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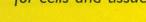
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CONTINUED ON PAGE 1552

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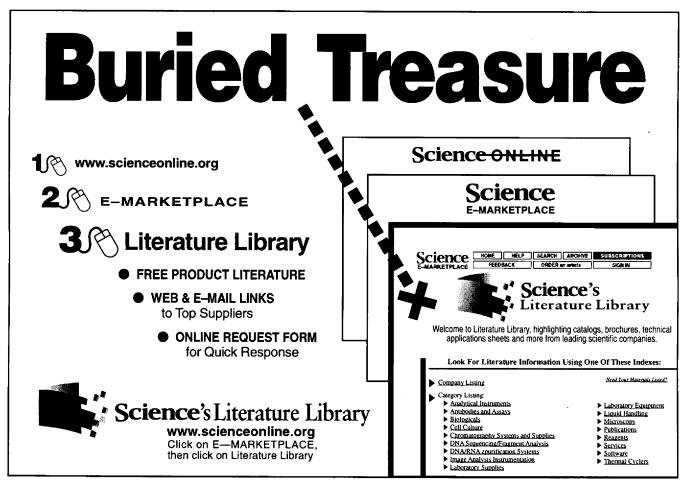
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## Announcement Regarding Entrustment of Industrial Science and Technology Research and Development Projects (Advance Notice)

The New Energy and Industrial Technology Development Organization (NEDO) is planning to launch eleven (11) new research and development projects in FY1999 based on funds provided by the Ministry of International Trade and Industry (MITI) of Japan. (An official call for applications to participate in the above projects is based on the condition that the government budget for FY1999 now under discussion will be approved). These new research and development projects are as follows: (1) Ultra High-Density Electronics System Integration, (2) Next Generation Ferroelectric Memory, (3) Environmentally Compatible Propulsion System for Next Generation Supersonic Transport Research Program, (4) Behavior-Based Human Living Environment Creation Technology, (5) Innovative Casting Simulation, (6) Glycocluster Controlling Biomolecules, (7) Innovative Lightweight Structure Planning, (8) Petrol Refining System Reliability Assessment, (9) Petrol Refining Pollutant Reduction, (10) Utilization of Electronic Devices in Space and Other Extreme Environments and (11) Evolutionary Molecular Engineering. NEDO is planning to invite applications from organizations interested in participating in the above projects. It is planned that a public announcement calling for applications will be made after mid-March 1999. Details regarding application procedures, project outlines and the date and the place of explanatory meetings will be posted on NEDO's homepage (http://www.nedo.go.jp) and announced in Tusanshou Koho after mid-March 1999.

Applied Technology Department
Fax: 81-3-3987-9396
New Energy and Industrial Technology
Development Organization
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Higashi-Ikebukuro, Toshima-ku,
Tokyo, Japan



The Greifswald-Rostock BioRegio, on Germany's Baltic coast, has set up the Biotechnikum Greifswald to incubate start-up biotechnology companies. Incubators represent a significant contribution of BioRegios to the growth of Germany's biotechnology industry.

he German government's three-year-old BioRegio program has made spectacular strides in stimulating the creation of biotechnology companies and the employment of life scientists.

ios Boost

Late in 1995, the German government decided that it wanted to take part in the global biotechnology industry. It faced a huge challenge. The United States had established clear dominance in the industry, followed by the United Kingdom. In the effort to catch up, Germany's Federal Ministry of Education and Research hit on a bold approach: a regional contest to stimulate academic and commercial interest in biotechnology projects. Winning "BioRegios" would receive DM50 million in federal funds to set up research projects and create environments to stimulate the formation of biotechnology-based companies.

When the government announced the results a year later, it turned out that just about everyone had won. Beyond the three winning BioRegios — Munich, Rhineland, and Rhine-Neckar — 14 other regions had created the infrastructure necessary to spark biotechnology businesses. Academic departments for the first time showed interest in collaborating with industry. Individual life scientists saw opportunities to commercialize their research, with the help of incubators located near universities. Banks and other investors realized the value of investing in biotechnology. And a public that had originally expressed broad suspicion of biotechnology grew to accept at least some of its virtues.

Those changes have resulted in an explosion of new biotechnology companies throughout Germany that shows no signs of stopping. For example, the BioRegio of Greifswald-Rostock, in northern former East Germany, oversaw the formation of seven new companies in 1996–1997, and seven more last year. The new companies average ten employees apiece, and most are growing. Here, representatives of a BioRegio, a "resource transfer agency" that helps BioRegios perform their tasks, and two companies helped by BioRegios outline how the system creates employment.

## Mainz BioRegio IMG Innovations-Management GmbH GENterprise Biotechnologie mbH Biosery GmbH

**MAINZ:** "At present, we are working mostly with scientists employed in the University of Mainz," says Friederike Hammar, representative of the Mainz BioRegio in its contact office at the University of Mainz. "But there is a growing need for life scientists here in the Rhineland-Palatinate region from beyond the university."

Hammar, a biochemist with a Ph.D. in immunology, coordinates the Mainz BioRegio's activities at the University of Mainz. These include supporting research with commercial promise, financing conferences, and helping would-be entrepreneurs to learn the basics of running companies, such as tax laws and basic management methods. For this purpose, the universities of Mainz and Kaiserslauten offer a special course, funded by local government. In both institutions, 30 scientists with promising business ideas are chosen for the course each year. "We help scientists to commercialize the results of their research," she explains. "Scientists can get expert help in filing for patents, and federal help in winning research grants."

As the promotion of biotechnological entrepreneurialism in the region succeeds, it sparks new needs. "We have practical aids like a Web page," Hammar explains. "Soon, we'll have a biotechnology handbook listing all research groups and biotech companies in the region. And we need more incubators for start-up companies." The BioRegio is also turning its attention to finding scientists to

staff the start-ups. The organization does not restrict itself to the local region or individuals of German nationality. "We have a lot of interest in hiring scientists from the United States," says Hammar, "because they have experience of both research and entrepreneurship."

**MAINZ:** The BioRegio program's success has rested in large measure on the ability to provide new companies with significant information and resources. Many BioRegios have relied on resource transfer agencies to help with that work. IMG Innovations-Management GmbH provides a typical example.

"We work on three tasks," explains Joachim Dörr, a Ph.D. chemist who heads IMG's biotechnology department. "We find talented young scientists and help them to found their own companies. We look for premises and labs for these companies. And we search for financing for them." Publicity also figures on IMG's list of tasks. "We arrange for small companies to participate at meetings, with financing from the regional government," says Dörr. "And we organize round tables in which the companies can talk about their skills. The round tables help young scientists with ideas see how forming their own companies is done."

