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CONTINUED ON PAGE 2007



# CONTINUED FROM PAGE 2006 INSTRUMENTATION, APPARATUS, AND LABORATORY MATERIALS

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The University is in the process of constructing a new Biomedical Engineering and Medical Science Building in the midst of the University of Virginia Health Sciences Center as part of a Whitaker Special Grant. In addition to the Department of Biomedical Engineering, this building will house the Cardiovascular Research Center and the Department of Pathology. The new building is a short walk from the School of Engineering complex, ensuring that the departmental teaching and research programs will retain their strong linkage to the School of Engineering and Applied Science.

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# RECRUITING SCIENTISTS WITH DISABILITIES

Students with disabilities who major in science and engineering as undergraduates or graduates must surmount significant obstacles to complete their education. Those difficulties can be overcome most successfully by teamwork among the students, their faculty, and support organizations, according to a study that the University of Minnesota conducted last year, funded by the National Science Foundation and the American Association for the Advancement of Science (AAAS). But the next step - joining the work force - presents its own challenges. Three years ago, AAAS set up a program to guide individuals with dis-





abilities into effective internships that may lead to permanent jobs. Some of the corporations that participate in the program have a long record of success in hiring scientists and engineers with disabilities.

Those companies notice two common factors. Because individuals with disabilities are used to dealing every day with difficulties unrelated to their work, they tend to find ready solutions to problems in their jobs. And the accommodations made for them inevitably end up proving valuable to the work force as a whole. Here, representatives of the AAAS project and IBM discuss their programs and their records of success.



Jean Morrell

**WASHINGTON, D.C.:** In 1996, the American Association for the Advancement of Science joined up with the National Aeronautics and Space Administration (NASA) and IBM to create Entry Point!, a program that links students with disabilities to potential employers. The program places full-time students in science, mathematics, or engineering — including Ph.D. candidates — in internships with willing companies or government agencies. It

accepts students with disabilities of all types: deafness and hearing impairment; blindness and visual impairment; dyslexia and other

learning disabilities; impaired mobility; and psychological impairments. Recent students in the program have included those with cerebral palsy, lupus, and Tourette's syndrome, as well as cancer survivors.

Students and employers must fulfill strict criteria. "Students must have a B average," explains Jean Morrell, an IBM executive on loan to the program. "If they have that, they show an employer that they have the ability to do the job." Companies, meanwhile, must offer meaningful work and support. "We're making sure that this is not a social program," Morrell continues. "We work

with the companies to make sure they give the students assignments to build their skills, and help them to discover what they want to do when they graduate." Entry Point! also expects companies to provide mentors, and necessary accommodations, such as computers adapted to the interns' disabilities.

The program has grown rapidly. It expanded from six students in 1996 to 36 in 1997 and 47 last year. This year, IBM has already placed 31 students, and NASA 19. In addition, DuPont, Mainebased UNUM Insurance Company, and Lockheed Martin have signed up as partners.

Entry Point! has benefited interns and employers. One of the first students, who had cerebral palsy and little ability to speak, typed that "for the first time in my life, my disability is no big deal." Interns offer companies a source of willing permanent employees. "A lot of students have extended from summer and turned it into a co-op experience, and several have joined IBM as full-time regular employees," says Morrell.

In fact, the entire work force stands to gain from the program. "The accommodations that managers have made for students with disabilities, like sending out meeting agendas in advance, and taking boxes and wastebaskets from hallways to allow wheelchair access, help everyone," explains Morrell. "And offices are more inviting to all employees when they are free of clutter and rearranged to accommodate a wheelchair."

Companies that actively recruit scientists and engineers with disabilities gain highly motivated employees and the opportunity to develop technology that will benefit the entire work force.

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Because individuals with disabilities are used to dealing every day with difficulties unrelated to their work, they tend to find ready solutions to problems in their jobs.

What advice does Morrell have for students with disabilities who seek supportive employers? "Don't concentrate on salary alone," she advises. "Look at the overall benefits, including medical insurance, the opportunity to take advantage of flextime working, which is very important for individuals with mobility impairments, and the ability to work at home."



Keely Kenmitz

**AUSTIN, TX:** In 1997, the Entry Point! program introduced computer science major Keely Kemnitz to IBM — and IBM to her. The pair made a good match. A year ago, as soon as she earned her degree, Kemnitz moved into a permanent job in the company's video and graphics department.

Kemnitz, who has been in a wheelchair since the age of 12, heard about Entry Point! from her disability counselor at South

Dakota State University. "I just sent in my application and my two references, and waited for the response," she recalls. After interviewing her by phone, IBM offered her an internship at its software stress group in Rochester, Minnesota. "We tested the AS/400 to see how much of a workload it could take," she says.

The program provided more than a physical introduction to the workplace. IBM executive Joe Peplinski, who served as Kemnitz's mentor in the program, introduced her to the realities of life in a high-technology company. "He gave me an understanding of what kind of things I needed once I graduated and got a real job," she explains. "He helped me in job-related aspects and in life after college. For example, I had wanted to drive for a long time; Joe arranged driving lessons for me, because he thought driving was necessary for my long-term self-sufficiency."

IBM also accommodated her physical requirements. "The company put in badge readers and proximity readers and doors that opened when I hit the button," said Kemnitz. "They set up a desk that was the right height for my wheelchair." Accommodations outside the office have proved equally successful. "I'm still in the process of learning to drive," she says. "I'm expecting a vehicle this month." And Kemnitz has recently bought her own house in Austin.

**COLORADO SPRINGS, CO:** "Our strategy is in part that, by accommodating all our disabled employees, we'll accommodate all our customers with disabilities," says Matt King, a staff application developer at IBM who is currently working in the CIO office on advocacy for employees with disabilities. "We interface with the IBM Special Needs Systems Group, a center of competency for technology development for individuals with disabilities."

The company has a long history of hiring employees with disabilities and arranging suitable accommodations for them. Education programs help sensitize managers to their needs. One manager, for example, recently showed her staff a video on etiquette with guide dogs before the arrival of an employee who is blind. King himself contacts managers of new hires with disabilities to ensure that they set up assistive technology — such as computers adapted to specific disabilities. "We try to create an environment that is attractive to employees with disabilities; it is beneficial to everyone involved," says King.

Some of the most difficult situations that King faces involve individuals who become disabled while employed by IBM. "With a new hire, you expect that the person has already dealt with the issues surrounding the disability," he explains. "That's not the case with a fully-abled employee who loses vision or is involved in an accident. We take a very individualized approach. We will offer technical solutions to employees in that situation, but helping these employees return to productive work often takes more than just providing appropriate on-the-job accommodations."



Matt King, right and Garth Blackburn, left win a silver medal at the 1998 IPC World Cycling Championships for the Disabled.

Those accommodations can work both ways. For example, providing complete keyboard access to software so that individuals with sight impairment or cerebral palsy, who have difficulty using a mouse, can use the software, has proven valuable to other computer users who need or prefer to work without the mouse. On the other hand, voice recognition technology and the Java Web language, both developed for all computer users, have made it easier for individuals who are blind to interact with computers and the Internet.

King himself has a natural connection with the situations faced by employees with disabilities. Born legally blind with retinitis pigmentosa, he lost most of his remaining vision while in college. He works out of a branch office and his home in Colorado Springs in order to train for the tandem sprint cycling event at next year's Paralympics, in Sydney, Australia.

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In this challenging role, you will be responsible for Chiron's preclinical oncology program. This will include establishing and executing experimental strategies for all discovery and IND track oncology programs; developing new animal models; and contributing to discovery, identification and development of new therapeutics. Additional duties include evaluating in-licensing opportunities and representing Chiron in academic and corporate oncology collaborations. A PhD in a scientific discipline, preferably in Pharmacology, Biology or Pathology, 6-8+ years research experience, 3-5+ years industry experience, proven supervisory ability, and an extensive background working with *in vivo* tumor models are needed. An established record of scientific publications and a command of state-of-the-art principles and theories in cancer biology are also required. Experience with protein therapeutics or gene therapy is highly desirable. Job Code: 3776

# SCIENTIST—TUMOR BIOLOGY

Drawing upon your experience with *in vitro* cell-based assays and *in vivo* tumor biology studies, you will maintain immortalized and primary mammalian cell cultures, characterize *in vivo* activity of novel compounds in orthotopic rodent tumor models, and develop new tumor models. In addition, you will perform *in vitro* cell-based assays to characterize the activity of small molecule, protein, DNA and viral-based therapeutics. Your work will entail extensive *in vivo* and *in vitro* data analysis.You must have a PhD in Biology, Pathology or closely related field, 3-4 years related PhD-level experience, exceptional organizational skills, and demonstrated computer proficiency. Experience in immunohistochemistry and *in situ* analysis is highly desirable. Job Code: 3846

# **SENIOR SCIENTIST**

You will lead basic research efforts in gene therapy of hematologic diseases. This will include directing preclinical studies in support of clinical programs for gene therapy of hemophilia A and initiating new programs for gene therapy of cardiovascular and hematologic disorders. Requires a PhD in Biochemistry, Pharmacology or Physiology with 5+ years of relevant postdoctoral experience in coagulation, thrombosis or ischemic diseases. Your background must include experience with assays for coagulation factor activity, animal models for coagulopathies, cardiovascular disease and/or angiogenesis, ELISA assays and protein purification; skill in the use of gene therapy vectors and detection of reporter gene expression *in situ* is highly desirable. We prefer 3-5 years industry background, ideally to include experience with clinical development programs working in a GLP environment. You must be able to synthesize diverse scientific fields, work in a team setting and build research programs. **Job Code: 3809** 

# **SCIENTIST II/SR. SCIENTIST**

You will establish a new macromolecular X-ray crystallography team at Chiron and strengthen our relationship with the structural biology community. You will be responsible for the preparation of crystals and the determination of high-resolution 3-dimensional structures of protein drug targets, and complexes of these targets with small molecular weight ligands. You should have a PhD in Biophysics, Biochemistry or a related field and at least 3 years post-doctoral experience in macromolecular crystallography, working with proteins and protein-ligand complexes. Experience with MAD methods and synchrotron sources, the ability to communicate well with scientists from a wide variety disciplines, and the ability to work independently are essential. Job Code: 3859

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Capitalizing on your knowledge of the medical industry, you will develop and manage Phase IV studies to be conducted with major multiple sclerosis (MS) treatment centers. Your work will include supporting analysis and publication of studies, establishing educational and speaker programs, and participating in presentations. We will rely on you to maintain vital relationships with key opinion leaders in the MS neurologist community. To qualify, you must possess graduate-level training in science and/or medicine (PhD, PharmD, DVM), 5+ years experience in professional relations or the medical marketing/affairs industry, and an understanding of Clinical Research/Good Clinical Practice and FDA regulations for sponsored research. A background in Neurology and/or Immunology is preferred. A team player with excellent written and verbal communication skills and the proven ability to work independently is ideal for this position. Requires 75% travel.

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# Postdoctoral Position(s) Virology Group Veterinary Infectious Disease Organization

Postdoctoral position(s) available immediately for an ongoing project to work on the molecular biology of animal adenoviruses with emphasis on their development as vectors for vaccine delivery and human gene therapy. Candidates should have a Ph.D. with a strong background in molecular biology and virology. Experience with molecular techniques and virus vectoring is desirable.

The Veterinary Infectious Disease Organization, a research institute at the University of Saskatchewan, provides excellent opportunities to collaborate with other scientists in bacteriology, virology and immunology. VIDO has wellequipped laboratory and animal facilities and offers a stimulating research environment. The successful candidate will be expected to work in a team-based research environment.

Interested candidates should direct applications, including a curriculum vitae and three names of references to: **Dr. S.K. Tikoo or Dr. Lorne A. Babiuk**, Veterinary Infectious Disease Organization, 120 Veterinary Road, Saskatoon, SK S7N 5E3. Fax: (306) 966-7478; E-Mail: TIKOO@SASK.USASK.CA.

The University of Saskatchewan is committed to the principles of Employment Equity and welcomes applications from all qualified candidates, including aboriginal people, persons with disabilities, visible minorities and women.

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A PhD or other doctoral degree in the biomedical sciences is required, along with strong knowledge of molecular biology and recombinant DNA (knowledge of virology a plus); successful completion of a postdoctoral fellowship, plus a minimum of 3 years' additional experience in the academic, pharmaceutical, biotechnology, or governmental (e.g. NIH Intramural Program) arenas. Candidates must possess excellent verbal and written communication skills, coupled with an extraordinary ability to present data in a clear and compelling graphical manner. Candidates must have strong interpersonal skills and be comfortable interacting with a large number of scientists, from the level of senior investigator to undergraduate student.

Applicants should submit a curriculum vitae and detailed cover letter describing their interest in the position, along with 2 samples of their best writing to: Divisional Administrator; Box 96, Room ST-505, WEILL MEDICAL COLLEGE OF CORNELL UNIVERSITY, 1300 York Avenue; New York, NY 10021.

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# IN VIVO Study Director

In this highly visible role, you'll direct and conduct drug metabolism/disposition studies including design, scheduling, data analysis and reporting. Responsibilities also include *in vivo* model development, monitoring of drug disposition studies and managing/training the research efforts of Associate Scientists.

To qualify, you must have a PhD in Pharmacology, Biopharmaceutics or a related field, supported by 0-3 years' experience in drug metabolism research including models for ADME studies and reflecting your expertise in pharmacokinetics. Demonstrated written and oral communication skills are needed. **(Job Code: DD9926)** 

# PHARMACOKINETICS Computer Specialist

As an integral member of our computer-intensive Pharmacokinetics Department, you'll participate in the evaluation, implementation, validation and maintenance of our new information system.

To qualify, you must have a BS in Computer Science, Chemistry or the physical sciences and 3+ years experience in project management involving computer upgrades, preferably in the pharmaceutical industry or a scientific environment. Working knowledge of Unix networking protocols, Oracle database or NT networking protocols, and MS Windows, Excel, Word, and Slide Write are essential. Proficiency in PK analysis software and other scientific graphical data analysis and presentation tools desirable. **(Job Code: DD8127)** 

# DEPARTMENT OF IMMUNOLOGY Associate Scientists

The successful candidates will participate in projects directed toward discovery of potential therapeutics for autoimmune disease such as arthritis, multiple sclerosis and inflammatory bowel disease. To qualify, you will need a BS or MS in Immunology or a related discipline with experience in establishing and evaluating models of inflammation and/or isolating and characterizing leukocyte populations. Expertise in flow cytometry, ELISA methodologies, histology/immunohistochemistry and molecular biology is a definite plus. (Job Code: DD9958)

# DRUG DISCOVERY Senior Scientist/Computer Specialist

As a dedicated researcher with computer expertise, you'll share the excitement of the exploratory drug discovery group of our Department of Drug Metabolism. Join a group of scientists that use Finnigan 7000 and PE-Sciex 365/3000 LC-MS systems for bioanalytical assays and metabolite identification, as well as work with MS instrument vendors on networking and LIMS issues.

To qualify, you must have a PhD in Analytical Chemistry or related field with 1+ years experience, or a BS/MS with 5+ years experience. Your background should include proficiency in networking MS data systems to PC stations, as well as experience in Windows NT. Expertise in database management and lab automation, preferably in the pharmaceutical industry, is a definite plus. In addition, strong communication skills are essential. **(Job Code: DD9925)** 

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We have excellent opportunities for recent BS/MS Biochemistry (or related field) graduates to gain invaluable experience. We are seeking several talented biochemists to join a team of scientists involved in automated high throughput screening at the front line of new drug discovery for cancer, asthma, hepatitis, AIDS and other diseases. In addition to your degree, your background should reflect knowledge of, and experience with, enzyme and/or receptor binding assays using modern quantitative techniques. Knowledge of laboratory equipment, automation and computers will be very helpful. (Job Code: DD9974 for BS) or (Job Code: DD9967 for MS)

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For prompt, confidential consideration, we invite you to forward your resume which MUST include the Job Code for your position of interest to: E-mail: SPRIJobs@isearch.com or send to: Human Resources-JL, Schering-Plough Research Institute, 2015 Galloping Hill Road, Kenilworth, NJ 03033-0539. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



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The Jackson Laboratory is currently recruiting both new investigators and senior scientists to establish independent research efforts within a major program to identify and clone genes determining cancer susceptibility in mice, the so-called cancer modifiers. This is a great research challenge which we believe can be accomplished by talented investigators, working in the right environment, with strong support systems. Accordingly, substantial intellectual and technical resources are committed to this initiative.

