vitae, a summary of research interests and experience, and names of three references to: **Burton D. Clark, Ph.D., Department of Medicine, New England Medical Center, Box 041, 750 Washington Street, Boston, MA 02111. FAX: 617-636-3216.**

### POSTDOCTORAL FELLOWSHIP Molecular Cell Biology

Available immediately, NIH-funded **POSTDOCTORAL POSITION** in NIH Digestive Disease Core Center to study mRNA targeting in intestinal epithelial cells as an alternative pathway for protein sorting. Experience in techniques of molecular and cellular biology required. Applicants must have doctoral degree and U.S. citizenship or permanent resident status.

Please send a curriculum vitae and names of three references to: **Dr. Richard Grand, Chief, Division of Pediatric Gastroenterology and Nutrition, New England Medical Center and Tufts University School of Medicine, 750 Washington Street, Box 213, Boston, MA 02111-1533. FAX: 617-636-8718; Email: richard.grand@es.nemc.org. We are an Equal Opportunity Employer. We support diversity in the workplace.**

### POSTDOCTORAL FELLOW Molecular Retrovirology

Available immediately to participate in ongoing simian immunodeficiency virus (SIV) research projects. Current projects focus on the viral envelope and nef genes to understand the molecular mechanisms of immunopathogenesis and neuropathogenesis in HIV-1 infection and AIDS. Applicants should have experience in molecular biology, cell biology, and virology. Interested individuals are encouraged to send a letter of research interest, curriculum vitae, and three references to: **Dr. Toshiaki Kodama, Division of Pathobiology and Immunology, Oregon Regional Primate Research Center, 505 NW 185th Avenue, Beaverton, OR 97006. The Oregon Regional Primate Research Center is an Equal Opportunity Employer.**

## POSITIONS OPEN

### FELLOW IN THEORETICAL NEUROBIOLOGY

The Neurosciences Institute is an independent, not-for-profit organization at the forefront of research on the brain. Located in San Diego, the Institute is also the home of the Neurosciences Research Program and serves as an international meeting place for neuroscientists; Fellows have opportunities to interact with visitors from many institutions worldwide.

Applications are invited for positions as **JUNIOR FELLOW** in Theoretical Neurobiology. Since 1987, the Institute has had a research program dedicated to developing biologically based, experimentally testable theoretical models of neural systems. Current projects include large-scale simulations of neuronal networks, the design of behaving automata, and detailed formulations of biologically based models of perceptual systems. Junior Fellows will have opportunities for collaborations with Senior Fellows in Theoretical Neurobiology and colleagues at the Institute in developing neural models and theoretical approaches to understanding brain function. Fellows in Theoretical Neurobiology will also have daily opportunities to interact with Fellows in Experimental Neurobiology.

Applicants should be at the postdoctoral level with strong backgrounds in experimental or theoretical neuroscience or related fields. Experience in computer modeling is especially welcome. Positions are now available.

Fellows will receive stipends appropriate to their qualifications and experience. Candidates should send a short statement of research interests, a curriculum vitae, and the names of three references to: **Dr. Gerald M. Edelman, Director, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, CA 92121.**

### POSTDOCTORAL RESEARCH FELLOW

Immediate position in Virology to study molecular mechanisms of B lymphocyte transformation by Epstein-Barr virus. Must have Ph.D. or M.D. and laboratory expertise in molecular cloning and protein analysis. Experience in cellular immunology helpful. Project will examine novel membrane proteins induced by EBV infection and their roles in B cell growth regulation and transformation. Submit curriculum vitae and references to: **Mark Birkenbach, M.D., Kovler Viral Oncology Laboratories, The University of Chicago, 910 East 58th Street, Chicago, IL 60637. FAX: 312-702-3791. An Affirmative Action/Equal Opportunity Employer.**

### POSTDOCTORAL FELLOWSHIP IN PLANT SIGNAL TRANSDUCTION Waksman Institute, Rutgers University

A **POSTDOCTORAL RESEARCH POSITION** is available to study signal transduction during induction of disease resistance to viral infections of tobacco and *Arabidopsis*. Genetic, molecular, and biochemical approaches are being utilized. Emphasis is being placed on defining components of these pathways, particularly the salicylic acid signaling pathway (PNAS, 92:4134, 7143, and 11312, 1995).