The enterprise is working effectively. IMG has helped launch three companies already this year, and has another launch scheduled for June. It also helps established companies to expand into fresh areas of research or new product lines. "We aim to find collaborations between companies in need of scientists and universities, research institutes, or contract research companies, explains Dörr.

In addition to helping create jobs for life scientists, IMG has its own staffing needs. While not hiring at present, Dörr hopes soon to find a biochemist with the ability to write well and some experience in marketing. "We are on both sides," he points out. "We have to think scientifically and economically."

**MAINZ:** GENterprise Biotechnologie mbH typifies one of the Mainz BioRegio's success stories. Formed last April by five molecular biologists and an economist from the University of Mainz, it focuses on genomics research and products. "The BioRegio program stimulated and accelerated our wish to form a company, and created favorable conditions in which to do it," says Erwin R. Schmidt, a professor of molecular genetics at the university who cofounded GENterprise and works there part-time.

The company is expanding at a rapid rate. "We're preparing a microbial genome to be sequenced, and an EST project on a plant." says Schmidt. "We're also developing techniques to detect transgenics in foodstuffs. We're involved in species diagnosis, and constructing molecular probes that we plan to patent. We do custom sequencing and cloning, and some bioinformat-



ics. We have big pharmaceutical companies among our customers. And we are already making a profit."

That pace of expansion translates into a demand for more life scientists. "We are looking mainly for people trained in molecular genetics, bioinformatics, and nucleic acid research," says Schmidt. In general, the company wants newly minted Ph.D's as bench scientists, although it does not exclude hiring scientists with industrial experience. GENterprise also needs more senior scientists as project leaders. "We expect to hire one senior scientist per project," Schmidt explains. "They don't have to be German. We are used to international

working teams. It can be beneficial to have people from all over."

As a small company, GENterprise has one disadvantage in the job market. "There is strong competition for the really expert people, especially in genomics," reports Schmidt. "The betterestablished biotechnology companies offer higher salaries. But we offer the motivation of becoming a part-owner of the company."

**ROSTOCK:** Hans-Werner Heinrich had a tougher introduction to the commercial world than most life scientists. He lost his job as a virology professor in the East German Academy of Agricultural Research in December 1991, when the Academy was closed down following German reunification. The following month, Heinrich and a colleague started up Bioserv GmbH, a five-person contract research company that specializes in cell diagnostics. The federal government provided some support for the company's research in cell diagnostics, "but we needed more capital" recalls Heinrich.

The BioRegio competition provided the chance. "The Greifswald-Rostock BioRegio took part in the competition knowing that it had no chance to win. It is one of Germany's poorest regions with the highest unemployment," says Heinrich. "But we used the opportunity to be promoted by a BioRegio. We have the goal of becoming an international company."

The connection with the BioRegio helped Bioserv to garner DM3 million in private financing and another DM3 million from a bank. The extra capital has enabled the company to move into vaccine development while continuing its expertise in cell diagnostics. Seeking more capital, the company plans to go public in about 2002.

Having grown to 30 employees, Bioserv is seeking more. "At present, we employ chemists, biologists, veterinarians, and doctors," says Heinrich. "That's what we will need in the future. We especially want experts in biochemistry and cell biology. We need both senior and junior people. And by 2000–2001 we will need people with industrial experience, to make diagnostics for the global market."

Plainly, the BioRegios are succeeding in stimulating a "founding culture" among biotechnologists. As a result, Germany is emerging as a major player in the global biotechnology business.

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## UNIVERSITY OF MISSOURI, COLUMBIA

# NEW INITIATIAVES IN REPRODUCTIVE AND DEVELOPEMENTAL BIOLOGY AND GENETICS

The University of Missouri, Columbia is seeking applications ultimately for six positions in disciplines related to Reproductive Biology. The positions are to be filled in the next two years.

## Main goal:

The main goal of this cooperative endeavor is to provide insight into basic physiological, pathophysiological, cellular and molecular mechanisms regulating reproductive processes in the female. The faculty will join an interdepartmental group representing eight departments and four colleges. Interactions of new and established faculty will be encouraged. Candidates should demonstrate the ability to conduct a dynamic, externally funded research program and participate in appropriate teaching or clinical duties. Preference will be given to those with postdoctoral experience. Applications should be submitted to the office listed below by April 15, 1999, or until suitable candidates are identified.

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Two positions listed below will be appointed in the Department of Obstetrics and Gynecology in the School of Medicine. These investigators will explore uterine and ovarian factors that limit fertility in humans and impair human health. The majority of effort will be devoted to research. The scope of these positions is complementary to the expertise and interests of the current faculty in the Department of Obstetrics and Gynecology.

- 1. Physician scientist (M.D. or M.D./Ph.D.) with interests in basic endometrial biology, which might include implantation, normal and abnormal uterine environment during pregnancy, placental pathophysiology and abnormal uterine growth (i.e., endometriosis, leiomyomas and uterine cancer). (Assistant, Associate or Full Professor)
- 2. Physician scientist (M.D. or M.D./Ph.D.) with interests in basic mechanisms regulating ovarian function, ovulation, and fertilization including abnormal ovarian function (polycystic ovarian disease and oncology). (Assistant, Associate or Full Professor)

# Four Positions within the Reproductive Physiology Group

The following four positions will provide expertise in basic molecular genetics for understanding and manipulating gene function of reproductive processes. Appointments will be 80% research and 20% teaching in the candidate's area of expertise, and appointees will be expected to contribute to the mission of the Colleges of Agriculture, Medicine and Veterinary Medicine and the University Food for the 21st Century Program.

- 3. Molecular Biologist (Ph.D.) with interests in biochemical endocrinology and signal transduction. (Assistant Professor)
- 4. Embryologist/developmental biologist (Ph.D.) with interests in deletion/addition of genes to livestock species. (Assistant Professor)
- 5. Cell biologist/developmental biologist (Ph.D.) with interests in chromatin reorganization, nuclear reprogramming and early embryo development. (Assistant Professor)
- 6. Molecular biologist/geneticist (Ph.D.) with interests in comparative gene mapping and gene function as these relate to the interface of nutrition and reproduction. (Assistant Professor)

Salaries will be competitive. Start up funds and technical support will be provided for three years, at which time recruited faculty will be expected to have obtained external support for their programs.