Designated a Basic Cancer Center by the National Cancer Institute, The Jackson Laboratory offers its principal investigators the opportunity to conduct research in an interactive and supportive environment. Our existing faculty has broad expertise in gene mapping, the analysis of quantitative trait loci, statistical genetics, positional cloning, and a great depth of knowledge of the inbred mouse resources available on site. The scientific services available to all members of this Cancer Center include large volume allele typing, creation of gene targeted and transgenic mice, DNA sequencing, flow cytometry, biological imaging, pathology consultation, and an extensive animal management program in our Research Animal Facility.

The Jackson Laboratory is an independent, not-for-profit research institution located in Bar Harbor, Maine, adjacent to Acadia National Park. The Laboratory hosts an array of genetics meetings, courses and workshops, making it a focal point for the mammalian genetics community. The combination of research excellence, academic interaction, a favorable family environment and idyllic location make The Jackson Laboratory a highly desirable living and working environment for scientists.

If you would like further information, please write to Ms. Rita Poirier (rsp@jax.org) in the Office of the Director, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609. AA/EOE

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St. Jude Children's Research Hospital, located in Memphis Tennessee, is one of the world's premier research centers for research and treatment of catastrophic diseases in children, primarily pediatric cancers. St. Jude is a learning environment offering professional growth and diversity for the research technologist where biomedical education extends beyond the laboratory and clinical experience. Workshops, seminars and lectures are regularly presented by both the St. Jude faculty and distinguished visiting investigators. Our non-faculty research staff career ladder provides several levels of promotion and financial compensation for talented and motivated technologists to advance in their field.

# Senior Scientific Editor

You will edit and rewrite clinical and scientific research proposals for submission to federal and private funding agencies as well as educate faculty members about the requirements for funding proposals and grant preparation techniques. Additionally, you will train other editorial staff members in editing and revising funding proposals; edit and rewrite manuscripts for submission to biomedical or scientific journals; and supervise activities of the department as delegated by the Department Director. A Bachelor's or Master's Degree in English or the life sciences required. Knowledge of medical and scientific terminology essential. Familiarity with topics related to genetics, molecular biology, or oncology preferred. Minimum of 5 years (Master's) or 7 years (Bachelor's) or relevant experience required, including preparation of grant applications for foundations or agencies (NIH, NCI, etc.), work on peer-reviewed journals, and editing, rewriting, or writing of grant proposals or journal articles.

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ne Many

Resumes may be sent to: St. Jude Children's Research Hospital Human Resources Dept. SC618 332 N. Lauderdale, Memphis, TN 38105 Fax: 901-495-3123 E-mail: virgil.holder@stjude.org SJCRH is an equal opportunity employer. Photos courtesy of St. Jude Biomedical Communications Dept.



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**Targeted Proteomics** 

The Protein Center division of Memorial Sloan-Kettering Cancer Center is undertaking a strategic move towards establishing a *Targeted Proteomics* program for the study of dynamic protein modifications and protein-protein, protein-nucleic acid and protein-small molecule interactions in living cells, especially as it applies to our quest for better methods to control and cure cancer.

The Center, supported by NCI Technology Development Funds and internationally renowned for protein discovery, has positions available for PhD level biologists / chemists in the area of nanoscale protein affinity capture and display. Mass spectrometry (Bruker Reflex III; Micromass Q-Tof; Sciex API 300; Finnigan LCQ), computing and engineering facilities are excellent and a high level of collaborative work is demanded.

# SENIOR STAFF SCIENTIST

We are looking for an enthusiastic scientist to take a key role in development of this program. The successful candidate has at least 5 years research experience since obtaining a PhD degree and will lead a team of postdoctoral fellows, students and support staff. Strong background in biochemistry, small scale protein purification and affinity chromatography, and basic skills in immunology and molecular biology required. Supervisory experience and some knowledge of current protein analytical chemistry a plus. Salary and rank according to qualifications.

# POSTDOCTORAL FELLOWS

Positions are available in the following areas:

- technology development to affinity capture ultra-small amounts of protein for mass spectrometric ID
- isolation of protein complexes, phosphorylated proteins, drug-binding proteins and DNA-binding proteins / complexes (see Nature 398:824-8; Blood 93:2707-20; PNAS 96:5645-50)
- protein-DNA and protein-protein interactions at promoters, particularly during transcriptional activation of human *defensin* genes and/or involving the PU.1 factor (*JBC* 273:8727-40)

Please send inquiries, C.V. and names of 3 references to: Paul Tempst, PhD, Professor of Molecular Biology and Director, Protein Center; Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. E-mail: p-tempst@mskcc.org

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# **Senior Research Scientist**

PhD, MD or MD/PhD in Diabetes Physiology/Endocrinology or Pharmacology/Biochemistry. Must have significant research experience in the field of carbohydrate and lipid metabolism related to the pathogenesis and treatment of diabetes along with 2-6 years post-graduate background. Must also demonstrate experience with in-vivo models of diabetes and/or metabolism. (Ad Code: 99-WKB1613)

# Senior Research Pharmacologist

PhD and 2-6 years post doctorate experience in Urology, Neurology or related field along with demonstrated research experience in the area of erectile dysfunction and incontinence. Must possess research expertise in urology, neurology and pharmacology. Must be experienced in experimental models used to assess erectile dysfunction and lower urinary system function, surgical techniques and cystometric procedures. Applicants should have an excellent publication record and be able to work in a team environment. (Ad Code: 99-WKB0468)

# **Associate Scientist**

BS/MS and 2-4 years experience with murine studies. Surgical experience and familiarity with cancer and infectious disease biology and research techniques for mammalian and microbial cell culture a plus. Research experience in a drug discovery setting is also desirable. Will include analysis and reporting of data and some weekend and night work. (Ad Code: 99-WKB1397)

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The Office of Scientific Review of the National Institute of General Medical Sciences, National Institutes of Health in Bethesda, MD is seeking a scientific review administrator to utilize his or her knowledge of biochemistry, biophysics, or computational biology to perform a variety of functions associated with the scientific and technical merit review of research and research training support grant award applications. The incumbent will provide guidance on the Institute's program guidelines and initiatives, and on policies and procedures of the NIH peer review system. Duties include participation in site visits, attending meetings of study sections and review committees, preparing summary statements of review group findings and recommendations, and attending Council meetings to provide information concerning the review of applications.

**Qualifications:** U.S. citizenship; Ph.D.; independent work in planning, organizing, and conducting biomedical research; and research program administration experience.

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For further information, contact the National Institute of General Medical Sciences Personnel Office on (301) 594-2749; TDD (301) 402-6327. Applications must be postmarked by the closing date of **July 12, 1999.** 

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# **University of Minnesota**

# Program in Signal Transduction and Gene Expression [http://biosci.cbs.umn.edu/BMBB/stage]

The University of Minnesota Program in Signal Transduction and Gene Expression (STAGE) announces the availability of postdoctoral positions in the laboratories of selected Program faculty. Please consult the above referenced web site for links and/or contact the appropriate faculty via a letter of inquiry to Mr. Paul Kluge, STAGE Administrator, University of Minnesota, 1479 Gortner Avenue, St. Paul, MN 55108.

- David Bernlohr; Lipid second messengers and obesity-linked insulin resistance.
- Greg Connell; Trypanosome RNA editing and mammalian iron homeostasis.
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- Charles Louis; Intracellular calcium signaling in health and disease.
- James McCarthy; Cell adhesion molecules and signal transduction pathways in solid tissue tumor progression and metastasis.
- Gary Nelsestuen; Membrane-enzyme interactions, especially those related to the blood coagulation cascade.
- Michel Sanders; Estrogen regulation of gene expression in normal and cancerous cells.
- Yoji Shimizu; Regulation of lymphocyte migration and adhesion by kinases and adapter proteins.
- Paul Siliciano; mRNA splicing, RNA-RNA and RNA-protein interactions.
- Brian Van Ness; Molecular immunology; genetics and cell interactions in lymphoid malignancies.
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<sup>1</sup> Science December 1998 BPA Int'I. Publisher's Statement. <sup>2</sup> 6 March 1998, 23 May and 18 July 1997 Harvey Research Science Readership Survey, as applied to Science December 1998 BPA Int'I. Publisher's Statement, publisher's own data.

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For more information visit our website at http://www.mcw.edu/cellbio/

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Candidates should have a Ph.D. and/or M.D. as well as advanced training in developmental biology and skin biology. We are seeking to recruit an individual who shows promise in pursuing an independent research program which can take advantage of interactions with existing members of the LSB group working in the areas of epidermal biochemistry, molecular biology and genetic diseases of cornification, as well as with other scientists within the NIAMS IRP and the NIH campus as a whole.

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Linda Peterson Secretary to Scientific Director NIAMS, NIH Building 10, Room 9N228 9000 Rockville Pike Bethesda, MD 20892-1820

CLOSING DATE: AUGUST 15, 1999

# Postdoctoral position Gene Therapy

An Intramural Research Training Award is available immediately for a Ph.D. or M.D. to investigate the use of gene therapy in the treatment of diseases of the eye and to study the cell biology of chronic degeneration diseases of the eye. The position will offer the opportunity to study the use of various viral and non-viral vector delivery systems and the study and treatment of various models of retinal degeneration. A background in molecular biology is required. Prior experience in the study of apoptosis and cell culture is desirable. Candidates should have a Ph.D. or M.D. with less than 5 years of postdoctoral experience and must be either a U.S. citizen or permanent resident. Salary range is from \$27,500 - \$38,000 depending on postdoctoral experience. A curriculum vitae and the names of three references should be sent to:

> Karl G. Csaky, M.D., Ph.D. National Eye Institute National Institutes of Health Laboratory of Immunology Building 10 Room10N112 Bethesda, Maryland 20892-1857 E-mail: kcsaky@helix.nih.gov Telephone: 301-402-0896 Fax: 301-480-1122

Deadline date for receipt of applications is August 15, 1999.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

# HEALTH SCIENTIST ADMINISTRATOR (Biological Sciences) GS-601-12/13/14 (\$48,796-\$89,142)

The Division of Genetics and Developmental Biology of the National Institute of General Medical Sciences, National Institutes of Health in Bethesda, MD is seeking a program director responsible for stimulating, planning, advising, directing, and evaluating activities for a portfolio of basic biomedical research grants in the area of molecular genetics, with an emphasis on one or more of the following: the genetics of complex biological systems; genomic organization; and/or chromosomal organization and structure. Duties include providing scientific expertise in these specialized areas of genetics and advising applicants, grantees, and Institute staff regarding research aspects of grants. The incumbent also makes funding recommendations on specific research grant applications; attends meetings of study sections, review committees, and Council; and participates in site visits.

**Qualifications:** U.S. citizenship; Ph.D.; independent work in planning, organizing, and conducting biomedical research; and research program administration experience.

To obtain complete application requirements by FAX, call (800) 728-JOBS, and request fax ID# **3624**. The vacancy announcement may also be viewed online at: http://www.nih.gov/nigms/nigms\_staff/staff.html

For further information, contact the National Institute of General Medical Sciences Personnel Office on (301) 594-2749; TDD (301) 402-6327. Applications must be postmarked by the closing date of July 6, 1999.

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# CHAIR OF PHYSIOLOGY UCLA SCHOOL OF MEDICINE

The UCLA School of Medicine invites applications for Chair of the Department of Physiology. The successful candidate must have an exceptional record of research accomplishment in Physiology or a related discipline and a commitment to medical and graduate student education.

The Department is committed to an integration of genetic and molecular approaches to physiological and biophysical problems with medical relevance. The Department currently has international stature with strengths in neuro-, cardiovascular, and gastrointestinal physiology and biophysics. The position provides a unique opportunity to define physiology in the 21st century.

Nominations or letters of interest and curriculum vitaes should be sent to: Leena Peltonen, M.D., Ph.D., Chair, Physiology Search Committee, c/o Jeanette Lim, UCLA School of Medicine, Box 951722, Los Angeles, California 90095-1722.

> UCLA is an Equal Opportunity/ Affirmative Action Employer.

Jack Clark Chair in Parkinson's Disease Research Centre for Research in Neurodegenerative Diseases University of Toronto

Applications are invited for this Endowed Research Chair from experienced investigators (M.D. or Ph.D.) in the fields of biochemistry, molecular biology, cell biology, invertebrate or vertebrate model systems, neuropharmacology, gene therapy, neural transplantation, or other fields whose research can be applied to investigation of the pathobiology and treatment of Parkinson's Disease. Oualified candidates will have an established record of scientific excellence and productivity, as well as proven ability to lead a scientific research team. They will interact with the existing internationally recognized research teams at the Centre for Re search in Neurodegenerative Diseases work ing on other neurodegenerative diseases, including Alzheimer's Disease. In accordance with its employment equity policy, the University of Toronto encourages applications from qualified women and men, members of visible minorities, Aboriginal people, and persons with disabilities. The closing date for applications is July 30, 1999. Letters of application, including a curriculum vitae, should be addressed to:

Dr. Peter St. George-Hyslop, Director Centre for Research in Neurodegenerative Diseases University of Toronto 6 Queen's Park Crescent West Toronto, Ontario Canada, M5S 3H2



At Pfizer Central Research, located in Groton, CT, you'll have all the resources you need to bring new and dynamic ideas to fruition. As a company committed to innovation, we share your goal of making this world a healthier place and value the creative drive and professional expertise it takes to get there. Working together, we will continue to develop and launch the products that make such a difference in the lives of so many. At Pfizer, the power to create a better world is as immediate as it is real–and it belongs to you.

# NEW LEADS BIOLOGY

# SENIOR RESEARCH SCIENTIST, Ph.D.

<sup>8</sup>We have an immediate opportunity for a creative scientist in our New Leads Biology group. This Scientist will develop and run a variety of high-throughput and directed assays and pursue chemical leads in selectivity and functional assays. Responsibilities include supervising 2-3 assistants and working closely with chemists and biologists throughout Pfizer Discovery as well as with outside collaborators. A Ph.D. and postdoctoral training in biochemistry or molecular pharmacology is required; pharmaceutical experience is desirable. Job Code: 9926204SCI

# ASSISTANT SCIENTIST, BS/MS

<sup>8</sup>We have two openings for BS/MS level Scientists in the New Leads Biology group. He/she will be involved in developing and running a variety of assays, including enzymatic, receptor-binding and whole cell assays. These assays will be used to discover lead compounds by high-throughput and directed screening, and the leads discovered will then be characterized in selectivity and functional assays. General skills needed include common biochemical techniques, use of automated instrumentation and computers. This position also requires excellent communication skills and problem solving ability. Job Code: 9922721SCI

Pfizer offers exceptional salaries and benefits, as well as tremendous growth potential. Please send your resume in confidence to: Pfizer Inc, Job Code: \_\_\_\_\_\_, Central Research, c/o Aon Consulting, P.O. Box 25, Findlay, OH 45839, or e-mail to: Pfizer@aon-hros.com. As an Equal Opportunity Employer, Pfizer is focused on building a diverse workforce.