Applicants should have research experience in genetics, molecular biology, and/or biochemistry. Send a curriculum vitae and a cover letter detailing experience and have three letters of recommendation sent to: **Dr. Daniel Klessig, Waksman Institute, Rutgers University, P.O. Box 759, Piscataway, NJ 08855. Rutgers University is an Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL RESEARCH SCIENTISTS

Positions available to study telomere-chromatin structure and aspects of genomic sensitivity in human normal and mutant cells. Candidates should have a Ph.D. in molecular biology or related field. Experience with molecular cytology and recombinant DNA preferred. Send curriculum vitae and names and addresses of three references to: **Dr. Tej K. Pandita, Center for Radiological Research, Columbia University, 630 West 168th Street, New York, NY 10032. FAX: 212-305-3229. An Equal Opportunity/Affirmative Action Employer.**

### SENESCENCE GENE ISOLATION

**POSTDOCTORAL FELLOWSHIP** and/or Research Grant Awards up to \$25,000 per year for the isolation and sequencing of the gene on human chromosome 4 which initiates clonal cellular aging and death. Fellowships or grants may be held at any academic or research institution. Applicants must follow NIH application format. Application deadline: June 15, 1996. **Genetics of Aging, P.O. Box 1583, Goleta, CA 93116.**

## POSITIONS OPEN

### PREDOCTORAL RESEARCH ASSISTANTSHIPS

Openings in Cell Biology available for fall 1996 for **STUDENTS** pursuing the doctoral degree in the areas of: 1) Molecular and cellular biology of pollen development in Orchidaceae (NSF) and 2) Biomedical research on hair bundles in sea anemones (NIH). Positions are funded at \$9,000 per year stipend plus \$2,000 per year tuition and are renewable for three years. For further information and application materials contact: **Dr. R. C. Brown, Email: rcb@usl.edu, for 1) and Dr. G. M. Watson, Email: gmw5722@usl.edu, for 2), Department of Biology, University of Southwestern Louisiana, Lafayette, LA 70504-2451. Affirmative Action/Equal Opportunity Employer.**

### MAYTAG POSTDOCTORAL RESEARCH ASSOCIATE ARIZONA STATE UNIVERSITY

One-year (with the possibility of a one-year extension) **POSTDOCTORAL RESEARCH FELLOWSHIP** emphasizing collaborative research with a faculty member in the Department of Zoology. Applicants must send the following to the faculty member with whom they propose to collaborate: 1) curriculum vitae, 2) three letters of recommendation, 3) reprints of publications, 4) description of previous research, and 5) description of the collaborative research plan.

Applicants must not have received a doctoral degree prior to 1992, and must not currently hold a permanent faculty position. Application deadline: April 30, 1996. Starting date: July 1, 1996. Applications from two individuals wishing to share the position will be considered.

A list of faculty and their research interests may be obtained either from the Maytag Search Committee, Department of Zoology, Arizona State University, Tempe, AZ 85287-1501. FAX: 602-965-2519; or via the departmental web site address (<http://lsvl.asu.edu/zoology/jobs>). Arizona State University is an Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL RESEARCH FELLOWSHIP UNIVERSITY OF MARYLAND

Position available for Ph.D. or M.D. experienced in molecular endocrinology to participate in a program of rational design of new analogues of glycoproteins by site directed mutagenesis. Prior experience in biologic actions, carbohydrate structure and computer modeling of glycoproteins preferred. Interested applicants should send curriculum vitae and names of three references to: **Dr. Bruce Weintraub, M.D., Endocrine Division, University of Maryland Medical Center, N3W50, 22 South Greene Street, Baltimore, MD 21201. Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL RESEARCH ASSOCIATE AUDITORY PHYSIOLOGY