## Send Applications to . . .

Applications including a CV and brief research proposal should be addressed to: Dr. H. Allen Garverick, 163 Animal Science Research Center, University of Missouri, Columbia, MO 65211-5300

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Automate/run high-throughput screens for multiple therapeutic targets. Experience with workstations, automation and computer applications, experience in cell biology, biochemistry or related biological disciplines with 2-4 years in an academic, clinical or pharmaceutical environment. Code: PRCC69MB

## Haystack Process Manager, Ph.D.

Manage the Haystack system team within the compound management group. Responsible for keeping the inventory, ordering and scheduling production activities. Experience in compound management, a clear understanding of HTS and its supply needs and familiarity with large storing and retrieving units. Degree in Chemistry or Physical Science, 10-15 years of relevant industrial experience, familiarity with IT needs and requirements and good supervisory scheduling and communication skills. Code: PRCC69HH

# Haystack System Engineer, B.S./M.S.

Responsibility for the mechanical/hardware component of Haystack and all integrated peripherals such as Haywain and Rosys. Degree in Mechanical or Electrical Engineering and 5-7 years of Industrial experience, familiarity with complex automated systems, optical, fluidic and electromechanical assemblies to provide system operational and maintenance training and support, validation and maintenance of operational new modules, subsystems and systems. Code: PRCC69SF

Bristol-Myers Squibb uses resume-scanning technology. Please submit on plain white bond paper, using standard type and fonts (no italics, graphics or staples please) with Code # to:

Bristol-Myers Squibb Company Pharmaceutical Research Institute P.O. Box 5101, 5 Research Parkway Wallingford, CT 06492 FAX: 203-677-7762

www.bms.com

# Enter the next generation of pharmaceutical discovery.

At Schering-Plough Research Institute, scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. Our continuing growth provides the following opportunities at our Lafayette research campus. Lafayette, located in picturesque, rural Northwestern New Jersey, is just one-hour from the New York City area. Join us now as we create the future of pharmaceutical discovery.

## **GENERAL TOXICOLOGY**

## Principal Scientist/Study Director-Toxicology

Requires Doctoral and Postdoctoral level training in a scientific specialty related to toxicology, and 5-10 years' experience in preclinical drug safety, including prior project management and regulatory submissions in the pharmaceutical industry. Will direct internal GLP studies in general toxicology, monitor studies at outside contract laboratories, and manage preclinical development programs. (Job Code: XHXJPADD8141)

## Senior Scientist/Study Director-Toxicology

Requires Doctoral and Postdoctoral level training in a scientific specialty related to toxicology. Immunology, molecular biology and/or biochemistry background preferred. Pharmaceutical industry experience a plus. Will design and direct GLP toxicology studies for regulatory submissions. (Job Code: XHXJPADD8139)

## Associate Scientist-Toxicology

Requires a BS degree in pharmacy, biology or related discipline. Prior experience required in preparation or formulation of test articles for preclinical safety evaluation in a GLP environment. Experience in toxicology, industrial pharmacology, inventory control and/or computer software validation is desirable. Excellent computer skills required. (Job Code: XHXJPADD9910)

## IN VITRO TOXICOLOGY

## **Assistant Scientist I**

Requires a BS degree in biological sciences and some knowledge of genetic or investigative (biochemical or in vitro) toxicology. Prior experience with GLPs preferred. (Job Code: XHXJPADD9917)

## REPRODUCTIVE TOXICOLOGY

## Senior Scientist/Study Director-Reproductive Toxicology

Requires Doctoral and Postdoctoral level training in a scientific specialty related to reproductive biology or teratology. Pharmaceutical industry experience including previous therapy team and drug development experience is preferred. Successful candidate will design and direct internal and external GLP studies in reproductive toxicology for regulatory submissions. (Job Code: XHXJPADD9915)

## Scientist II

Requires a BS degree in biological sciences with 7-10 years' experience in reproductive toxicology in a GLP environment. Prior experience training other employees preferred. (Job Code: XHXJPADD9913)

## Assistant Scientist-Toxicology

Requires a BS degree in biological sciences with 1-3 years' experience in reproductive toxicology in a GLP environment. (Job Code: XHXJPADD9914)

## **PATHOLOGY**

## **Senior Research Pathologist**

Requires a DVM and board eligibility/certification by the American College of Veterinary Pathologists, and anatomic pathology experience in investigative and toxicological pathology. Responsibilities include participation on a multidisciplinary team to research mechanisms of drug efficacy and toxicity, and evaluate drug safety.

(Job Code: XHXBPDD9940)

## Assistant Scientist-Pathology

Requires a BS or equivalent in a relevant scientific discipline and experience in histology and/or necropsy techniques. HT or HTL (ASCP) certification preferred.

(Job Code: XHXJPADD9920)

## **DRUG METABOLISM**

## Scientist I-Drug Metabolism

Requires a BS or MS degree in a relevant scientific discipline with 5-7 years' experience in biochemistry, protein chemistry or equivalent. Experience in in vitro and analytic methods preferred.

(Job Code: XHXJPADD9928)

## Scientist II-Drug Metabolism

Requires a BS or MS degree in a relevant scientific discipline with 8-10 years' experience in drug metabolism and analytic methods development. Experience with modern analytic techniques including liquid chromatography and mass spectroscopy required. (Job Code: XHXJPADD9931)

## **CNS PHARMACOLOGY**

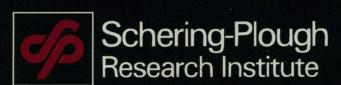
## **Assistant/Associate Scientist**

This position, located in Kenilworth, New Jersey, requires a BS degree in biology or a related field and at least 4 years of experience in behavioral pharmacology, or an MS degree and at least 2 years of experience. The ideal candidate will have had experience investigating the mechanism of action of CNS drugs. (Job Code: XHXBMDD8113)

# For additional information, or to apply online, visit our web site at: www.sp-research.com

Schering-Plough Research Institute is committed to the scientists who are responsible for our success. We offer an excellent compensation package that includes a competitive salary, a cash incentive bonus program, comprehensive benefits, profit sharing and 401(k). Comprehensive benefits include: group insurance and retirement programs, flexible work arrangements, educational assistance, and health and wellness programs.

For prompt, confidential consideration, we invite you to forward your resume which MUST include the job code to: **E-mail: SPRIJobs@isearch.com** or send to: **Human Resources**, **Schering-Plough Research Institute**, **144 Route 94**, **P.O. Box 32**, **Lafayette**, **NJ 07848**. 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.