# **ANNOUNCEMENT**

# DOES THIS SOUND LIKE YOU OR SOMEONE YOU KNOW!

"I have long been interested in science, and in helping people. During my training, I had a number of clinical experiences which convinced me that I wanted to specialize in immunology at the bench, but still have patient contact." "I was always tinkering with my toys, taking them apart, trying to fit the square peg in the round hole. NIH is the only place to be for cutting-edge training, creativity, and pure excitement."

Has your interest always been to pursue medical research? Do the realities of staggering educational debt appear to prevent you from realizing your dreams? NIH offers a variety of clinical and basic science postdoctoral training fellowships that can be combined with educational loan repayment incentives. You owe it to yourself to know about these programs (or share the information with someone in need!) as you make your career decisions. You owe it to yourself to learn more about what NIH can do for you.

# NIH Loan Repayment Benefits of \$35,000 per Year

NIH, the world's leading biomedical research facility, has trained thousands of qualified students in neuroscience, pathology, immunology, molecular genetics, developmental biology, cell biology, molecular biology, virology, and structural biology, to name only a few areas in our intramural research program.



NIH is dedicated to building a diverse community in its training and employment programs.

# POSITIONS OPEN

### FACULTY POSITION IN PROSTATE BIOLOGY Department of Molecular and Integrative Physiology

The University of Kansas School of Medicine

The University of Kansas Medical Center invites applications for a tenure-track position at the **ASSIST**-**ANT PROFESSOR** level. The faculty member will have a primary appointment in the Department of Molecular and Integrative Physiology and a joint appointment in the Division of Urology. The successful candidate should have a record of productive research in the area of prostate biology and is expected to establish an independent research program. Outstanding candidates whose research examines the genetic, molecular, or cellular basis of prostate cancer will be given preference. Qualifications include a M.D., Ph.D., or both and postdoctoral research experience. Applications will be reviewed as received and will be accepted until August 30, 1999. To apply, submit a statement of research interests, curriculum vitae, and three letters of recommendation to: Chair. Faculty Search Committee, Department of Molecular and Integrative Physiology, University of Kansas Medical Center, 3901 Rainbow Boule-vard, Kansas City, KS 66160, FAX: 913-588-7430; Telephone: 913-588-7400.

The University of Kansas Medical Center is an Equal Opportunity/Affirmative Action Employer.

### JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE Department of Otolaryngology-Head and Neck Surgery

The Department of Otolaryngology-Head and Neck Surgery is recruiting a full-time basic scientist to be located in the Center for Hearing Sciences. The focus of this TENURE-TRACK FACULTY POSI-TION is cellular, genetic, and/or molecular mechanisms of hearing. Candidates should have a Ph.D. and/or M.D. degree with postdoctoral experience. The successful applicant will be expected to interact with other members of the Center, to acquire extramural funding, and to participate in the teaching of graduate students, medical students, and Residents. Applicants are asked to submit by July 31, 1999, a curriculum vitae, a description of research interests, and three letters of reference to: Dr. David K. Ryugo, Center for Hearing Sciences, Johns Hopkins University School of Medicine, 720 Rutland Avenue, Baltimore, MD 21205. Johns Hopkins University is an Equal Opportunity Employer.

Immediate opening for a POSTDOCTORAL FELLOW or tenure-track ASSISTANT PROFES-SOR to study the biology and genetics of HIV drug resistance as part of a rapidly expanding AIDS research program. Candidates should be M.D., Ph.D., or equivalent, and have sufficient experience to establish an independent, funded research program. Competitive salary and start-up packages commensurate with training and experience. Send curriculum vitae, summary of research interests, and names of three references to: John W. Mellors, M.D., Chief, Infectious Diseases Division, Director HIV/AIDS Program, University of Pittsburgh, Graduate School of Public Health, 603 Parran Hall, 130 DeSoto Street, Pittsburgh, PA 15261. Telephone: 412-624-8512; FAX: 412-383-7982; e-mail: fern+@ pitt.edu. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

### **RESEARCH ASSOCIATE**

Research Associate position available to Ph.D., M.D., or equivalent for studies in psychoneuroimmunology—role of stress in resistance to infection. A history of research productivity is desirable. Contact: Dr. Gerald Sonnenfeld, Professor and Chair, Department of Microbiology and Immunology, Morehouse School of Medicine, 720 Westview Drive S.W., Atlanta, GA 30310-1494. Morehouse School of Medicine is an Equal Opportunity Employer.

### HEMATOPATHOLOGIST AND CLINICAL CYTOGENETICIST

ASSISTANT/ASSOCIATE PROFESSOR. The Department of Pathology and Laboratory Medicine at the University of California, Los Angeles, invites applications for clinical faculty positions at the level of Assistant or Associate Professor. The Department is seeking two individuals with primary interest in hematopathology and clinical cytogenetics. Candidates must be an M.D. and Board-eligible/Board-certified. Hematopathology candidates must have experience in bone marrow, flow cytometry, hematology, and molecular pathology. Clinical Cytogeneticist candidates must have diagnostic experience that includes prenatal, postnatal, and solid tumor diagnosis. The candidates will be expected to assume teaching responsibilities and to develop a translational research program.

Qualified candidates should send their curriculum vitae, statement of interest, and a list of three references to: David A. Bruckner, Sc.D., Search Committee Chair, Department of Pathology and Laboratory Medicine, UCLA Medical Center 171315, 10833 LeConte Avenue, Los Angeles, CA 90095-1713.

University of California is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.

# FACULTY POSITION WILDLIFE ECOLOGIST

The Faculty of Environmental and Forest Biology, a diverse faculty ranging from Molecular Biologists to Ecosystem Scientists, is seeking a Wildlife Ecologist to fill an academic year, tenure-track position at the SUNY College of Environmental Science and Forestry. The appointee will contribute to the teaching, research, and public service activities of the Faculty of Environmental and Forest Biology, and is expected to develop a vigorous, extramurally funded program in wildlife ecology that contributes substantially to undergraduate and graduate programs. Potential teaching opportunities include wildlife management, ecology, and areas of specialty. Requirements include Ph.D. in appropriate field, and the position is available by January 2000.

Applicants should send a letter of interest, hard copies of a curriculum vitae, graduate transcripts, separate statements of teaching and research interests, reprints of relevant publications, and three letters of recommendation to: Dr. Guy Baldassarre, SUNY College of Environmental Science and Forestry, 1 Forestry Drive, Syracuse, NY 13210. Telephone: 315-470-6739; e-mail: gabaldas@mailbox.syr. edu. All application materials must arrive by 15 August 1999.

Biotechnology Center, University of Illinois at Urbana-Champaign. DIRECTOR OF DNA SER-VICES. W. M. Keck Center for Comparative and Functional Genomics. High-Throughput Sequencing and Genotyping Unit. Proposed starting date: August 9, 1999. Responsibilities: The successful candidate will direct a laboratory that offers campus-wide DNA core facility services for DNA sequencing fragment analysis and oligonucleotide synthesis. In addition, the Director will be in charge of high-throughput sequencing projects including large-scale expressed sequence tags and microbial genomes. Qualifications required: M.S. in molecular or cell biology or related field with relevant experience. Type of position and salary: Full-time, 12-month regular aca-demic professional position. Salary is commensurate with experience. Application: Send letters of application with complete curriculum vitae and three letters of recommendation to: Dr. Barbara Whitmarsh, c/o Ms. Elaine Sampson, W. M. Keck Center, 1201 West Gregory, Urbana, IL 61801. Tele-phone: 217-265-5057; FAX: 217-265-5066; e-mail: esampson@staff.uiuc.edu. Deadline: For full consideration, applications should be received by 5:00 p.m. on July 16, 1999.

# POSITIONS OPEN

FACULTY POSITION. The Department of Pharmacology of the College of Medical Sciences at Nova Southeastern University invites applications for a position of ASSISTANT PROFESSOR. The candidate should have the ability to teach in one or more areas of pharmacokinetics, cardiovascular, autonomic, or renal pharmacology. The candidates responsibilities will include participation in team-taught courses to health profession students, as well as expectations of scholarship and service. The College of Medical Sciences is located in the new Health Professions Division facility on the Fort Lauderdale campus. Salaries are competitive and benefits are generous. Position available immediately, pending approval of the Board of Trustees. Please send a letter of intent stating career goals, curriculum vitae, copies of graduate transcripts, and the names, addresses, and telephone numbers of three professional references to: Nova Southeastern University, Human Resources Department (HLF), 3301 College Avenue, Ft. Lauderdale, FL 33314. Nova Southeastern University is an Affirmative Action/Equal Opportunity Employer.

### ASSISTANT PROFESSOR DEPARTMENT OF NEUROBIOLOGY

The Department of Neurobiology at the University of Alabama at Birmingham (UAB), School of Medicine invites applications for a tenure-track position at the Assistant Professor level. The Department is seeking an outstanding individual who uses a contemporary molecular biological approach to evaluate the development of receptors at the neuromuscular junction and central synapses and the signaling pathways involved. Preference will be given to candidates with established extramural (preferably NIH) funding and likelihood of collaborative interactions with other research programs in the department related to molecular basis of synapse assembly. Attractive facilities and start-up package are available. The Department currently has a strong base of Molecular and Cellular Neurobiologists studying problems of receptor and ion channel function and signal transduction in neurons and glia. Send curriculum vitae and statement of research plans and have three letters of recommendation sent to: Michael J. Friedlander, Ph.D., Professor and Chair, Department of Neurobiology, 1719 6th Avenue South, CIRC 516, University of Alabama at Birmingham, Birmingham, AL 35294-0021 by July 9, 1999. UAB is an Affirmative Action/Equal Opportunity Employer.

The Division of Nephrology of the Department of Medicine at Vanderbilt University is seeking highly talented individuals to fill three non-tenure-track positions (CLINICAL INSTRUCTOR and two RE-SEARCH ASSISTANT PROFESSORS). Applicants for Research Assistant Professor positions are sought who have demonstrated ability to perform independent basic research relating to the kidney and are funded by, or competitive for funding by, the NIH. Applicants for the Clinical Instructor position must have completed Nephrology Fellowship Training and be Board-certified/Board-eligible in internal medicine and nephrology. Vanderbilt offers an exciting environment in which to build a successful research and clinical career.

Candidates should send correspondence and curriculum vitae to:

> Steven C. Hebert, M.D. Ann and Roscoe R. Robinson Professor of Medicine Director, Division of Nephrology C-3119 Medical Center North Nashville, TN 37232-2372 Telephone: 615-343-2220 FAX: 615-343-2675

An Equal Opportunity/Affirmative Action Employer.

# POSTDOCTORAL FELLOWSHIP

The Laboratory of Skin Biology at NIH, is seeking a postdoctoral fellow to work in the developmental and molecular aspects of epidermal differentiation. Transgenic and knock-out mice are being utilized to assess the function of structural epidermal genes and of transcription factors regulating skin differentiation. **Applicants should have** extensive experience in molecular and cellular biology. **Interested candidates** with a Ph.D., M.D., or equivalent degree and that have had less than 5 years of post-doctoral experience should send a current C.V., list of publications, and three references to:

Dr. Peter Steinert Dr. Maria Morasso NIH, NIAMS, Lab of Skin Biology Building 6 Room 134 6 Center Drive MSC 2790 Bethesda, MD 20892 Telephone: (301) 402-2888 FAX: (301) 402-2886 e-mail: pemast@helix.nih.gov morasso@nih.gov



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# United States Environmental Protection Agency National Health and Environmental Effects Research Laboratory Atlantic Ecology Division

# RESEARCH BIOLOGIST/ECOLOGIST/ENVIRONMENTAL SCIENTIST GS-401/408/1301-9/11/12

The U.S. Environmental Protection Agency's National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division (AED), Ecological Response Branch in Narragansett, Rhode Island, is seeking qualified candidates to fill an interdisciplinary Research Biologist/Ecologist/Research Environmental Scientist position. AED's mission is to develop and evaluate theory, methods, and data needed to understand and quantify the environmental effects of anthropogenic stressors on the coastal waters and watersheds of the Atlantic seaboard. As a member of an AED research team, the incumbent will be expected to develop a research program that will quantitatively link changes in estuarine and coastal conditions with changes in landscape conditions. Specific responsibilities will include planning, developing, and conducting research studies with AED teams to develop and apply analytical tools, such as quantitative landscape ecology spatial statistics and geographic information systems, to conduct quantitative assessment across ecological resources and across spatial scales that span the entire Atlantic coast. Other responsibilities include developing and applying methods for merging data acquired by diverse monitoring programs; communicating findings at workshops, symposia, and in peer-reviewed literature; and providing technical assistance, consultation, and research support in areas of expertise to other elements of the laboratory, EPA, and other agencies.

This is a term, two-year position. U.S. citizenship is required and candidates must meet U.S. Office of Personnel Management qualification requirements. Candidates should have the required education and/or experience as described in the announcement listed below. Salary ranges from \$33,026 to \$62,260 and is commensurate with qualifications. The selected candidate will be eligible for a full benefits package, including health insurance, life insurance, retirement and vacation and sick leave. Reimbursement for relocation expenses is not authorized for this position.

HOW TO APPLY: All applicants must apply through the U.S. Office of Personnel Management (OPM) by call the OPM automated jobline on (919) 790-2822 or accessing OPM via Internet at <u>http://www.usajobs.opm.gov</u> AND requesting an OPM package for <u>Announcement #AR1808</u>. Application materials must be received by <u>July 16, 1999</u>.

The U.S. EPA is an Equal Opportunity Employer.

# **CENTER DIRECTOR**

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

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

Applications must be postmarked by July 15, 1999. Previous applicants must reapply in order to be considered.

# USDA/ARS IS AN EQUAL OPPORTUNITY EMPLOYER.

**United States** 

Agriculture

Department of

S Agricultural Research Service STAFF SCIENTIST POSITION

Ophthalmic Genetics and Clinical Services Branch, National Eye Institute, National Institutes of Health, Bethesda, Maryland. Position available for Ph.D. with experience in protein crystallography, site-directed mutagenesis, protein expression and purification of By-crystallins, theoretical analysis of beta-structural proteins and structural interpretation of gel-filtration, and analytical centrifugation data. Knowledge of the UNIX operating system, programming languages, molecular modeling software and protein databases is essential for this position. Applicants must have at least 3 years of experience in molecular biology of βγ-crystallins. Salary based on education and experience beginning at \$58,000 for qualified applicants. All applications should include the following: a statement of research interest; a career synopsis, a current curriculum vitae and bibliography, and the names and addresses of references. A list of the requirements or additional information about the position may be obtained by contacting Ms. Cheryl Wild, Personnel Management Specialist, National Eye Institute, Building 31, Room 6A-18, Bethesda, Maryland 20892, telephone 301-496-4274; FAX 301-496-3958, e-mail: CWild@nei.nih.gov

Applications must be received or postmarked by June 30, 1999. Incomplete applications will not be considered.

Candidates must be either U.S. Citizens or Resident aliens who have a Ph.D. degree.

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

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# POSITIONS OPEN

# ASSISTANT/ASSOCIATE PROFESSOR PHARMACOLOGY AND TOXICOLOGY

The Department of Pharmacology and Toxicology at the University of Louisville School of Medicine invites applications and nominations for a tenuretrack Assistant or Associate Professor faculty position. The selected candidate will have a Ph.D. in pharmacology, toxicology, or related discipline, and be expected to transfer or develop a nationally recognized and independently funded research program that incorporates molecular approaches to pharmacology and/or toxicology research. The University of Louisville Health Sciences Center has established interdisciplinary research centers of excellence in genetics and molecular medicine, cancer, and environmental health science. Applicants with research interests in one or more of these areas are particularly encouarged to apply. The primary responsibilities will be in research and research training. For further information please visit our website: www.louisville.edu/medschool/ pharmacology

New research laboratories and competitive research start-up packages are available. Applicants should send a letter outlining career research goals, curriculum vitae, and the names of three individuals who can be contacted for letters of reference to: David W. Hein, Chairman, Department of Pharmacology and Toxicology, University of Louisville School of Medicine, Louisville, KY 40292.