This position is available for a Ph.D. graduate to study neural mechanisms for the processing of complex communication and/or biosonar sounds in the bat's auditory system. A person with background in neurophysiology and/or neuroanatomy is welcome to apply. Please send 1) curriculum vitae, 2) a brief statement of research interest and experience, and 3) names and telephone/FAX numbers of three references to: **Professor N. Suga, Department of Biology, Washington University, One Brookings Drive, St. Louis, MO 63130. FAX and telephone: 314-935-8530; Email: Suga@wustlb.wustl.edu. An Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL FELLOWSHIPS RESPIRATORY PHYSIOLOGY

Two **POSTDOCTORAL RESEARCH** positions are available at Dartmouth Medical School in the general area of respiratory physiology. Research interests of the faculty include high altitude adaptations, tissue oxygenation, cystic fibrosis, respiratory sensations, and most aspects of the control of breathing. Applicants must hold or expect a doctoral degree and must be U.S. citizens or permanent residents. Send letter, curriculum vitae, and names, addresses, and telephone numbers of three references to: **Donald Bartlett, Jr., M.D., Department of Physiology, Dartmouth Medical School, Lebanon, NH 03756. Women and members of minority groups are encouraged to apply. Dartmouth is an Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

### RESEARCH ASSISTANT PROFESSOR

A RESEARCH ASSISTANT PROFESSOR position in the area of *in vivo* CNS receptor imaging is available in the Department of Radiology, University of Pennsylvania. Candidates should have either an M.D./Ph.D. or M.D. degree with experience in *in vivo* imaging, neuropharmacology, or related areas of neuroscience. Knowledge of tracer kinetics is helpful but not necessary. The scientist will participate as a team member in developing I-123 and Tc-99m labeled tracers for functional imaging of CNS neuroreceptors with SPECT in animals and humans. A generous start-up package will be provided and the scientist is expected to develop extramural research support. Send résumé to: **Hank F. Kung, Ph.D., Department of Radiology, University of Pennsylvania, Philadelphia, 3400 Spruce Street, Philadelphia, PA 19104-4283. Email: kungfh@sunmac.spect.upenn.edu; http://sunmac.spect.upenn.edu. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.**

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For full consideration, applications must be received by July 31, 1996. Please contact: **Thomas P. Green, M.D., Pulmonary and Critical Care Medicine, Children's Memorial Hospital, 2300 Children's Plaza, Number 73, Chicago, IL 60614. Telephone: 312-880-4780; FAX: 312-880-4057.**

*We welcome the interest of all qualified candidates, and especially wish to encourage applications from women and minority groups.*

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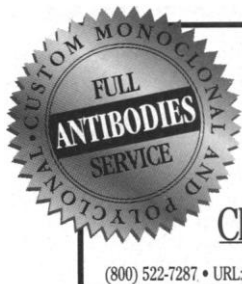
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<sup>1</sup>JOURNAL OF IMMUNOLOGICAL METHODS, vol. 187: 1-7, (1995). "A Rapid Non-Selective Method to Generate Quadromas by Microelectrofusion"; Y. Cao, T. Vinayagamoorthy, A.A. Noujaim, M.R. Suresh.

<sup>2</sup>MOLECULAR BIOTECHNOLOGY, vol. 3: 181-189 (1995). "Rapid Optimization of Electroporation Conditions for Plant Cells, Protoplasts, and Pollen"; Saunders J.A. et al

<sup>3</sup>ANALYTICAL BIOCHEMISTRY, vol. 208: 1-9 (1993). "Preparation of Nuclear Transplant Embryos by Electroporation"; Robl, J.M. et al.

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