**Using Science for Human Advantage** 



## **Bioinformatics Expert**

#### Who we are

Roche Genetics is a cross-divisional organization with the mandate to integrate and optimize the deployment of approaches based on human genetics toward the development of individual health care concepts and products that will emphasize integrated diagnostics, therapeutics, and disease prevention. The Genetics/Genomics Technology Platform in Basel supports this Genetics Initiative by developing and/or applying novel technologies for DNA sequence variation analysis, experimental genetics, transcript profiling and proteomics.

The position

We are looking for a senior level bioinformatics specialist who will be responsible for supporting the technology development groups regarding the automation of proteomics technology, the integration of gene chip data and proteomics data in a global relational database, the development of software tools for complex data analysis and data mining.

#### Who you are

You must have a strong background in biology and information technologies. You should have a PhD in biology, molecular biology or biochemistry with several years of experience using bioinformatics tools. You should have a solld understanding of relational databases principles, programming skills in C++ and SQL, and familiarity with the Windows NT operating system.

#### Who to contact

If the above profile fits your background and experience, and you are interested in working in a challenging environment please send your application with full supporting documentation to: F. Hoffmann-La Roche Ltd, Mr Werner Aschwanden, PSPB-1, 52/205, P.O. Box, CH-4070 Basel, quoting reference As1353.

## Reporters

Celera Genomics, the information company that plans to sequence the human genome within the next three years, is launching an editorially independent Genome News Network to report on genomics worldwide. We have openings for journalists with 3-5 years' experience reporting on biomedical research and policy in the weekly or daily press. Solid knowledge of genetics is an advantage.

With your resume or CV, please enclose a letter about the highlights of your professional experience, salary requirements, and your interest in the Genome News Network and send to:

Human Resources,
Celera Genomics Corporation,
45 West Gude Drive, Rockville, MD
20850; Fax: 240-453-3755
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## **Research Opportunities**

Mount Sinai School of Medicine is a leader in medical research and education. The establishment of our new Microscopy Center has created opportunities for experienced Microscopists with a BS/BA or MS in Biology or Life Sciences. All applicants should have

excellent organizational and communication skills, an understanding of basic laboratory procedures, and the ability to manage a large and varied workload.

Mount Sinai

**Electron Microscopist** 

The successful candidate will participate in ultrastructural studies of various biological systems. Qualifications include at least 2 years of experience in routine electron microscopy procedures (TEM, SEM),

ultramicrotomy, immunogold labeling, specimen preparation, photographic darkroom work, and routine maintenance of equipment. Individuals with immunofluorescence and confocal microscopy experience are desirable. **Code: EM** 

Light Microscopist

Participating in biomedical studies that use a variety of advanced light microscopic techniques, duties will include maintaining equipment, instructing users in equipment operation, and sample preparation. Qualifications include at least 2 years of experience in fluorescence and confocal microscopy, immunofluorescence labeling, in situ hybridization, digital imaging and analysis, cell culture, and histological techniques. Strong computer skills are essential. **Code: LM** 

We offer a salary commensurate with experience and excellent benefits. For consideration, please mail/fax your resume, which must indicate code for position of interest, to: Scott Henderson, Ph.D., Director, Microscopy Center, Box 1007, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574; Fax: 212-860-1174. Visit our website at: www.careermosaic.com/mountsinai We are an equal opportunity employer fostering diversity in the workplace.

## **Mount Sinai School of Medicine**

## New York University

# JUNIOR & SENIOR FACULTY POSITIONS COLLEGE OF DENTISTRY

New York University College of Dentistry is seeking to recruit faculty members to tenure/tenure-track positions who have strong research and academic training. Preference will be given to individuals with clinical training (MD, DDS/DMD, RN). We are interested in appointing scientists/clinicians who have acquired a Ph.D. in one of the biomedical sciences, including but not limited to, Biochemistry, Cell Biology, Experimental Pathology, Immunology, Microbiology, Molecular Biology, Oral Biology, Pharmacology, Physiology, etc.

New York University College of Dentistry expects to appoint up to ten new candidates. Start-up packages may be available, salary and rank are commensurate with experience. Successful applicants are expected to establish a strong extramural funded productive research program in areas of interest that include but not necessarily limited to, cancer-research, bone biology, saliva and chemosensory systems. Candidates are expected to support the teaching programs of the College. Please send a letter of interest and curriculum vitae to: Novella Jones, Director of Human Resources, New York University College of Dentistry, 345 East 24th Street, New York, NY 10010-4086. Fax: 212-995-4085.

NYU encourages applications from women and members of minority groups.



## International Aspirin® Award 1999

## Young Researchers' Aspirin® Award

The Young Researchers' Aspirin® Award's objective is to encourage scientific research into the mechanism of action and clinical use of acetylsalicylic acid, the active ingredient of Aspirin®. Scientists who have contributed to the knowledge of Aspirin® through original independent scientific research in the field of theoretical (experimental) and/or clinical medicine are invited to compete for the Award. The results of their work should have a direct effect on the knowledge or use of Aspirin® and be based on a peer-reviewed publication, accepted and/or published. The publication should not be older than two years. The age limit of the Young Researchers' Aspirin® Award in the year of candidature is 40.

The Young Researchers' Aspirin® Award's value is DM 20,000.

Entries will be judged by an international scientific committee representing basic and clinical research.

Young researchers are invited to order the complete application documents at the following address:

International Aspirin® Award c/o Bayer AG BG Consumer Care Integrated Communications (Code-Nr.: SCI)

Building C 151 D-51368 Leverkusen/Germany Fax: ++49-214-30-29554

Deadline for submission is April 30th, 1999 (Date of receipt of documents by Bayer AG)





## Advanced Medicine

Located in the San Francisco Bay Area, Advanced Medicine, Inc. is a progressive, biopharmaceutical company led by experienced, forward-thinking management. We are dedicated to the discovery & development of novel therapeutic drugs and approaches, and our rapid progress has created unparalleled opportunities for a select group of experienced, hands-on researchers to join our expanding R&D team.