Applications should be received by September 1, 1999, for full consideration, but the application process will continue until the position is filled. The University of Louisville is an Affirmative Action/Equal Opportunity Employer. Women and minorities are particularly encouraged to apply.

ENDOWED PROFESSORSHIP. Poultry science, Penn State. Applications are being accepted for the Walther and Maxine Ott Professorship in Undergraduate Poultry Education; an ASSOCIATE PRO-FESSOR or PROFESSOR tenure-track position with an appointment of 70 percent Resident education and 30 percent research or extension. The successful applicant will develop a comprehensive program focusing on novel and creative ways to educate and advise students who are interested in a poultry science career and are enrolled in the new interdepartmental animal sciences major. Candidate must have a Ph.D. in poultry science or a closely related field. Scholarship and excellence in teaching and in either research or extension required. Submit letter of application, statement of teaching and research/extension interests, complete curriculum vitae, and the names, addresses, telephone numbers, and e-mail addresses of three references to: Dr. W. B. Roush, Department of Poultry Science, Department S, University Park, PA 16802. Telephone: 814-863-0655; e-mail: wbr@psu.edu. Application deadline: August 15, 1999, or until position is filled. Affinnative Action/ Equal Opportunity Employer.

The Division of Nephrology and Hypertension at the University of Cincinnati invites applications for a SENIOR RESEARCH ASSOCIATE or RE-SEARCH ASSISTANT PROFESSOR (depending on the qualifications). Applicants should have Ph.D. or M.D. and extensive postdoctoral or equivalent experience in kidney tubule microperfusion. The major responsibility of the successful candidate will be on characterization of the acid-base transporters in the kidney tubules. Familiarity with cell imaging techniques is desirable. Competitive salary and start-up package will be offered.

Applicants should submit a letter of interest in the position, the names of three references, and a curriculum vitae to: Dr. Manoocher Soleimani, Professor of Medicine, University of Cincinnati Medical Center, Division of Nephrology and Hypertension, P.O. Box 670585, Cincinnati, OH 45267-0585. Applications from women and underrepresented minorities are encouraged.

POSITIONS OPEN

# ORTEX ASSOCIATE NEUROSCIENTIST IN VIVO/BEHAVIORAL RESEARCH

Cortex Pharmaceuticals, Inc., an Irvine, Californiabased neuroscience company focused on novel drug therapies for the treatment of neurological and psychiatric disorders, is currently seeking an Associate Neuroscientist to perform in vivo/behavioral research.

A suitable candidate will have a B.S./M.S. degree with a minimum of three to five years of experience performing in vivo/behavioral neurobiological research. The ideal candidate will have additional experience in one or more of the following technical areas: small animal surgical and neurosurgical expertise (including brain stereotaxy), immunohistochemistry, ELISA, in situ hybridization, gel blot methodology (Western, Northern), or in vitro tissue culture.

Cortex Pharmaceuticals, Inc. offers a competitive compensation and benefits package, which includes medical, dental, vision, and life insurance, 401(k) retirement plan, and stock options. For further information, please visit our website: www.cortexpharm. com.

Interested applicants should mail a résumé or curriculum vitae by July 15, 1999 (no telephone calls please), to: Jan Ingram-Mello, Cortex Pharmaceuticals, Inc., 15231 Barranca Parkway, Irvine, CA 92618. E-mail: jmello@cortexpharm.com.

### RESEARCH ASSISTANT PROFESSOR

The University of Utah seeks a full-time non-tenure-track Research Assistant Professor for the Department of Pathology, Division of Cell Biology and Immunology: A Ph.D. degree with postdoctoral research experience in endocytosis and organelle biogenesis including molecular biology, biochemistry, cell biology, and morphology techniques is required. Responsibilities would include directing research on the endocytic pathway in eukaryotes involving lysosome/vacuole biogenesis, organelle movement and vesicular fusion/fission. Additionally, candidates must have previous experience in grant and manuscript writing and editing, managing a laboratory of approximately 15 people, public speaking and teaching. This position is available on a year basis. Salary and benefits commensurate with experience. Send curriculum vitae, description of research interests, and the names of three references to: Raymond A. Daynes, Ph.D., Professor and Head, Division of Cell Biology and Immunology, Department of Pathology, University of Utah Health Sciences Center, 50 North Medical Drive, Salt Lake City, UT 84132. The University of Utah is an Equal Opportunity/ Affirmative Action Employer and encourages applications from women and minorities.

### INVESTIGATOR **CRIPPLED CHILDREN'S FOUNDATION RESEARCH CENTER**

The Crippled Children's Foundation Research Center (CCFRC) is seeking applicants for tenure-track positions at the **ASSISTANT** or **ASSOCIATE** PROFESSOR levels as CCFRC Investigators. Applicants should preferably have a record of productive research in the areas of immunology, signal transduction, lipid absorption and metabolism, or obesity, and have active extramural funding. The CCFRC will provide fully equipped laboratory space, supplemental research support, and a stimulating research environment. The CCFRC is located at LeBonheur Children's Hospital and is affiliated with the University of Tennessee Center for the Health Sciences in Memphis. Send a letter of application with a statement of research interests and accomplishments, curriculum vitae, and at least three names and addresses for letters of recommendation to: Dennis D. Black, M.D., Scientific Director, Crippled Children's Foundation Research Center, 50 North Dunlap, Room 401 West Patient Tower, Memphis, TN 38103. An Equal Opportunity / Affirmative Action Employer.

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# POSITIONS OPEN

# TWO POSITIONS IOWA STATE UNIVERSITY

Plant quantitative genetics ASSISTANT or AS-SOCIATE PROFESSOR to enhance a tradition of excellence in crop improvement research and education. The incumbent will conduct innovation, multidisciplinary research emphasizing quantitative and population genetics, selection theory and methodology, or evolutionary and ecological genetics. The research program will be primarily applied to the breeding and improvement of small grains.

Extension soil management and environmental soil science ASSISTANT or ASSOCIATE PROFES-SOR with 70 percent extension and 30 percent research appointment to develop a strong extension and outreach program with emphasis on environmental issues in soil management as they relate to tillage, crop production, land use, and soil productivity

Both positions available January 1, 2000. For additional information contact: Dr. Thomas Loynachan, Interim Head, Department of Agronomy, Iowa State University, Ames, IA 50011-1010. Tele-phone: 515-294-7636; FAX: 515-294-3163; email: teloynac@iastate.edu. Application deadline is September 30, 1999. Details available at (Agronomy) website: http://www.iastate.edu/~hrs\_info/ jobs/4titles.htm#1.

Immunology, virology, vaccines. RESEARCH SCIENTIST (Ph.D.), RESEARCH ASSISTANT (M.S. or equivalent), and POSTDOCTORAL FEL-LOWS to help develop vaccines for exotic BL4 viral agents (filoviruses) and improve existing vaccines (orthopoxvirus). Research Scientist: cellular immunology of viral vaccines, especially as applied to primates, is preferred; postdoctoral experience required. Assistant(s): versatility favored, as work includes immunology, virology, molecular biology, and viral pathogenesis. Appointments in circa five-year terms, renewable. U.S. citizenship required. NRC Associateships, both regular (recent Ph.D's or M.D's) and senior (for established Investigators), are also available to support basic research in related areas, in three- to five-year terms. Inquiries to: Dr. Alan Schmaljohn or Dr. Mary Kate Hart, Virology Division, U.S. Army Medical Research Institute of Infectious Diseases, Ft. Detrick, Frederick, MD 21702. FAX: 301-619-2290.

# SEARCH REOPENED

Penn State Berks–Lehigh Valley College invites applications for a tenure-track **ASSISTANT PROFES**-SOR position in the Division of Science. The position requires a Ph.D. in either genetics, cell biology, or biochemistry. Responsibilities include teaching upper- and lower-division undergraduate courses at either the Berks or Lehigh Valley campuses. Expectations for the position include the development of an undergraduate research program and service to the college and community. The starting date is flexible, either spring or fall semester 2000. For additional information and application instructions refer to the openpos.html; e-mail: bdel@psu.edu. Deadline for receipt of applications is September 1, 1999. Equal Opportunity Employer/Affirmative Action.

### VISITING ASSISTANT PROFESSOR OF BIOLOGY

Two full-time, temporary, non–tenure-track posi-tions for the 1999–2000 academic year. Teaching will include general biology for majors or non-majors and a course in an area of specialty. Salary: \$25,000 plus benefits. Information about Duquesne University is available at website: www.duq.edu. Send a curriculum vitae, a summary of teaching experience, and the names of three references to: Biology Search, Dr. Kyle W. Selcer, Department of Biological Scienc-es, Duquesne University, Pittsburgh, PA 15282. FAX: 412-396-5907. Review of applications will begin immediately and will continue until the positions are filled

Duquesne University is an Affirmative Action/Equal Opportunity Employer.

# Metabolic Diseases

ading-edge resources & a passion for discovery. You'll find them at Roche.

Hoffmann-La Roche is a leading research-intensive pharmaceutical company that discovers, develops, manufactures and markets prescription drugs that improve, prolong and save lives. Our extremely gifted employees and an annual \$1.7 billion investment in pharmaceutical research and development have given birth to our latest discovery – Xenical\*, the only prescription medication that significantly improves obesity management and obesity-related conditions.

If you are intent on contributing to the future of medicine in an open, supportive, leading-edge environment, consider one of these exceptional career opportunities in the area of metabolic diseases at our Nutley, NJ Pharmaceutical Research Center.

# Ph.D. Scientist

You will utilize bioinformatic approaches in the identification and validation of novel molecular targets. With access to proprietary databases and powerful analytical tools, this position offers creative individuals a unique opportunity to synergize with the Roche Bioinformatics community, applying state-of-the-art genomics technologies to target identification.

Requirements include a minimum 2 years' postdoctoral experience and broad knowledge in the fields of non-insulin dependent diabetes mellitus (NIDDM) and obesity. Specific knowledge of one or more of the following areas is desirable: insulin secretion, insulin resistance, gluconeogenesis, and appetite suppression or energy expenditure. Aptitude in Web site development and/or scripting languages (Perl, JavaScript, VisualBasic) is a plus. **Job Code: 99-000-1300** 

# **Principal Scientist**

If selected, you will support the drug discovery process as it pertains to obesity. This will involve designing and implementing research programs that use biochemistry and molecular and cellular biology to discover novel compounds that modulate food intake and body weight. You will need a Ph.D. or equivalent advanced degree and a background in studying obesity. **Job Code: 99-000-1313** 

# **Research Leader**

You will use your knowledge of current research as well as your understanding of drug development opportunities and processes in the obesity area to assume a leadership role in obesity research. You will also participate in the drug target selection process and in the in vivo evaluation of anti-obesity drug candidates. You will need a Ph.D. (or equivalent) with 1-3 years of postdoctoral experience and 2-5 years' work experience (preferably in the pharmaceutical industry), as well as a background in obesity research and familiarity with animal models. Experience with drug development in the obesity area is desirable. Job Code: 99-000-1279

# **Principal Scientist**

If selected, you will provide in vivo pharmacology support for all diabetes discovery projects and for the evaluation of licensing opportunities in the diabetes area. This will involve ensuring that appropriate animal models of diabetes are in place as needed and that necessary technical skills and analytical procedures are available to conduct all necessary in vivo/ex vivo work. You will need a Ph.D. (or equivalent) with 1-3 years of postdoctoral experience; and a background in NIDDM and familiarity with animal models of diabetes. **Job Code: 99-000-1213** 

As one of NJ Monthly's "Best Companies to Work for in New Jersey," we offer our employees competitive salaries and a benefits package that includes on-site childcare and a state-of-the-art fitness center. To be considered, forward your resume, indicating job code of position of interest and salary requirements, to: Hoffmann-La Roche, R&D Human Resources, Building 76/5th Floor, 340 Kingsland Street, Nutley, NJ 07110; FAX: 973-235-2767. Hoffmann-La Roche is an equal opportunity employer fully committed to diversity in the workplace. www.RocheUSA.com





St. Jude Children's Research Hospital

# DEPARTMENT OF BIOCHEMISTRY POSTDOCTORAL FELLOWSHIPS

The Biochemistry Department offers a highly interactive environment for postdoctoral research with a focus on the molecular and cellular biology of signal transduction. The research programs within the Department offer recent Ph.D. or M.D. graduates comprehensive training in a large variety of contemporary molecular and biochemical techniques. Laboratory facilities are housed in a 220,000 sq. ft. research facility. SJCRH offers very competitive salaries and fringe benefits. Current research programs within the Department include:

**Paul K. Brindle:** The role of transcriptional coactivators in hematopoiesis.

John L. Cleveland: Regulation of apoptosis in hematopoiesis and leukemia.

James N. Ihle: Mechanisms of hematopoietic stem cell growth regulation, differentiation and transformation.

**Paul A. Ney:** Mechanisms of erythroid proliferation and differentiation.

**Suzanne Jackowski:** Cell cycle regulation of membrane phospholipid biosynthesis.

Charles O. Rock: Fatty acid metabolism and growth factor signalling.

Brian P. Sorrentino: Hematopoietic stem cell selection, expansion, and gene transfer.

Gerard P. Zambetti: Function of wild-type and mutant p53 in tumor suppression, oncogenesis, and the cell cycle.

Applicants should submit a brief statement of research interests, curriculum vitae and the names of three references to:

Biochemistry Departmental Fellowships The Department of Biochemistry St. Jude Children's Research Hospital 332 North Lauderdale Memphis, TN 38105

http://www.stjude.org/education/default.htm

An Equal Opportunity/Affirmative Action Employer

# POSITIONS OPEN

### DIRECTOR RESEARCH SERVICES VA Puget Sound Health Care System and University of Washington

The University of Washington and the Veterans Affairs Puget Sound Health Care System seek a Senior Academic Investigator to direct the VA Puget Sound Research Service. The VA Puget Sound conducts the third-largest research program in the national VA Health Care System with major strengths in biomedical, rehabilitation, and health services research. The twenty million-dollar research program includes 386 projects and 83 funded Investigators. The VA Puget Sound is an integrated Health Care System providing primary and tertiary care at campuses in Seattle and Tacoma, Washington. As a University of Washington-affiliated teaching medical center the VA offers training programs in all medical specialties, subspecialties, and in several allied health professions. The candidate should be a recognized academic scholar and proven leader in a research program with credentials acceptable for appointment at the Associate or Full Professor level at the University of Washington. Candidates from a variety of biomedical or health services research disciplines are encouraged to apply and may have an M.D. and/or Ph.D. Interested candidates should forward their curriculum vitae and list of references by July 31, 1999, to: Thomas D. Bird, M.D., S-182-GRECC, VA Puget Sound Health Care System, 1660 South Columbian Way, Seattle, WA 98108. The University of Washington is building a culturally diverse faculty and strongly encourages applications from women and minority candidates. The UW and VA Puget Sound Health Care System are Affirmative Action/Equal Opportunity Employers.

# NATIONAL EYE INSTITUTE NATIONAL INSTITUTES OF HEALTH

The intramural program of the National Eye Institute invites applications for a position as a RE-SEARCH SCIENTIST within the Laboratory of Sensorimotor Research. This position may be either tenured, or tenure-track with conversion to tenure anytime within six years. Applicants will be expected to establish a research program related to understanding the neurobiology of the visual and/or oculomotor system in monkeys. The Laboratory of Sensorimotor Research is devoted to understanding the organization of the brain related to the control of eye movements and visual perception. It has excellent facilities for the study of these systems in awake behaving primates, including dedicated computer systems, a machine shop, an electronics shop, and a histology laboratory. The Laboratory also provides the opportunity to collaborate on studies of human patients with diseases related to the visual and oculomotor systems. Candidates should send a brief cover letter, curriculum vitae, bibliography, a one- or two-page statement of current research interests, copies of recent, relevant publications, and three letters of recommendation to: Dr. Lance M. Optican, Search Committee Chair, 2A50, NIH, Bethesda, MD 20892-4435.

The deadline for applications is August 1, 1999. NIH is an Equal Opportunity Employer.

**RESEARCH ASSOCIATE** position available for a Ph.D. to work in the area of cellular immunology and cancer vaccines. Must have proven track record in cellular immunology research including at least three years of postdoctoral experience and ability to develop independent research within a team structure. Send application to: Eli Gilboa, Ph.D., Duke University Medical Center, Center for Genetic and Cellular Therapies, Box 2601, Durham, NC 27710. (No letter, FAX, or e-mail).

MICROBIOLOGIST. DIRECTOR OF FER-MENTATION AND MICROBIOLOGY (FOOD). Opportunity in Atchison, Mississippi. Develops and improves fermentation manufacturing technologies and supervises quality assurance. Ph.D. degree required. Send résuntés today to: Mr. David Rindom, 1300 Main, Atchison, KS 66002. POSITIONS OPEN



Invitrogen is a growing company delivering highly innovative products for gene cloning and expression. We are committed to providing life scientists with superior products and technical information.

Invitrogen currently has the following positions available in our Research and Development Department. We are looking for enthusiastic Researchers with good oral and written communication skills and the desire to be involved in the development of cutting-edge molecular biological research tools.

# ASSISTANT/ASSOCIATE DIRECTOR OF CLONING TECHNOLOGIES

The successful candidate will lead a research and development group in the development of innovative new products, which utilize a variety of cloning techenced scientist with proven success in management of a group of Ph.D. scientists. Responsibilities include providing strategic vision and direction for the group's effort and collaborating with other research and development groups as well as groups from manufacturing, and sales and marketing.

The successful candidate will have a Ph.D. in biochemistry, molecular biology, or related discipline with a minimum of five years of experience in industry. Must have a minimum of two years of managerial experience.

# SCIENTISTS

The successful candidates will be expected to demonstrate innovation in the investigation of novel technologies and product ideas. Responsibilities include designing experiments, evaluating test data, and preparing associated documentation for a research program.

The successful candidates will have a Ph.D. in biochemistry, molecular biology, or related discipline and zero to five-plus years of postdoctoral experience.

Invitrogen offers an aggressive benefits package and a rewarding, professional environment. Please submit

your résumé via our website, FAX, or mail:

Invitrogen Attn: Human Resources 1600 Faraday Avenue Carlsbad, CA 92008 FAX: 760-603-7207 Website: www.Invitrogen.com

Equal Opportunity Employer/Minorities/Females.

### SENIOR SCIENTIST LIFE TECHNOLOGIES

Life Technologies, Inc. (LTI) is a global leader in life sciences technology development headquartered in Rockville, Maryland. We are currently seeking a Senior Scientist to manage the development of custom services related to mammalian, insect, and bacterial protein expression and purification. Background must also include the molecular biology skills of vector design, construction, the development of highthroughput applications, and management experience. Ph.D. and postdoctoral experience required with at least 10 years of experience (including postdoctoral) preferably in an industrial setting.

Mail or FAX résumés citing req #99-R1037 to: Life Technologies, Inc., Human Resources, P.O. Box 6482, Rockville, MD 20849-9899. FAX: 301-610-8020; website: http://www.lifetech.com. LTI offers excellent benefits, a good working environment, is an Equal Opportunity Employer, and promotes a drug-free workplace.

**RESEARCH SCIENTISTS.** Three to five years of postdoctoral experience; expertise in protein biochemistry, purification, fermentation. Résumé and references to: Employment, ExpressGen Inc., CTP Research Center, 2201 Campbell Park Drive, Chicago, IL 60612. FAX: 312-733-88541; e-mail: personnel@expressgen.com.

An Equal Opportunity/Affirmative Action Employer.

# POSITIONS OPEN

# DIRECTOR CENTER FOR BIOINFORMATICS

NASA-Ames Research Center expects to expand its present program in bioinformatics and will seek applications in the near future for the position of Director, Center for Bioinformatics and Bioinformation Processing, and is seeking letters of interest from potential candidates. Duties include directing the planning, coordination, and performance of a group of civil servants and contractors to conduct research and technology development in the areas of computation and visualization technologies, and bioinformation processing. The Director is expected to provide leadership necessary to advance ongoing research and initiate new activities consistent with the NASA Strategic Plan and the goals and objectives of the NASA's Life Sciences Programs. He/she represents and advocates bioinformatics/bioinformation processing research to Ames management, NASA Headquarters Program Directors, and the relevant scientific community. Persons applying must have senior credentials in a research field applicable to the life sciences, particularly neuroscience, cell and molecular biology, and/or gravitational and space biology, with a proven record of publications in these areas. Experience in the computer sciences is desirable with emphasis on bioinformatics or bioinformation processing.

Candidates must be U.S. citizens. Čivil service salary range for this position is \$71,869 to \$109,895 per annun. Salary and GS level will be commensurate with experience. A letter of interest, curriculum vitae, list of publications, and names of three professional references should be sent to: Kenneth A. Souza, NASA-Ames Research Center, MS 240-10, Moffett Field, CA 94035. Responses accepted until July 23, 1999. For more information, on the present program visit the Center for Bioinformatics website: http://lifesci. arc.nasa.gov/CGBR/TBC.html. NASA-Ames is an Equal Opportunity Employer.

# MEDICAL DIRECTOR OF THE NEPHROLOGY, ENDOCRINOLOGY, AND HYPERTENSION PATIENT CARE CENTER

The Department of Medicine at Vanderbilt University Medical Center has an opening for a Medical Director of the Nephrology, Endocrinology, and Hypertension Patient Care Center (PCC). The ideal candidate should at a minimum be at the Professor or Director of Medicine level who understands clearly the business of health care and who will be responsible for growing and further developing our emerging PCC concept. The candidate should have an M.D. degree and have compiled a record of outstanding achievements in one or more of the PCC areas listed above in order to be appointed at the level of Associate or Professor with tenure. The candidate is expected to have a clinical practice, lead clinical research initiatives, have a firm understanding of disease management, and be recognized as a leader in their field. He/she will be expected to participate/lead the management of clinical practices, as well as contribute to the overall development at Vanderbilt University Medical Center and Vanderbilt Medical Group. The Medical Director will also be expected to help recruit new faculty who can further Vanderbilt's strong national presence in nephrology, endocrinology, and hypertension. Send letter of interest and curriculum vitae to: Steven Hebert, M.D., Ann and Roscoe R. Robinson Professor of Medicine, Director, Divi-sion of Nephrology, C-3119 Medical Center North, Nashville, TN 37232-2372.

Vanderbilt University Medical Center is an Affirmative Action/Equal Opportunity Employer.

**RESEARCH ASSOCIATES** (M.D./Ph.D.) at the University of Chicago sought for work in (a) neurotrophin biology/central nervous system gene therapy or (b) prion diseases. Molecular/anatomical experience required. Send curriculum vitae and references to: (a) Dr. Fernette Eide or (b) Dr. James Mastrianni, FAX: 773-702-9060; e-mail: feide@ drugs.bsd.uchicago.edu or jmast@drugs.bsd. uchicago.edu. University of Chicago is an Equal Opportunity/Affinative Action Employer.

# Tenure Track Investigator Gerontology Research Center National Institute on Aging

The Intramural Research Program of the National Institute on Aging (NIA), Baltimore, Maryland, invites applications for a tenure track investigator position at the Gerontology Research Center. Starting salary commensurate with qualifications and experience. The successful applicant will be responsible for designing and executing studies on the effects of hormone replacement therapy in men and women using a variety of methodologies, including neuropsychological evaluations, longitudinal follow-ups, short-term and long-term intervention studies, and techniques based on structural and functional neuroimaging.

Applicants must have a record of scientific accomplishments, including excellence in laboratory research and qualifications of a Ph.D. in Psychology or Neuropsychology. Applicants should send curriculum vitae, bibliography, and 1,000-word overview of a proposed program along with three letters of reference to Chair, LPC Tenure Track Search Committee, Vacancy #AG-27, Personnel Office, National Institute on Aging, NIH, Box 26, 5600 Nathan Shock Drive, Baltimore, MD 21224-6823.

The deadline for application is July 18, 1999.

NIH is an Equal Opportunity Employer.

mayo

# MAYO CLINIC FACULTY POSITIONS IN TRANSPLANTATION BIOLOGY

Mayo Clinic is undertaking an expanded research initiative in transplantation biology. One objective of this initiative is to assemble a faculty of independent investigators who can focus diverse scientific interests on the biological and immunological hurdles to transplantation and on the development of novel approaches to overcoming those hurdles. Four scientists of the highest caliber with expertise in cellular biology, molecular or structural biology, biochemistry, immunology or virology who might want to contribute to such an integrated program are sought. The basic science research program will include opportunities to interact with clinical and pre-clinical programs. To inquire, send a cover letter describing your research interests, a curriculum vitae and the names of three references to:

> Jeffrey L. Platt, M.D. Mayo Foundation Medical Sciences Building Room 2-66 Rochester, MN 55905

Mayo Foundation is an affirmative action and equal opportunity employer and educator. Forschungszentrum Karlsruhe Technik und Umwelt

Im Forschungszentrum Karlsruhe ist die Position eines

# Vorstandsmitgliedes aus der Wissenschaft

zu besetzen. Die Aufgaben dieses Vorstandsbereichs umfassen – in enger Abstimmung mit den drei anderen Vorstandsbereichen – die Verantwortung für die wissenschaftsorientierten Forschungsprogramme und Institute des Zentrums sowie die Kooperation mit wissenschaftlichen Einrichtungen.

Das Forschungszentrum Karlsruhe ist Mitglied der Hermann von Helmholtz-Gemeinschaft Deutscher Forschungszentren. Es ist mit etwa 3700 Beschäftigten, davon über 1200 mit wissenschaftlichtechnischer Hochschulbildung, eine der größten öffentlichen Forschungseinrichtungen in Deutschland. Zur Ergänzung der Grundfinanzierung durch die Gesellschafter Bund und Land Baden-Württemberg kommt der Einwerbung von Drittmitteln wachsende Bedeutung zu. Programmschwerpunkte sind Umweltforschung, Energietechnologien, Mikrosystemtechnik, Nanotechnologien und Medizintechnik. Die Arbeit umfaßt die gesamte Bandbreite der Forschung von reiner Grundlagenforschung bis zu anwendungsorientierter und industrienaher Entwicklung. Nähere Informationen finden Sie im Internet unter http://www.fzk.de.

Gesucht wird eine Persönlichkeit, die über eine überzeugende wissenschaftliche Qualifikation und Anerkennung sowie über umfangreiche Erfahrungen im Wissenschaftsmanagement verfügt. Sie sollte fähig und bereit zur kollegialen Zusammenarbeit im Vorstand sowie in der Lage sein, hochqualifizierte Wissenschaftlerinnen und Wissenschaftler kooperativ zu führen und zu motivieren.

Die Vergütung orientiert sich an der für Leitungsfunktionen im Hochschulbereich vorgesehenen Besoldung.

Bitte senden Sie Ihre Bewerbung oder Interessenbekundung bis 6 Wochen nach Erscheinen der Anzeige an den

Vorsitzenden des Aufsichtsrates des Forschungszentrum Karlsruhe GmbH, Herrn Ministerialdirektor Dr. Eckhard Lübbert Bundesministerium für Bildung und Forschung, 53170 Bonn

# POSITIONS OPEN

### SWINE PHYSIOLOGIST AND BEEF PHYSIOLOGIST UNIVERSITY OF NEBRASKA-LINCOLN

Department of Animal Science is seeking candidates for a Swine Physiologist and a Beef Physiologist. Both positions are 12-month, tenure-track, with 50 percent teaching and 50 percent research responsibilities at either the ASSISTANT or ASSOCIATE PROFESSOR level. Both will be required to teach courses in reproductive physiology or endocrinology at the undergraduate and graduate level. Research will be directed at improvement of and/or solving problems associated with reproductive performance of the Nebraska beef and swine industries according to the respective assignment. Research facilities for both positions will be assigned at the Animal Science Building, the Swine Unit or the Beef/Cow Unit as appropriate. Requires a Ph.D. in animal science, reproductive physiology, or endocrinology. Postdoctoral experience preferred. Must have an appreciation for the role of basic science in the advancement of animal agriculture; demonstrated evidence of collaborative efforts; demonstrated willingness to work in an interdisciplinary setting; and have demonstrated the ability to secure extramural funding.

Submit a letter of application; a detailed résumé of education (including transcripts), experience, qualifications, and publications; and the names, addresses, and telephone numbers of three references postmarked by September 1, 1999 (or until an acceptable candidate is hired), to:

Dr. Donald H. Beermann, Head Department of Animal Science University of Nebraska-Lincoln P.O. Box 830908, C203 Animal Science Lincoln, NE 68583-0908 Telephone: 402-472-3571 FAX: 402-472-6362

UNL is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity; is responsive to the needs of dual-career couples; and assures reasonable accommodation under the Americans with Disabilities Act. Contact Dr. Beermann for additional information.

A POSTDOCTORAL/RESEARCH ASSOCI-ATE position is available immediately to study the expression and regulation of angiogenic growth factors and matrix metalloproteinases in cancer cells. Candidates should have a Ph.D. degree and experience in techniques of molecular and cellular biology. Interested candidates should send curriculum vitae, a statement of research interests, and the names and addresses of three referees to: James R. Gnarra, Ph.D., Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center, 1901 Perdido Street, Suite P7-2, New Orleans, LA 70112. E-mail: jgnarr@lsumc.edu. LSUMC is an Equal Opportunity/Affirmative Action Employer.

A POSTDOCTORAL POSITION is available to study the genetic aspects of metabolic bone disorders The laboratory is well equipped and has a collegial environment. We prefer someone with training in genetics or metabolic bone disease/mineral metabolism. Please send curriculum vitae to: Dr. Michael Econs, 975 West Walnut Street, IB445 Indiana University School of Medicine, Indianapolis, IN 46202. E-mail: mecons@iupui.edu.

# BETH ISRAEL DEACONESS MEDICAL CENTER HARVARD MEDICAL SCHOOL

POSTDOCTORAL POSITION available immediately to study the regulation of genes in the endothelium using in vitro and in vivo model systems. Experience in molecular biology and transgenic/knockout techniques is preferred. Send curriculum vitae and names of three references to: Dr. William Aird, Molecular Medicine RW-663, Beth Israel Deaconess Medical Center, 330 Brookline Avenue, Boston, MA 02215. FAX: 617-667-2913; e-mail: waird@ caregroup.harvard.edu. Equal Opportunity Employer.

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# POSITIONS OPEN



### ASSOCIATE DIRECTOR SOUTHWEST REGIONAL PRIMATE **RESEARCH CENTER**

The Southwest Regional Primate Research Center (SRPRC) was recently established at the Southwest Foundation for Biomedical Research (SFBR). Applications and nominations are invited for the position of Associate Director. This is a full-time administrative position, and the successful applicant will have a high level of responsibility. Applicants must have a Doctoral degree and a minimum of 10 years of experience in research and/or administration. The successful applicant will assist the Center Director in preparing and managing budgets, negotiating with funding sources, administering committees, preparing grant applica-tions, preparing promotional literature, and fostering collaborative research involving scientists based at the Center and those based at other institutions. Information about the host institution (SFBR) can be obtained from our home page at website: http://www. sfbr.org.