## Scientist/Senior Scientist

-Pharmacokinetics-

You will perform pharmacokinetic & pharmacodynamic data analysis. Candidates must possess a Ph.D. or equivalent along with hands-on experience with mathematical, pharmacokinetic, or pharmacodynamic modeling using computer programs such as WINNONLIN, SAS, Excel and graphics software. (Job Code: 99016)

## Scientist/Senior Scientist

-Metabolism-

You will develop & implement high throughput screenings for in vitro metabolism and transport/permeation. Candidates must possess a Ph.D.; 4+ years of relevant experience; the ability to excel in a team-oriented environment; and excellent written/verbal communication skills. (Job Code: 99017)

## Pharmacologist/Physiologist

Positions are available for Scientist/Sr Scientist & Research Associates who possess a minimum of a BS in a related discipline; a pharmacology/physiology background; and demonstrated in vivo & ex vivo experience in a broad range of therapeutic areas. (Job Code: 99018)

In addition to attractive compensation and benefits, we will provide you with a scientifically challenging & rewarding environment, a pathway for personal and professional growth, and significant equity participation. Please forward your resume with references and cover letter to: Advanced Medicine, Human Resources Department, (Attn: Job Code), 280 Utah Avenue, South San Francisco, CA 94080; fax: (650) 827-8690 email: career@advmedicine.com. EOE

The Future is Here

## LIJ Medical Center

From community based programs to large tertiary Decome teaching hospitals, North Shore-Long Island Jewish is a health system of incomparable quality, resources and innovation. Be #1 with us in the following opportunity:

## Post-Doctoral Fellowship in Infectious Diseases

Research at Long Island Jewish Medical Center involves fungal infections and other infectious diseases. Candidates should be able to work quite independently, research the literature, and devise and carry out protocols relating to the early and rapid diagnosis of fungal infections.

PhD required with further experience, especially in the field of mycology, desirable. Please send or fax CV to: Carol Singer, MD Chief, Infectious Diseases, Long Island Jewish Medical Center, Room FP/333, 270-05 76th Avenue, New Hyde Park, NY 10040. Fax: (718) 470-9859. We are an equal opportunity employer M/F/D/V.



NORTH SHORE LONG ISLAND JEWISH HEALTH SYSTEM



with

## PRINCIPAL ASSOCIATE RESEARCH SCIENTISTS

## THE **BAYER** FACTS:

■ In the highly competitive global pharmaceutical marketplace, there are many "Bayer Facts" that distinguish us as a leader. To name a few, we are part of Bayer Corporation, a \$32 billion international diversified organization and one of the most broadly-based healthcare companies in the U.S. Our Pharmaceutical Division site in WEST HAVEN, CT has worldwide responsibility for the research and development of treatments for osteoporosis; cancer; diabetes and other metabolic disorders. We are currently seeking to fill 3 positions with the following requirements:



primary or shared project responsibility of a complex nature. Preparing reports of analytical and interpretative nature and interacting with R&D and other departments on projects. You will conduct complex R&D activities which require specialized scientific techniques and take the initiative in keeping current with developments in specialized areas.

■ As a Principal Associate Research Scientist at Bayer, your responsibilities will include

A premier healthcare company for the 21st century.

Bayer:

- To qualify you must have a BS/BA with 4+ years or an MS with 2+ years experience. Pharmaceutical industry experience and a background in cancer research preferred. Strong written and oral communication skills required.
- For one of the positions: We are seeking an individual with a strong background in molecular and cellular biology, including DNA and RNA purification, subcloning, expression analysis (Northern blot, RT-PCR, Western blot, etc), site-directed mutagenesis and other routine molecular biology techniques. Knowledge of protein expression systems (baculovirus, GST fusion, etc.) mammalian cell culture and gene transfer techniques, and familiarity with DNA analysis programs (GCG, MacVector, etc.) and searching on-line DNA and protein databases
- For two of the positions: We are seeking individuals with strong backgrounds in assay development with an emphasis on mechanism based biochemical and cellular assays. Experience in protein analysis, including SDS-PAGE, Western analysis and basic mammalian cell culture and molecular biology techniques required. Familiarity with computerized data handling analysis (Excel) also essential
- Please send/fax your resume, including salary requirements, to: Dept KL, Bayer Corporation, Pharmaceutical Division, 400 Morgan Lane, West Haven, CT 06516. Fax: (203) 812-6798. No agencies or phone calls please. For more information on Bayer, search: http://www.bayerpharmana.com
- An Equal Opportunity Employer M/F/D/V. Bayer Corp. is committed to enhancing and maintaining cultural diversity within our work environment.



**Pharmaceutical** Division

## **EXECUTIVE POSITION IN ISRAEL**

## Collgard Biopharmaceuticals

Vice President, R&D General Manager

Collgard, founded in 1995, is a private. development stage pharmaceutical company with offices in Tel Aviv, Israel and Boston, USA. The Company is dedicated to develop products for the treatment of diseases where "tissue trauma" and related collagen economy are centrally involved

Collgard is seeking a candidate for the key position of Vice President of R&D in Israel. The candidate will be responsible for the design, conduct, reporting and management of IND and NDA enabling programs in Israel, US and Europe as well as for all scientific issues relating to preclinical research, toxicology PK/PD, clinical and associated product development strategies. The position requires a Ph.D. or MD degree with a minimum of 7-10 years of relevant experience in the biopharmaceutical industry with direct responsibilities for the development of small molecule and biotechnology-derived products This position could possibly include General Manager responsibilities.

The successful candidate will be a team player and team leader, with excellent communication Experience in the development of therapeutics for cancer, cardiovascular and fibrotic diseases a plus.

For confidential consideration, please send CV to: Chief Executive Officer Collgard Biopharmaceuticals, Inc. 1860 Beacon Street Waban, MA 02468-1442 or fax to: (617) 244-6026

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REWARD: Annual Salary to \$125,900

This position is temporary not to exceed 3 years. It will be filled under a Senior Executive Service Limited Term Appointment Authority. In addition, it may or may not be filled under the provisions of the Intergovernmental Personnel Act.

The U.S. Department of Justice, the nation's premier law enforcement agency, has initiated an intensive search for an energetic and proactive individual with proven executive level experience to advise the Attorney General on a wide range of law enforcement technology and technology policy issues. The successful candidate will possess excellent managerial, analytical, and interpersonal skills and experience in the application of science and technology to complex problems and policy issues.

## CLAIM YOUR REWARD:

If you are ready to accept the challenge of advising on the science and technology program for the world's premier law enforcement agency, contact us for an application package:

By Mail:

U.S. Department of Justice Executive Resources Group 1331 Pennsylvania Avenue, NW Suite 1170, Attn: Sherry A. Mahoney

Washington, DC 20530

By Email:

Sherry.A.Mahoney@usdoj.gov

By Phone: (202) 514-6794

## U NOVARTIS

Novartis Agricultural Discovery Institute, a stable, fully funded institute based in San Diego, CA, matches genes to traits and individuals to innovation. We're engaged in discoveries that enable the creation of novel seeds, new methods of protecting crops, and advanced animal health products. What began as a solid commitment to academic excellence, has now become a powerful tool for ensuring adequate food supplies for a growing planet. We have numerous positions available for all levels of scientific professionals.

# Enab Colscovery

cDNA/Genomic Library Construction

We are seeking multiple Molecular Biologists at the Ph.D., MS and BS levels to construct cDNA and large and small fragment genomic libraries for mapping and sequencing projects. Requires a minimum 2 years' library construction and screening. Experience with cDNA normalization, subtraction, full-length cDNA enrichment methods, high-throughput PCR, BAC library construction and fingerprinting, and laboratory robotics is highly desirable. DNA sequence analysis and database mining required. Excellent computer skills, communication and organization skills are essential. (Dept. GENL-S35)

## **Gene Expression**

Positions in our Gene Expression Laboratory are available at the Ph.D., MS and BS levels. The incumbents will use DNA microarrays and other gene expression profiling technologies to dissect gene regulation pathways. Requires at least 3 years' demonstrated experience in mRNA and cDNA manipulation. Experience with high-throughput PCR, fluorescence probing, quantitative PCR and automated equipment is a plus. Excellent organization and computer skills, such as MS Excel, are essential. (Dept: GEXP-S35)

## **Cellular Biologists**

Two positions are currently open. Successful candidates will have 2+ years' (MS degree) or 5+ years' (BS) relevant laboratory experience. Must be able to work with minimal supervision. Plant Cellular Biologist position requires solid knowledge/experience with plant tissue culture, transformation and microscopes. Molecular Biologist position requires demonstrated knowledge/experience in RNA, DNA and protein manipulation. (Dept: CELIB-S35)

## **Bioinformatics: Analysis Integration**

These positions will develop a Bioinformatics system integrating externally available tools into an internal system. Requires extensive software development experience, formal Biology and CS training, and related Ph.D. Also requires 4 years' software development with Java, C+++, or C, and software engineering experience using C, Java, Perl and (possibly) C+++. Experience with JDBC, SQL and (possibly) CORBA, along with solid background in genomics information essential. (Dept. BAI-S35)

## **Informatics: System Administrator**

This position will be responsible for hardware, operating systems and software support for all NADI PC, UNIX, and Macintosh computers and networks. Other responsibilities will include implementing and maintaining computer and data security systems; data storage backup, archival, and off-site storage. Candidates must have formal CS training with a BS in a relevant field, along with 3 years' UNIX System Administration experience and 2 years' Windows 95/98/NT System Administration experience. (Dept: ISA-S35)

## DNA Sequencing Principal Investigator and Team Leaders (several positions available)

The successful candidates will lead DNA sequencing and gene discovery teams using state-of-the-art-automated instrumentation. Requires MS or Ph.D. in Biological Sciences/Molecular Biology or equivalent. Experience leading an automated DNA sequencing & analysis team and background in recombinant DNA technology required. Working knowledge of sequence analysis software tools and UNIX operating systems required. Expertise in DNA sequencing/analysis/gene discovery approaches desirable. (Dept: SPI-S35)

## Mutation Identification Principal Investigator and Team Leaders (several positions available)

The successful candidates will lead mutation identification technology development and application teams using state-of-the-art and novel automated instrumentation. Requires MS or Ph.D. in Biological Sciences/Molecular Biology or equivalent. Experience leading an analytical team, developing novel approaches, and a background in various recombinant DNA techniques is required. Working knowledge of DNA sequence analysis software tools and UNIX operating systems desirable. Expertise in gene discovery approaches desirable. (Dept: MIPI-S35)

For immediate consideration, please send resume/salary history to: Novartis Agricultural Discovery Institute, Inc., Attn: HR, - including Dept., 3050 Science Park Road, Suite 102, San Diego, CA 92121-1102; Fax: (619) 784-8995. EOE.





The Molecular Pharmacology Department at St. Jude Children's Research Hospital has an opening for a faculty member at the Assistant/Associate level. Candidates are sought with an interest in developing an independent research program in an area related to the treatment of childhood cancers. Outstanding applicants with experience in any area relevant to cancer treatment will be considered; candidates with experience in the fields of DNA repair, apoptosis, or the treatment of brain tumors are especially encouraged to apply. Candidates at the Associate Member level should have an established research program supported by peer reviewed grants.

The Molecular Pharmacology Department is a basic science department at St. Jude Children's Research Hospital. Opportunities are available for collaboration with other basic science departments in the areas of biochemistry, genetics, tumor cell biology, immunology, virology, and developmental neurobiology, and with clinical programs involved in the treatment of solid tumors and hematological malignancies. A generous start-up package is available for an outstanding candidate. St. Jude Children's Research Hospital was founded by Danny Thomas, and continues to receive support for research and clinical programs through the fund-raising efforts of the American Lebanese Syrian Associated Charities (ALSAC).

Please send a curriculum vitae, a three page description of proposed research, and three letters of recommendation to: Chair, Faculty Search Committee, Molecular Pharmacology Department, St. Jude Children's Research Hospital, 332 N. Lauderdale Memphis, TN 38105.

www.stjude.org

## **Faculty Opportunity**

Institute for Gene Therapy and Molecular Medicine

Mount Sinai School of Medicine is a leader in medical education and research. The Institute for Gene Therapy and Molecular Medicine invites applications for a tenure-track faculty position

Mount Sinai at an academic rank commensurate with the candidate's qualifications. The appointee will be expected to develop a cutting-edge basic research program in at least one aspect of the maintenance and continued expression of extrachromosomal DNA in eukaryotic cells. Research areas of interest include DNA replication, chromatin remodeling and gene silencing. Newly constructed laboratories and

extensive research facilities are available. The necessary financial support for the initiation or expansion of a strong research program will be provided. Mount Sinai School of Medicine, under the leadership of a new Dean, is in the process of a major expansion of its research programs. We encourage applicants who desire an environment that fosters interaction with a diverse group of scientists.

Interested candidates with a Ph.D. and/or M.D. degree and outstanding records of research productivity should send a C.V., a one-page description of research plans, and names and addresses of three references to: Dr. James G. Wetmur, Chair of the Search Committee, Box 1124, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574; Fax: 212-534-1684; E-mail: wetmur@msvax.mssm.edu Visit the Institute on the web at: www.mssm.edu/gene/GeneTherapy/home-page.html We are an equal opportunity employer fostering diversity in the workplace.