Applicants should submit their curriculum vitae, a cover letter, and the names and addresses of at least three references to: Dr. John L. VandeBerg, Southwest Regional Primate Research Center Director, c/o Director of Human Resources (928), Southwest Foundation for Biomedical Research, P.O. Box 760549, San Antonio, TX 78245-0549 USA. Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE. National Center for Écological Analysis and Synthesis (NCEAS)/ University of California, Santa Barbara. Work with Ecologists, Statisticians, Resource Managers to evaluate international protocols for classifying species conservation status (e.g., IUCN, TNC, USFWS), and quantitative models for estimating extinction risk. Responsibilities: work with group to develop a range of population dynamics simulations, analyze data, and coordinate communication. Applicants should possess Ph.D. or equivalent experience in applied math or ecology. Programming experience in C or C++, and Matlab, S+, or other statistics/math software. Initial funding one year; possible extension for second year. All work to be conducted at NCEAS. Position open until filled. Desired start date: August 1, 1999. Send letter of application, statement of research interest, copies of publications, curriculum vitae, and names (with e-mail) of three referees. Applications should have "Extinction Risk" as subject field and e-mailed or mailed to: Dr. S. Andelman, National Center for Ecological Analysis and Synthesis, 735 State Street, Suite 300, Santa Barbara, CA 93101-3351. E-mail: postapp@nceas.ucsb.edu. NCEAS solicits proposals twice a year for supported activities, including working groups, sabbatical Fellows, and Postdoctoral Associates. Next deadline: August 11, 1999. Information about NCEAS and proposal guidelines at website: http://www.nceas.ucsb.edu. The University of California is an Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL POSITION

Are you undecided whether to pursue a career in academics versus industry? Explore both options while remaining in academics. Join in our collaboration with Hoechst Marion Roussel to identify drugs targeted at orphan GPCRs. Utilize structure-function in vitro studies of recombinant receptors and transgenic models to expedite drug discovery. Expertise in molecular biology required. Starting date July 1999. Send curriculum vitae and three references to: Alan Kopin, M.D., 750 Washington Street, #7703, Boston, MA 02111. E-mail: akopin@msn.com. New England Medical Center is an Equal Opportunity Employer.

# POSITIONS OPEN

# POSTDOCTORAL FELLOWSHIPS

The University of California and the Veterans Affairs Medical Center, San Francisco, have positions available for two separate projects. The first seeks an individual interested in exploring the regulation of gene transcription during differentiation of normal and transformed keratinocytes. This indivdiual will have a Ph.D. in molecular and/or cellular biology with experience in cell signaling as well as gene transcription. The second seeks an individual interested in exploring the effects of microgravity at the molecular and cellular levels on bone formation and bone cell differentiation using rodent models. This individual will have a Ph.D. in the biological sciences with experience in bone cell preparation as well as bone histomorphometry including in situ hybridization and immunolocalization. Please send your curriculum vitae and names of three references to: Daniel Bikle, M.D., Ph.D., VA Medical Center (111N), 4150 Clement Street, San Francisco, CA 94121.

### POSTDOCTORAL ASSOCIATE **Biophysical Mechanisms of Drug Delivery** Georgia Institute of Technology

The Institute for Bioengineering and Bioscience offers two Postdoctoral positions to study (1) the mechanisms by which ultrasound transiently disrupts the membranes of viable cells to noninvasively deliver drugs and genes, and (2) the ability of microfabricated microneedles to painlessly pierce the skin and deliver proteins in animals and humans. Please send curriculum vitae to: Dr. Mark R. Prausnitz, Schools of Chemical and Biomedical Engineering, Georgia Tech, Atlanta, GA 30332-0100. E-mail: mark. prausnitz@che.gatech.edu. Georgia Tech is an Equal Education and Employment Opportunity Institution.

# **RESEARCH ASSOCIATE/INSTRUCTOR**

A faculty position is available to join a group studying the molecular biology/signal transduction in hypertension. An individual is needed to determine if mutations of candidate genes for blood pressure regulation interfere with renal tubular signal transduction and ion transport. M.S. or Ph.D., with experience in molecular biology, biochemistry, or protein chemistry is required. Send letter of application, curriculum vitae, and three letters of reference to: Division of Pediatric Nephrology, Department of Pediatrics, Georgetown University Medical Center, 3800 Reservoir Road N.W., Washington, DC 20007. FAX: 202-687-7161. Equal Opportunity Employer/Affirmative Action.

Department of Neurological Sciences at Rush-Presbyterian-St. Luke's Medical Center is seeking two POSTDOCTORAL CANDIDATES. One with experience in molecular neuroanatomy to study gene expression of neurotrophins in human aging and neurodegenerative disease and a second to participate in quantitative structural and functional MRI and fMRI imaging studies in healthy aging and disease. Both full-time research positions are NIH-supported for two years with the possibility of a third. Send statement of research interests, curriculum vitae, and names of references (two to three) to: Dr. Elliott Mufson, Department of Neurological Sciences, Rush-Presbyterian-St. Luke's Medical Center, 2242 West Harrison, Suite 200, Chicago, IL 60612. Or to: Dr. Leyla de Toledo-Morrell, Department of Neurological Sciences, Rush-Presbyterian-St. Luke's Medical Center, 1653 West Congress Parkway, Chicago, IL 60612.

POSTDOCTORAL POSITION available on an NIH-funded project to study proteins and lipids that regulate the stability of a microsomal enzyme. Expertise in biochemistry or molecular biology with a background in phospholipid analysis/metabolism or pro-tein degradation is preferred. Salary: \$28,000 to \$35,000 per year. Send curriculum vitae to: Dr. Rick Zangar, P7-56, Pacific Northwest National Laboratory, Molecular Biosciences, P.O. Box 999, Richland, WA 99352. E-mail: richard.zangar@ pnl.gov.

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# TAFF OR SENIOR

The Wistar Institute, the nation's oldest independent biomedical research institute, seeks a molecular biologist to join our cancer vaccine program.

Candidates must possess a Ph.D. or other related degree & a minimum of 3 years postdoctoral training. Experience in library construction and antigen cloning desirable.

Please send curriculum vitae, publication list and description of research experience to: **dherlyn@wistar.upenn.edu or Human Resources Department Attn: Dorothee Herlyn, The Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104.** 

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



# DEPARTMENT OF ZOOLOGY UNIVERSITY OF GUELPH Two Tenure Track Assistant Professorships

**MOLECULAR PHYSIOLOGY:** The Department seeks the appointment of an individual with expertise in the molecular physiology of aquatic organisms, with a particular interest in environmental adaptations. Undergraduate teaching responsibilities will focus on the areas of cell physiology, histology or developmental biology.

**MOLECULAR PHYLOGENETICS:** The Department seeks the appointment of a molecular phylogeneticist who couples both a strong theoretical background with an ongoing empirical research program. As the Department has a particular commitment to aquatic biology, preference will be given to applicants working on freshwater or marine organisms. Undergraduate teaching responsibilities will focus on molecular evolution and, depending upon the applicant's area of expertise, cell biology, invertebrate zoology or systematics.

A Ph.D. and postdoctoral experience are required. Applicants for both positions should have a strong record of achievement in research and will be expected to develop and sustain an externally funded research program that involves the training of graduate students. The expected starting date is **July 1, 2000.** Applications, including a *curriculum vitae*, and brief (<4 pages) summary of research and teaching interests, as well as copies of up to three papers should be sent to: **Dr. Paul Hebert, Department of Zoology, University of Guelph, Guelph, Ontario, Canada N1G 2W1.** Applicants should also arrange for three letters of reference to be sent by the closing date of **August 31, 1999.** For additional information on the Department of Zoology see: http://www.uoguelph.ca/zoology

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The appointments are subject to final budgetary approval.



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



# **Synergy of Science**

Selective Genetics, Inc. develops site-specific gene therapy products for soft and hard tissue repair and regeneration. Clinical targets include musculoskeletal, revascularization, and nerve regeneration. We have the following opportunities:

# Director, Pharmacology

Provide leadership in the direction, execution and interpretation of preclinical studies, including toxicity studies to support clinical development. Requires a Ph.D. in Pharmacology or Immunology and 10 years' relevant experience with demonstrated success in transferring technology from research to Phase I/II clinical trials. **Code SDP.** 

# • Group Leader

Lead the process development of Gene Activated Matrix products including analytical methods for the characterization of viral and/or non-viral gene therapy vectors. Requires a Ph.D. in Biochemistry and 8+ years' experience in biomaterials, adenovirus and/or plasmid gene vectors. **Code SGL**.

# • Scientist, Biomaterials

Join a small, focused interdisciplinary team of scientists with backgrounds in tissue engineering and pharmaceutical formulation developing Gene Activated Matrices for musculoskeletal applications. Requires a Ph.D. and demonstrated expertise in biomaterials. Prior pharmaceutical development experience is desirable. **Code: SSB**.

Please send/fax your resume to: Code: (see above), Selective Genetics, Inc., 11035 Roselle St., San Diego, CA 92121; Fax: (619) 625-0050.



# Rapid Access to Intervention Development

The NATIONAL CANCER INSTITUTE is requesting applications for the following initiative: Rapid Access to Intervention Development (RAID). RAID will make available to academic investigators, on a competitive basis, the preclinical development contract resources of NCI's Developmental Therapeutics Program. The goal of RAID is the rapid movement of novel molecules and concepts from the laboratory to the clinic for proof-of-principle clinical trials. RAID will assist investigators who submit successful applications by providing any (or all) of the preclinical development steps that may be obstacles to clinical translation. These may include, for example, production, bulk supply, GMP manufacturing, formulation, and toxicology. Suitable agents for RAID will include small molecules, biologics, or vaccines. There are two receipt dates for proposals per year, February 1 and August 1. Current applications must be received by August 2, with all materials submitted directly to the office listed below. For information on process and procedure, visit the web site, http://dtp.nci.nih.gov. Inquiries are encouraged, and the opportunity to clarify issues or questions is welcome. Academic investigators may have collaborations with small-business partners and still qualify for RAID funding. Proposals to produce materials ready for use in clinical trials must have a letter of commitment to actually conduct the trial from an Institution where the clinical trial would occur. Please note that a maximum of two distinct proposals per investigator can be submitted per the application review date. Please contact .:

RAID, Office of Associate Director Developmental Therapeutics Program, NCI Executive Plaza North, Suite 843 6130 Executive Blvd., Rockville, MD 20892 Tel: 301.496.8720; Fax: 301.402.0831 Email: sausville@dtpax2.ncifcrf.gov



UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE Molecular Mechanisms of Intestinal Development and Neoplasia

**POSTDOCTORAL POSITIONS** are available for Ph.D's in a program under the direction of **Peter G. Traber, M.D.**, which focuses on the molecular and cellular biology of the gastrointestinal system. Research interests: **Peter G. Traber, M.D.** Mechanisms of intestinal gene transcription and the function of intestinal transcription factors and co-adaptor proteins. **EunRan Suh, Ph.D.** Regulatory mechanism of CDX1 and CDX2 expression in colon cancer. **Debra Silberg, M.D., Ph.D.** The effect of ectopic and precocious expression of intestine-specific transcription factors in transgenic mice.

A strong background in molecular biology is required. Experience in transcription regulation and protein/DNA interaction is desirable. Send curriculum vitae and three references to: EunRan Suh, Ph.D., 415 Curie Boulevard, Suite 600, University of Pennsylvania, Philadelphia, PA 19104. Email: suher@mail.med.upenn.edu; FAX: 215-573-2024. Equal Opportunity/Affirmative Action Employer.

# POSTDOCTORAL FELLOW POSITION CELL SIGNALING AND CARCINOGENESIS

A Postdoctoral position is available for mechanistic and applied studies of cell signaling, xenobiotic metabolism, and carcinogenesis. The research group focuses on the biosynthesis and turnover of bioactive lipids (sphingosine and ceramide) as cell mediators as well as the biological effects of naturally occurring sphingolipids (in food) and synthetic analogs. The research utilizes a wide range of techniques, including synthetic organic chemistry, signal transduction and apoptosis methodologies, quantitative analytical chemistry (HPLC and tandem mass spectrometry), gene regulation, and enzymology as applied to both in vitro and in vivo systems. Applicants should have experience with molecular biology techniques and/or carcinogenesis model systems and have the ability to work in a multidisciplinary environment. Send cover letter, curriculum vitae, and the names of three references to: Dr. Alfred H. Merrill, Jr., Department of Biochemistry, Emory University School of Medicine, 1510 Clifton Road, Atlanta, GA 30322-3050. FAX: 404-727-5978; e-mail: amerril@emory. edu.

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

### POSTDOCTORAL POSITION

An immediate opening is available to study the roles of proteolyzed collagen-IV in angiogenesis and macular degeneration. A strong background in biochemistry and cell biology is desired. Please send curriculum vitae, description of research experience, and three letters of reference to: Peter C. Brooks, Ph.D., University of Southern California, School of Medicine, Department of Biochemistry and Molecular Biology, Norris Cancer Center/Topping Tower-6409, 1441 Eastlake Avenue, Los Angeles,CA90089.FAX:323-865-0514;e-mail:pbrooks@ hsc.usc.edu.

Positions available at **POSTDOCTORAL/IN-STRUCTOR/ASSISTANT PROFESSOR** levels. Cell and molecular biology of colon cancer: lineagespecific differentiation, cell-cycle regulation, apoptosis, and alterations in initiation and progression of colon cancer. Studies encompass cell culture, unique mouse genetic models, and human populations. Application of state-of-the-art screening and imaging technologies for analysis of gene expression. Submit curriculum vitae and names of references to: Leonard Augenlicht, Director, Molecular Oncology, Albert Einstein Cancer Center, 111 East 210th Street, Bronx, NY 10467.

# POSITIONS OPEN

# BORRELIA BURGDORFERI TREPONEMA PALLIDUM

A POSTDOCTORAL POSITION is available to study outer-membrane proteins of Borrelia burgdorferi, the Lyme disease spirochete. The focus of the project shall be to use diverse genetic and protein-based approaches to identify and characterize lipid-modified and nonlipid-modified borrelial outer-membrane proteins that are differentially expressed in arthropod and mammalian hosts. Proficiency with recombinant DNA techniques is required, as is a solid understanding of membrane biology and membrane protein structure-function relationships. Knowledge of plasmid genetics is also desirable. Position includes salary (negotiable), fringe benefits, and the opportunity to work in a rapidly expanding microbial pathogenesis center located in the heart of Lyme disease country. Send curriculum vitae and the names, telephone numbers, and e-mail addresses of three references to: Dr. Justin Radolf, Center Director, Center for Microbial Pathogenesis, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3710. FAX: 860-679-8130; e-mail: jradolf@up.uchc.edu.

A POSTDOCTORAL POSITION is available to study outer-membrane proteins of Treponema pallidum, the syphilis spirochete. The focus of the project shall be to use diverse genetic and protein-based approaches to identify and characterize treponemal outermembrane proteins that serve as potential virulence factors and vaccine targets. Proficiency with recombinant DNA techniques is required, as is a solid understanding of membrane biology and membrane protein structure-function relationships. Experience with animal models of infectious diseases is also desirable. Position includes salary (negotiable), fringe benefits, and the opportunity to work in a rapidly expanding microbial pathogenesis center. Send curriculum vitae and the names, telephone numbers, and e-mail addresses of at least three references to: Dr. Justin Radolf, Center Director, Center for Microbial Pathogenesis, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3710. FAX: 860-679-8130; e-mail: jradolf@up.uchc.edu.