Mount Sinai School of Medicine

# DALHOUSIE UNIVERSITY ASSISTANT PROFESSOR

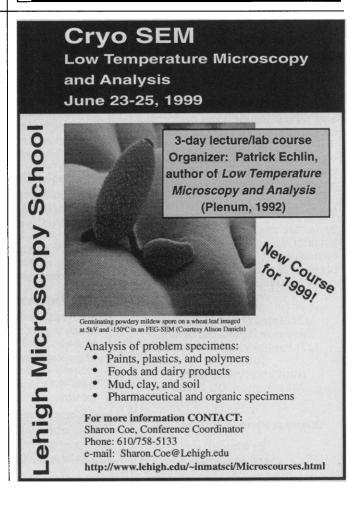
## Department of Biochemistry

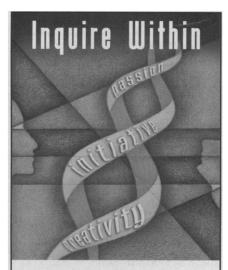
The Department of Biochemistry invites applications for a probationary, tenure-track position at the rank of Assistant Professor. Preference will be given to applicants whose research interests have biomedical relevance and fall within the research emphasis of the department: regulation of lipoprotein/lipid metabolism, protein structure/function and molecular biology. The successful applicant will be expected to initiate an active research program. The interest and experience necessary to teach general biochemistry to medical, health professions and undergraduate science students as well as to develop advanced classes in his/her principal area of interest for senior undergraduate and graduate students is also required. Applicants should have a Ph.D. and at least two years of postdoctoral experience. The successful candidate will be expected to compete for external research and salary support duringthe initial appointment.

Applicants should submit a curriculum vitae, reprints of several recent publications, a one- to two-page statement outlining their research plans and names of three referees to:

Dr. F. B. St.C. Palmer, Head, Department of Biochemistry, Faculty of Medicine, Sir Charles Tupper Medical Building, Dalhousie University, Halifax, NS B3H 4H7.

Closing date for receipt of applications will be May 15, 1999. The Academic Planning Committee will commence reviewing applications after the application deadline. Dalhousie University is an Employment Equity/Affirmative Action Employer. The University encourages applications from qualified Aboriginal Peoples, persons with a disability, racially visible persons and women. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.





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## Pathologist, Research

Requires an MD or DVM/VMD and Board Certification in Anatomic Pathology or equivalent plus proficiency in the interpretation of immunohistochemistry and molecular pathology. **Job Code:** SCI0162

## Pathologist, Pharmacological Sciences

Along with a DVM and PhD, you must be Board Certified by the American College of Veterinary Pathology. In addition, 3-5 years experience in a preclinical and/or toxicology pathology department within a biotechnology or pharmaceutical company is required. Job Code: SCI0173

## Toxicology Scientist

Requires a PhD or equivalent in Toxicology (Board Certification preferred) and 2+ years experience in the biotechnology/pharmaceutical industry. Expertise in endocrinology, neurosciences, immunology, and cardiovascular pharmacology oncology desired. Job Code: SCI1799

We offer progressive benefits in the beart of the SF Biotech Bay. Send your resume, indicating Job Code, to: Genentech, Inc., Human Resources, PO Box 1950, South San Francisco, CA 94083-1950. Please use plain typefaces. You may email your resume, indicating Job Code, to jobs@gene.com (ASCII files only with a maximum line width of 76 characters). We cannot accept faxed resumes. Genentech is an Equal Opportunity Employer.

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# THE UNIVERSITY OF VERMONT **DEAN**

## **COLLEGE OF AGRICULTURE & LIFE SCIENCES**

The University of Vermont (UVM) invites applications and nominations for Dean of the College of Agriculture and Life Sciences. The Dean is the chief administrative officer of the College and reports directly to the Provost. The Dean, in cooperation with the faculty in the College, the Agricultural Experiment Station, and UVM Extension, is responsible for administering and planning instruction, research, service, and development.

The College contains 7 undergraduate departments and programs, and offers 11 undergraduate majors and 7 graduate programs within the departments of Animal Sciences, Botany and Agricultural Biochemistry, Community Development and Applied Economics, Nutrition and Food Sciences, Microbiology and Molecular Genetics, and Plant and Soil Science. A faculty of 65 works with approximately 800 undergraduate and 87 graduate students.

We seek candidates whose personal and professional qualities and experience assure superior leadership in all areas of academic endeavor. Candidates must demonstrate significant administrative experience, strong communication skills and commitment to affirmative action, cultural diversity and academic excellence. Candidates should have knowledge of the role(s) of basic and applied research programs and Cooperative Extension within the research mission of a comprehensive, land-grant university. The Dean must also present a record of both teaching and scholarly achievement meriting a tenured professorship in the College.

Established in 1791, UVM is located in Burlington, a small city situated between the Adirondack and Green Mountains on the shores of Lake Champlain. The eight undergraduate colleges and schools of the University have an enrollment of 7500. Graduate, Medical, and Continuing Education students bring the total enrollments to approximately 10,000. More information can be found on, <a href="https://www.uvm.edu">https://www.uvm.edu</a>, the university's website.

We will begin to review applications April 1, 1999, and will accept nominations and applications until the position is filled. The University especially welcomes as candidates people of color, women, and people with disabilities.

Nominations and applications, including a letter describing the individual's qualifications for the position, a curriculum vitae and names, addresses and telephone numbers of three references, should be sent to:

Mara R. Saule and Jill M. Tarule
Co-Chairs, Search Committee
Dean, College of Agriculture and Life Sciences
Office of the Provost
The University of Vermont
348 Waterman Building
Burlington, VT 05405

The University of Vermont is an equal opportunity affirmative action educator/employer.

## ASSOCIATE CHIEF BIOLOGIST FOR PROGRAM OPERATIONS **ES-XXX SENIOR EXECUTIVE SERVICE (SES)**

The U.S. Geological Survey (USGS) is seeking candidates for the full-time position of Associate Chief Biologist for Program Operations, ES-XXX. THIS POSITION IS A MULTIDISCIPLINARY POSI-TION AND MAY BE CLASSIFIED AS A ES-341, ADMINISTRATIVE OFFICER, ES-340, PRO-GRAM MANAGER, ES-401, BIOLOGIST, OR A ES-1301, PHYSICAL SCIENTIST. Salary range for this position is \$110,351 to 125,900 per annum.