### POSTDOCTORAL FELLOWSHIP In Molecular Pharmacology of Cholinergic Receptors in Non-Neuronal Cells University of California–Davis

A position is available to study the molecular pharmacology of cholinergic receptors in non-neuronal cells of the skin. The Ph.D. degree in pharmacology/ biochemistry and fluency in the English language are required. Applicants should be proficient in receptorligand binding analysis, and protein phosphorylation and enzymatic assays to use these and other standard biochemical approaches, and cell culture techniques to characterize the nicotinic and the muscarinic effects on cellular functions of skin cells.

We offer a competitive salary and excellent benefit package. Send or FAX a cover letter stating career goals, curriculum vitae, and names of references in the United States to: Sergei A. Grando, M.D., Ph.D., D.Sc., Department of Dermatology, University of California-Davis, 4860 Y Street, Suite 3400, Sacramento, CA 95817 USA. FAX: 916-734-6793. Equal Opportunity Employer.

**POSTDOCTORAL POSITION** available immediately to study cell cycle regulation in vascular endothelial cells. (See: *Circulation* **98**:2883–2890, 1998) Candidate should be highly motivated with a strong background in molecular biology. Send research interests, curriculum vitae, and three references to:

> Douglas W. Losordo, M.D. Cardiovascular Research St. Elizabeth's Medical Center 736 Cambridge Street Boston, MA 02135 FAX: 617-789-5029

# POSITIONS OPEN



### POSTDOCTORAL POSITION DEVELOPMENT OF MEMORY T CELL

Available immediately to investigate the development of cytotoxic T cell memory (**Opferman et al.**, 1999). A background in molecular biology or biochemistry is essential and an interest in immunology advantageous.

Please send curriculum vitae and names of three references to: Philip G. Ashton Rickardt, Ph.D., The University of Chicago, Gwen Knapp Center for Lupus and Immunology Research, 924 East 57th Street, Room R413A, Chicago, IL 60637-5420. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION in molecular neurobiology/pharmacology laboratory beginning November 1, 1999, is available for the study of molecular and cellular mechanisms of inhibitory synaptic function, and its modulation by central nervous system depressant agents. Recent publications include work on receptor mutagenesis (Nature 389:385-389; PNAS 95:6504-6509), biophysical analyses of receptor kinetics (Biophys. J. 73:2518-2526), and analysis of GABA receptor subunit knockout mice (PNAS 94:4143-4148). The individual must have experience in one or more of the following: genomic/ cDNA cloning, transgenics, gene targeting. Send statement of research experience, curriculum vitae, and three references to: Dr. Neil Harrison, Ph.D., c/o Anna Adamo, Box 50, LC-203, Weill Medical College of Cornell University, 525 East 68th Street, New York, NY 10021. E-mail: aia2001@ mail.med.cornell.edu.

**POSTDOCTORAL POSITIONS** available to study the mechanisms of DNA repair and transcription-coupled DNA repair in relation to aging, Cockayne and Werner's syndromes. We are also interested in oxidative DNA damage processing in nuclear and mitochondrial DNA. Position limited to M.D's and Ph.D's with less than five years of postdoctoral experience. Please send curriculum vitae and three letters of reference to: Vilhelm A. Bohr, M.D., Ph.D., Chief, Laboratory of Molecular Genetics, National Institute on Aging, National Institutes of Health, Box 1, 5600 Nathan Shock Drive, Baltimore, MD 21224-6825. FAX: 410-558-8157; email: vbohr@nih.gov. NIH is an Equal Opportunity Employer.

# POSTDOCTORAL FELLOW

Two Postdoctoral positions available immediately in the laboratory of **Dr. Aviva Symes**, Uniformed Services University of the Health Sciences, Bethesda, Maryland (e-mail: asymes@usuhs.mil). One project will examine cytokine-induced changes in astrocytes after traumatic brain injury. The second project will examine the role of SHP-2 in cytokine signaling. Candidates (Ph.D.-M.D.) should either have expertise in neuroanatomy and primary cell culture or molecular biology and signal transduction. Send curriculum vitae and names of three references to: Human Resources, PL#2990133, Henry M. Jackson Foundation, 1401 Rockville Pike, Suite 600, Rockville, MD 20852. E-mail: hr@hjf.org. Equal Opportunity Employer/Affirmative Action.

**POSTDOCTORAL RESEARCH POSITIONS** at Children's Hospital–Harvard Medical School in chemokine receptors and HIV pathogenesis. Several positions are available to examine posttranslational modifications in chemokine receptors, conformationally defined epitopes identified with single-chain antibody display, and identification of mimetopes using peptide phage display. Contact: Dr. Craig Gerard or Dr. Hyeryun Choe, e-mail: gerard\_c@gonzo.tch. harvard.edu or hchoe@mbcrr.harvard.edu. U.S. citizenship required; women and minorities are encouraged to apply. Announcements

# EUROPEAN OPPORTUNITIES



# The International Spinal Research Trust

SPINAL RESEARCH Request for proposals

**Spinal Research** is a grant giving charity (number 281325) based in the U.K. with the sole purpose of funding research aimed at resolving the non or partial functioning of the injured spinal cord.

The areas of ISRT research funding are identified in our Research Strategy (*Spinal Cord* (1996) 34:449–459), copies available on request. We invite proposals on the interplay of trophic, tropic and inhibitory influences on axonal regeneration with regard to promoting extensive regrowth and establishment of appropriate connections.

- Such proposals could include:
- role of embryonic guidance molecules in the adult spinal cord
- interactions of inhibition and growth-promoting activities
- guidance and connectivity of regenerating and sprouting axons

Unless strong arguments are presented for alternative models, studies are expected to be based in the *adult mammalian* spinal cord and employ appropriate lesioning and assessment methodologies.

Applicants should submit five copies of a letter of intent (c. two sides) summarising the proposed research and background of the laboratory. Five copies of an approximate budget and curriculum vitae of the Principal Investigator(s) should be appended.

Copies of our draft updated Research Strategy are available on request. Awards seldom exceed the level of a post-doctoral salary plus laboratory consumables over three years. Following a preliminary review, detailed proposals will be requested from a limited number of applicants. Letters should arrive by 23 July 99. No faxed or electronic letters will be accepted.

Address letters of intent to: ISRT, Unit 8a Bramley Business Centre, Station Road, Bramley, Guildford, Surrey GU5 0AZ, U.K. Tel: +44 (0)1483 898786 Fax: +44 (0)1483 898763 E-mail: research@isrthq.demon.co.uk



in association with St Catherine's College Department of Zoology

# University Lecturership in Zoology (Biodiversity)

Applications are invited for the above post, tenable from 1st October 1999, or as soon as possible thereafter. Stipend according to age, on the scale £16,655 to £31,010 per annum (under review). The successful candidate may be offered a fellowship at St Catherine's College, on the basis set out in the further particulars, in which case the combined university and college salary would be according to age on a scale up to £37,113 per annum.

Candidates will be expected to have an active research programme in biodiversity. A keen interest in undergraduate and postgraduate teaching is expected.

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 Paul Harvey, FRS, Department of Zoology, South Parks Road, Oxford OX1 3PS (Tel: +44(0)1865 271260; Fax: +44(0)1865 271249), to whom completed applications (eight typed copies, or one only from overseas candidates), containing a curriculum vitae, a list of publications and statement of research, and the names of three referees, should be sent by 5th July 1999. Candidates should contact their referees and ask them to send references to Professor Harvey by this closing date. Candidates will be notified if they are required for interview.

The University is an Equal Opportunities Employer.



# GORDON RESEARCH CONFERENCES

Conferences at the Frontiers of the Biological, Chemical and Physical Sciences

visit the frontiers of science at:

# WWW.GRC.URI.EDU

Our web site contains the complete schedule for the 1999 Conferences. Apply directly from the web! Check it out now, Conferences fill up fast!

# POSITIONS OPEN

**POSTDOCTORAL POSITION** is available at Baylor College of Medicine to study molecular mechanisms of mitotic chromosome condensation and segregation in eukaryotes. Research will involve budding yeast and cultured mammalian cells. The requirements of this position include a strong background in molecular biology and at least one of the following areas: cell biology, yeast genetics, or protein biochemistry. Please send curriculum vitae and names of three references to: Dr. Ilia Ouspenski, Department of Cell Biology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. E-mail: ilia@ bcm.tmc.edu. Baylor College of Medicine is an Equal Opportunity/Affinnative Action/Equal Access Employer.

# POSTDOCTORAL POSITION

A Postdoctoral position is available immediately to characterize the three-dimensional structure of the human Epstein-Barr virus receptor ligand binding domain. Candidates must be highly motivated and must have experience in NMR spectroscopy. Please send your curriculum vitae including a brief description of research experience, names, e-mail addresses, and telephone numbers of three references to: Dr. Michael Overduin, C-236, University of Colorado Health Sciences Center, 4200 East 9th Avenue, Denver, CO 80262. For more information, please visit our website: biomol.uchsc.edu.

Two NIH-funded **POSTDOCTORAL RE-SEARCH POSITIONS** are available immediately to study programmed cell death of spermatogonial stem cells and tubulin isoforms during sperm nuclear shaping and tail development. Ph.D. and/or M.D. degree with strong background in cell biology, molecular biology, and/or biochemistry. Send curriculum vitae and names of three references to: Laura L. Tres, Department of Cell Biology and Anatomical Sciences, City University of New York Medical School, 138th Street and Convent Avenue, J-903, New York, NY 10031. An Equal Opportunity/Affirmative Action Employer.

# POSITIONS OPEN

POSTDOCTORAL POSITIONS THE CLEVELAND CLINIC FOUNDATION Department of Molecular Cardiology

Two Postdoctoral positions are available to study the structure-function and/or physiology via transgenic models of adrenergic receptors ( $\beta_2$ - and  $\alpha_1$ ). Candidates should have a background in either pharmacology, molecular biology, protein chemistry, or mouse physiology. One position is part of an NIHfunded training grant in cardiovascular studies (*U.S. citizenship or permanent residence required*). Exceptional applicants may be awarded a higher-salaried Research Institute Fellowship. Please submit a curriculum vitae and names of references to: **Dianne M. Perez, NB5, The Lerner Research Institute, The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195.** 

**POSTDOCTORAL RESEARCH FELLOW** in molecular pharmacology. Massachusetts General Hospital. A position is available in the Department of Anesthesia and Critical Care to study interactions between clinical and novel anesthetics and ligand-gated ion channels. Part of an NIH program grant with other Harvard Investigators. M.D. or Ph.D. and electrophysiology experience required. Send curriculum vitae and names of two references to: Dr. Stuart A. Forman, M.D.-Ph.D., Department of Anesthesia and Critical Care, CLN-3, Massachusetts General Hospital, Boston, MA 02114. E-mail: forman@ helix.mgh.harvard.edu. Equal Opportunity Employer.

**POSTDOCTORAL FELLOWSHIP** opening in molecular biology/biochemistry. Project includes protein purification, molecular cloning of the gene of the purified protein, and functional studies of the protein. Candidates should have experience in both protein purification and molecular biology. Possibility of long-term position exists. Salary, benefits competitive. Send cover letter, résumé, and names of three references to: Dr. Lau, Loma Linda University, P.O. Box 7210, Loma Linda, CA 92354.

# POSITIONS OPEN

CYCLIC NUCLEOTIDE-GATED CHANNELS

**POSTDOCTORAL POSITION** available immediately for a Cellular and/or Molecular Neurophysiologist to study the role of cyclic nucleotide-gated channels in neurons of the central nervous system. Candidate should have experience in intracellular or patch clamp recording in brain slices, or confocal imaging (*Curr. Opin. Neurobiol.* 7:404). Send curriculum vitae with three references to: **Frank Zufall, Ph.D.**, **Department of Anatomy and Neurobiology**, **University of Maryland, 685 West Baltimore, Street, Baltimore, MD 21201. E-mail: fzufa001@ umaryland.edu**.

**POSTDOCTORAL POSITION** available to study a variety of mutant recombinant hemoglobins focusing on subunit and long-range interactions. Recent publications include *Trends in Biochemical Sciences* **24**:211, 1999; *J. Biol. Chem.* **273**:35032, 1998; *Blood* **90**:4620, 1997. Candidates should be knowledgeable in protein and molecular biology techniques. Send curriculum vitae and names of three references to: Dr. James M. Manning, Department of Biology, Mugar Building **414**, Northeastern University, 360 Huntington Avenue, Boston, MA 02115. FAX: **617**-373-4496; e-mail: jmanning@lynx.neu.edu. *Northeastern University is an Equal Opportunity Employer.* 

**POSTDOCTORAL POSITION** available to study the role of protein phosphorylation and protein-protein interactions in mediating effects of insulin/growth factors on gene expression (*JBC* 273: 6482, 1998; *JBC* 274:17179, 1999; *JBC* 274: 17184, 1999) in cell culture and transgenic models. Experience with molecular and cellular biology required. Please send curriculum vitae and names, telephones, and e-mail addresses for three references to: **Terry Unterman, M.D., University of Illinois at Chicago/VA West Side, 820 South Damen Avenue, Chicago, IL 60612. FAX: 312-455-5877; e-mail: unterman@uic.edu.** 

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Science Professional Network can help you navigate through the myriad career options with its fast, searchable jobs database and other useful career information.

Science Professional Network www.scienceonline.org Click on Science Careers and 450 undergraduate students. Leading research themes are functional materials, fluid dynamics, and plasma and radiation physics. The Department invites applications for the position of **Full professor of experimental** 

# low-temperature plasma physics

# Profile

The department has two chairs on experimental plasma physics, one of which now has to be reinstalled. The two chairs, complementary but interacting, are expected to cover the full breadth of homogeneous plasma physics as well as that of heterogeneous (plasma/wall) systems. The research program should address both fundamental and applied aspects. This encompasses on the fundamental side:

non-equilibrium phenomena, transport properties, and reaction kinetics; and applications such as: deposition of functional layers and nanostructural materials, particle and light sources, surface modification, and chemical conversion.

Candidates should have a high-level track record of research, teaching and fund raising in major parts of the above areas. The successful candidate is expected to be an inspiring leader, capable of launching new initiatives to keep the group at the forefront of the international community in the field. Participation in the managerial tasks of the Department will be requested.

Eindhoven

University of

Technology -

Department

of Applied

Physics

Appointment and salary The function is a tenure-track position, with a salary according to the normal standards for a full professorship of the Dutch Universities, depending on experience and track record. The gross monthly salary is NLG 14.738 maximum for a full-time position. When applicable, a part-time fulfilment of the position can be discussed.

### Information

Further information on the contents of the position can be obtained from the chairman of the selection committee: Prof.dr. M.J. van der Wiel (ph: +31.40.247.4321; e-mail: m.j.van.der.wiel@tue.nl). Also, anyone who wishes to draw the attention of the selection committee to suitable candidates is kindly asked to contact the chairman.

### Application

Application letters with CV and list of publications should be directed to: Dr.ir. V.A.M. Brabers, Managing Director of the Department of Applied Physics Eindhoven University of Technology, P.O. Box 513, 5600 MB Eindhoven, The Netherlands.

# POSITIONS OPEN

# POSTDOCTORAL POSITION IN CELL CYCLE

The Cell and Molecular Biology Group (LS-4) in the Life Sciences Division at Los Alamos National Laboratory is seeking a Postdoctoral candidate to study the mechanisms of radiation-induced Gl phase cell cycle arrest in human fibroblasts. The NIH-funded project focuses on (1) the influence of cell adhesion on radiation arrest; and (2) the effect of TGF-/beta 1 and reactive oxygen species on radiation arrest. Experience in cell culture, and molecular and cell biological techniques is required. Experience in fields of cell adhesion, cell cycle, radiation effects, and/or DNA damage is desirable.

A Ph.D. completed within the last three years or soon to be completed is required. Current starting salaries range from \$39,120 to \$42,240. Further details about the Postdoctoral Program may be found at website: http://www.hr.lanl.gov/postdoc/. See Postdoc Job #PD994992 for submission requirements. Los Alamos National Laboratory is operated by the University of California for the U.S. Department of Energy. Affirmative Action/Equal Opportunity Employer.

### POSTDOCTORAL FELLOWSHIP POSITIONS PAIN RESEARCH

The University of Texas M. D. Anderson Cancer Center, Division of Anesthesiology, has openings in September 1999 for Postdoctoral Fellowship positions in molecular mechanisms of pain and opioid tolerance. Ph.D. or M.D. degree required. Strong interactions within multidisciplinary pain research group employing a broad range of techniques. Please send inquiries, curriculum vitae, and names of three references to:

Howard B. Gutstein, M.D. Director of Research Division of Anesthesiology and Critical Care University of Texas M. D. Anderson Cancer Center 1515 Holcombe Boulevard, Box 42 Houston, TX 77030

Equal Employment Opportunity Employer/smoke-free environment.

# POSTDOCTORAL FELLOW

The Department of Orthopaedic Surgery at the University of California, San Francisco has a Postdoctoral position available for the study of minimally invasive techniques for in vivo intervertebral disc repair. The work will be focused to achieve better understanding of the mechanical and biologic factors important for maintenance and restoration of cellular, morphological, and structural features of disc tissues using animal models. Candidates should have background in molecular biology/tissue engineering. Experience with tissue culture and mouse models preferred. Good verbal and writing skills are required. Send curriculum vitae and names of references to: Dr. J. C. Lotz, Department of Orthopaedic Surgery, University of California, San Francisco, 533 Parnassus Avenue, San Francisco, CA 94143-0514. FAX: 415-476-7881; e-mail: jlotz@itsa.ucsf.edu.

### POSTDOCTORAL RESEARCH FELLOW POSITION UCLA Infectious Disease Division AIDS Institute

Two positions are available in a new cellular immunology laboratory studying cellular immune responses against HIV-infection. Qualified M.D. and/or Ph.D. applicants with an interest in the areas of cellular immunology/retrovirology are sought. Experience with chromium release cytotoxic assays, cellular proliferation assays, flow cytometry, tissue culture, HIV-1 isolation and propagation, and basic molecular biology are desirable. Interested candidates forward curriculum vitae and three references to: **Otto Yang**, **M.D.**, **37-121 CHS**, Los Angeles, CA 90095-**1688**. E-mail: Iduncan@med1.medsch.ucla.edu. POSITIONS OPEN



### POSTDOCTORAL RESEARCH ASSOCIATE MOLECULAR SIGNALING

Positions are available to study G-protein control of differentiation (Craig C. Malbon) and G-protein beta-subunit biology (Hsien-yu Wang) using microin jection, transgenic mouse technology, and mutagenesis techniques (website: www.pharm/sunysb.edu). Ph.D. and experience in molecular biology/cell signaling required. Send curriculum vitae and letters of reference to: C. Malbon, Molecular Pharmacology, and H.-y. Wang, Physiology and Biophysics, University Medical Center, SUNY Stony Brook, NY 11794-8651. FAX: 516-444-7696; e-mail: brockner@pharm.som.sunysb.edu. Equal Opportunity Employer.

**POSTDOCTORAL POSITIONS** are available in the Department of Anatomy and Cell Biology at Columbia University, to be supported by an NIH Training Grant for research in simple vertebrate and invertebrate systems. Positions are also available to study the role of regulated proteolysis in Dictyostelium development, organelle motility, establishment of cell polarity, molecular mechanism of hormone secretions, and cytoskeletal dynamics, as well as the molecular mechanisms underlying development of the nervous system and heart. Training Grant candidates must be citizens or noncitizen nationals of the United States or must have been lawfully admitted for permanent residence. All candi-dates must have a Ph.D. or M.D. Interested candidates must send a cover letter with area of interest, curriculum vitae, and three references to: Columbia University, Anatomy and Cell Biology, Attn: Postdoctoral Slots, 630 West 168th Street, New York, NY 10032. We take Affirmative Action toward Equal Employment Opportunity. Members of undercepresented minorities are specifically encouraged to apply.

### POSTDOCTORAL POSITIONS COUPLING OF RECOMBINATION AND REPLICATION

Positions are available immediately to study mechanisms and control of chromosomal replication coupled to recombination. We use biochemical, biophysical, and genetic analyses to examine cellular proteins that initiate DNA synthesis during transposition, repair, and homologous recombination, including signal transduction mechanisms that trigger these processes. A strong background in molecular genetics, structural biochemistry, or enzymology is preferred. Applicants should send a curriculum vitae and three letters of reference to: Dr. Hiroshi Nakai, Department of Biochemistry and Molecular Biology, Georgetown University Medical Center, 331 Basic Science, 3900 Reservoir Road N.W., Washington, DC 20007. E-mail: nakai@bc.georgetown. edu; website: http://nrr.georgetown.edu.

# POSTDOCTORAL POSITIONS AVAILABLE

Two (2) Postdoctoral positions for qualified individuals are available immediately to study molecular mechanisms of brain injury and invasion as applicable to the central nervous system regeneration, trauma, and brain tumors areas. Candidates must possess previous experience in cell and molecular biology, a strong motivation, and interest in biological research. Candidates should possess a Ph.D. in molecular biol-ogy. Salary is highly competitive in state-of-the-art facilities and positions are intended to be for at least two years, with possibility of an extension depending on productivity record. If interested, please contact and/or send résumé to: Dario Marchetti, Ph.D., The University of Texas-Houston, Health Science Center, Medical School, Department of Neurosurgery, MSB 7.136, Houston, TX 77030. Tele-phone: 713-500-6137; FAX: 713-500-7787; email: dmarchet@heart.med.uth.tmc.edu.

# POSITIONS OPEN

# POSTDOCTORAL POSITIONS HARVARD MEDICAL SCHOOL

Positions available to study the viral and host mech-anisms in HIV-1 and HTLV-1 infection and strategies for the gene therapy of AIDS and adult T-cell leukemia (ATL), respectively. Projects include the use of our 15 billion–member human sFv-phage display library for the isolation and in vitro testing of intracellular antibodies (Gene Therapy 4:11, 1997) as discovery tools to delineate mechanisms of viral pathogenesis. Moloney and lentiviral vectors are used for in vivo delivery of intracellular antibodies to evaluate their use as gene therapeutics for AIDS (Mol. Med. 2:96, 1997; Human Gene Therapy 10:1453, 1999) and ATL (Virology 237:209, 1997; Gene Therapy 5:635, 1998). Recent Ph.D. and experience in molecular virology/ immunology are required. Send curriculum vitae, brief description of research experience, and names of three references to: Dr. Wayne Marasco, Dana-Farber Cancer Institute, JF 824, 44 Binney Street, Boston, MA 02115. FAX: 617-632-3889. Equal Opportunity Employer.

### RESEARCH INSTRUCTOR, RESEARCH ASSOCIATE, AND POSTDOCTORAL POSITIONS The University of Texas M. D. Anderson Cancer Center Department of Neurosurgery

Research Instructor, Research Associate, and Postdoctoral positions for research in molecular, cellular biology, and extracellular matrix. Ph.D. or M.D. Ph.D. and experience with brain tumors preferred. Send curriculum vitae and three references to:

Jasti Rao, Ph.D. Chief, Section of Invasive Programs The University of Texas M. D. Anderson Cancer Center Department of Neurosurgery—Box 064 1515 Holcombe Boulevard Houston, TX 77030

Minority and female applicants are strongly encouraged to apply. Equal Opportunity Employment Employer. Smoke-free environment.

POSTDOCTORAL POSITION available now to use electrophysiological methods to study the nervous system of C. elegans. Applicants should have a Ph.D. with a strong background in electrophysiological techniques and the desire to combine this with the extraordinary genetic resources available in this organism. Potential projects available in this vigorous and established laboratory include potassium channel function and calcium signaling in vivo and potassium channel structure/function. E-mail for more information to e-mail: jht@genetics.washington.edu. Visit the laboratory World Wide Web site at website: http://mendel.genetics.washington.edu/~lab. E-mail or send curriculum vitae, research summary, and three references to: James H. Thomas, Department of Genetics, Box 357360, University of Washington, Seattle, WA 98195.

**POSTDOCTORAL POSITION** is available immediately for research using the exciting and powerful technology of combinatorial peptide synthesis for the design and engineering of membrane proteins. Synthesis skills are not necessary. Send curriculum vitae and names of three references to: William C. Wimley, Ph.D., Biochemistry SL43, Tulane University Medical Center, New Orleans, LA 70112-2669. E-mail: wwimley@mailhost.tcs.tulane.edu. Position will be open until a qualified applicant is identified. Equal Opportunity Institution.

**POSTDOCTORAL** projects in T cell therapy of brain microtumor (*Immunol. Today* 19:17, 1998). Candidate should be experienced in establishing and engineering rat T cell lines. To apply, please describe reason for your interest, relevant experience, and list of English-language publications. Available immediately. Apply to: Dr. L. Lampson, Harvard Institutes of Medicine, 77 Avenue Louis Pasteur, Boston, MA 02115.

# POSITIONS OPEN

# POSTDOCTORAL FELLOWSHIP

A Postdoctoral position is available to investigate the mechanism and consequences of Ty element retrotransposition in *Saccharomyces cerevisiae*. We are especially interested in host genes that modulate Ty transposition. These mobile genetic elements are structurally and functionally related to retroviruses and are widely dispersed in nature.

The position is part of the Division of Basic Sciences of the National Cancer Institute and is located at the Frederick Cancer Research and Development Center in Frederick, Maryland. Salary range for this position is \$29,000 to \$32,000.

If interested, please send your curriculum vitae and names of three references to: Dr. David Garfinkel, Building 539, Room 152J, P.O. Box B, NCI-Frederick Cancer Research and Development Center, Frederick, MD 21702. Your curriculum vitae and names of references also may be sent by FAX: 301-846-6911; e-mail: garfinke@mail.ncifcrf.gov.

The National Institutes of Health is an Equal Opportunity Employer and encourages all qualified women and minorities to apply. Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, marital status, physical or mental disabiliy, age, sexual orientation, or membership or nonmembership in an employee organization.

### POSTDOCTORAL FELLOWS AND RESEARCH FACULTY MARINE AND ENVIRONMENTAL SCIENCE

### Wrigley Institute for Environmental Studies The University of Southern California

Catalina Island: (1) Two Postdoctoral Fellows in any area of marine and environmental science, and (2) Education Officer responsible for coordination of undergraduate programs.

University Park Campus: Postdoctoral or Research Scientists (level open) in (1) ocean biogeochemistry (with **Dr. Douglas Capone** or **Dr. Anthony Michaels**); (2) marine animal physiology (**Dr. Donal Manahan**); (3) environmental economics and policy (**Dr. Judith Kildow** and others).

Postdoctoral Fellowships funded for one to two years. Research faculty positions available at any level. Details and application information available at **website:** http://wrigley.usc.edu. Send questions to email: close@usc.edu. Application deadline: July 23, 1999.

A POSTDOCTORAL POSITION is available for a Cell/Molecular Biologist. Non-grant-funded with benefits and opportunity for salary supplement, adjunct faculty appointment, and limited teaching. This position provides a unique opportunity in a developing program of excellence and the opportunity to develop an imaginative, externally funded research program. A Ph.D. degree and experience in cell signaling are required. Expertise in calcium-imaging and single cell analyses is highly desirable. Candidates should send a letter addressing their research accom-plishments and future research plans, curriculum vitae, and arrange for at least three letters of reference to: William B. Rhoten, Ph.D., Chairman, Department of Anatomy, Cell, and Neurobiology, Mar-shall University School of Medicine, 1542 Spring Valley Drive, Huntington, WV 25704-9388. E-mail: rhoten@marshall.edu. Equal Employment Opportunity/Affirmative Action/ADA.

**POSTDOCTORAL POSITION** on type III protein secretion in bacteria. A Postdoctoral position is available to study the mechanism of type III protein secretion in *Pseudomonas syringae*. The successful candidate will characterize a novel bacterial surface appendage assembled by the *P. syringae* type III protein secretion system and determine the role of this appendage in gene regulation and protein delivery. Background in microbiology or molecular biology is required. Please send a curriculum vitae and three references to: **Dr. Sheng Yang He, Plant Research Laboratory, Michigan State University, East Lansing, MI 48824.** Michigan State University is an Equal Opportunity/ Affirmative Action Employer.

# POSITIONS OPEN

### INTERESTED IN CLINICAL OR POSTDOCTORAL RESEARCH TRAINING?

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POSTDOCTORAL POSITION in cell and molecular biology. The Cell Biochemistry Section at the Hormel Institute invites applications from individuals with M.D. or Ph.D. degree in physiology for a Postdoctoral position. The ideal candidate's major interest is in the molecular and cellular biology of cutaneous wound repair and proliferative skin diseases. This research will primarily involve determination of growth factor effects on cell growth and wound repair using established cellular and animal models. Send a curric ulum vitae, a description of research experience, and letters from three referees to: Dr. Zoltan Kiss, The Hormel Institute, University of Minnesota, 801 16th Avenue N.E., Austin, MN 55912. FAX: 507-437-9606. The University of Minnesota is committed to the policy that all persons shall have Equal Access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation

# FELLOWSHIP

### SMOOTH MUSCLE BIOLOGISTS CALL FOR PROPOSALS

The LAM Foundation is offering POSTDOC-TORAL FELLOWSHIPS for the study of the cellular and molecular basis of the abnormal smooth muscle proliferation that occurs in the disease Lymphangiomyomatosis (LAM). Fellowship Awards provide a maximum of \$35,000 per year renewable for up to two additional years. Pilot Project Awards of up to \$25,000 are available for the initiation of innovative research projects. Candidates must have at least two years of experience, an M.D., Ph.D., or equivalent degree, and perform the work in a laboratory with established expertise in smooth muscle biology or the genetics of tuberous sclerosis. Examples of competitive proposals include those that focus on the genetic regulation of smooth muscle growth or the development of a smooth muscle cell line that is representative of the LAM lesion. Mechanistic, hypothesis-driven approaches of all types are welcomed. Formalinfixed LAM tissues, dispersed LAM lung cells, genetic probes, and other reagents are available. Deadline is October 1, 1999, and May 1, 2000. Contact: The LAM Foundation, 10105 Beacon Hills Drive, Cincinnati, OH 45241. E-mail: lam@one.net; website: http://lam.uc.edu.

# EUROPEAN OPPORTUNITY

### POSTDOCTORAL POSITION IMMUNOGENETICS OF PSORIASIS UNIVERSITY OF ICELAND

Available immediately for three years. Applicants must be of European Union (EU) nationality. The Postdoctoral Fellow will be working on a collaborative EU-funded project (TMR) aiming at elucidating the genetic and immunological mechanisms operating in psoriasis. Experience in cell biology or molecular immunology is required. Competence in keratin or MHC biology is also desirable but not essential. The appointment is for three years in Reykjavík, including visits to partner laboratories in London and Milan. For further information contact: **Professor Helgi Valdimarsson, Department of Immunology, National University Hospital, Landspítalinn, 101 Reykjavík, Iceland. Telephone: +354-560-1960; FAX: +354-560-1943; e-mail: helgiv@rsp.is.** 

# POSITIONS OPEN

### UCLA CANCER GENE MEDICINE TRAINING PROGRAM

This Program will train M.D. and Ph.D. Postdoctoral Scientists in clinical and basic research in cancer gene medicine. *The Program is open to U.S. citizens and permanent residents*. Awards will be made normally for two years.

Further information and application forms are at website: http://genemed.ucla.edu; e-mail: eleon@ surgery.medsch.ucla.edu.







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