The incumbent of this position is responsible for providing administrative and technical support to the Biological Resources Division (BRD) of the USGS and serves as a key member of the division's leadership team which is responsible for directing the national and international biological science programs of the BRD. The major administrative and technical support functions managed and coordinated by the Associate Chief Biologist for Program Operations include the following: policy, budget, finance, human resources, procurement, real and personal property, motor vehicles, space, safety and health, audit and internal control, management analysis, facilities maintenance, and various general services functions. Operational and policy decisions made by the incumbent affect the working environment of more than 1,600 scientific, technical and support employees in office locations throughout the

Individuals interested in this position should contact the Human Resources Office at (703) 648-6131 to receive a complete vacancy announcement which describes job requirements (including Knowledges, Skills, and Abilities (KSAs) required for the position), an application, and evaluation procedures. Applications (Optional Application for Federal Employment (OF-612), or resume) must be received at the following address by 03/31/99, and should reference SES-99-1. A Reference and Qualifications Analysis form and a narrative qualifications statement addressing the KSAs should also be submitted by the above date and will be used in the evaluation of candidates

Applications can be mailed, faxed, or delivered in person. Regardless of the method of delivery, it is your responsibility to insure your application's successful conveyance. Faxed applications must not exceed 10 pages in length and must be received by 12:00 midnight on the closing date of the announcement. Mailed or hand delivered applications must be received by the close of business (4:30pm) on the closing date specified in the announcement.

U.S. Geological Survey, Personnel Staffing Services Branch, 601 National Center, Reston, Virginia 20192 FAX (703) 648-4113.

The U.S. Geological Survey is an Equal Opportunity Employer. U.S. citizenship is required

U.S. Geological Survey

## INSPECTOR GENERAL NATIONAL SCIENCE **FOUNDATION**

Arlington, VA 22230

The National Science Board seeks qualified applicants for NSF's Inspector General position. NSF supports science and engineering through programs that invest over \$3.3 billion per year in almost 20,000 research and education projects in science and engineering. This is a Senior Executive Service (SES) position with a salary in the ES-1 \$110,351) to ES-6 (\$125,900) range. Appointment will be on a career basis.

Qualification requirements include: demonstrated leadership ability; a degree in accounting, public administration, law, science policy, or a field of science or engineering related to the NSF mission; knowledge of Federal policy and objectives of the Inspector General Act and knowledge of Federal practices, procedures and organization for auditing, evaluation and oversight.

Announcement (EP 99-5), which includes position requirements and application procedures, is located on the NSF Home Page at www.nsf.gov/home/chart/work.htm#hrm. Applicants may also obtain a copy of the announcement by contacting NSF's Executive Personnel and Development Branch at 703-306-0755 (hearing impaired individuals may call TDD-306-0189). Deadline for receipt of applications is April 7, 1999.

EQUAL OPPORTUNITY EMPLOYER.

## POSTDOCTORAL POSITIONS

## Cell and Molecular Biology of Reproduction

Postdoctoral positions are available at the University of Massachusetts Medical School to study cellular and molecular aspects of reproduction. These positions are supported by an NIH training grant and individual investigator awards. The faculty and their research interests are:

Roger Davis, Ph.D. — Signal transduction José Lemos, Ph.D. — Stimulus-secretion by stress-activated MAP kinases in testis. Stephen Doxsey, Ph.D. — Centrosome and spindle assembly during fertilization and development.

Harvey Florman, Ph.D. — Signal transduction/ion channels at fertilization.

Daniel Kilpatrick, Ph.D. — Transcriptional control of spermatogenic cell differentiation. **David Kupfer**, Ph.D. — Reproductive toxicology and environmental endocrine disrupters.

Jeanne Lawrence, Ph.D. — X-chromosome inactivation and nuclear structure.

coupling in Leydig and sperm cells.

Craig Mello, Ph.D. - Germ cell determina-

William Okulicz, Ph.D. — Gene regulation in the primate endometrium.

Joel Richter, Ph.D. - Regulation of maternal mRNA expression in mammalian oocytes. Greenfield Sluder, Ph.D. — Control of centrosome reproduction and inheritance; checkpoint controls for mitosis in zygotes.

George Witman, Ph.D. - Control of mammalian sperm motility.

The University of Massachusetts Medical School, which ranked 2<sup>nd</sup> out of 125 medical schools in rate of growth of NIH funding over the last 3 year period, offers excellent facilities and a stimulating environment for postdoctoral study. The medical school is located ~35 miles west of Boston. Please send curriculum vitae and names of three references to the faculty member(s) of interest, c/o Pat Sculthorpe, Department of Cell Biology, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655.



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## Scientific Project Manager

A nonprofit scientific institute working



in the areas of health and environmental sciences seeks a midlevel scientific project manager with scientific consulting/association background and understanding of basic toxicology, risk assessment, and regulatory issues. This responsible mid-level

position requires the ability to work as part of a team; as well as experience in all aspects of committee management and coordination including research project development and management, literature reviews, technical writing, conference organization, arrangement of committee meetings, minute writing, budget preparation and monitoring, and development of correspondence and reports. Master's degree in scientific field such as chemistry, toxicology, environmental health, etc., required. WordPerfect and Quattro Pro for Windows helpful. Salary commensurate with experience; outstanding benefits. Send resume and salary history to Human Resources, ILSI, 1126 Sixteenth St., N.W., Washington, DC 20036 or fax to (202) 659-3859. EOE.

## 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 preclinical 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.

## GRANTS

## **NEUROSCIENCE**

## THE EJLB FOUNDATION SCHOLAR RESEARCH PROGRAMME

The EJLB Foundation awards each year up to seven (7) grants for research projects in all areas of neuroscience that pertain directly or indirectly to schizophrenia and mental diseases. Specific areas of support in the past have included: developmental neurobiology, synaptic mechanisms, systems and cognitive neuroscience, and clinical studies on the genetic and physiopathologic aspects of neurological and psychiatric disorders.

Eligibility for such grants is restricted to young scientists who are pursuing an independent research career and have given evidence of having significant potential. It is also a requirement that these scientists (i) have earned an MD and/or a Ph.D. degree; (ii) have completed their post-graduate training; and (iii) have been admitted after June 15, 1994 as faculty members of a leading university, or an affiliated non-profit research centre, in Canada or elsewhere in the world.

Each grant is of CAN\$300,000, is disbursed over three (3) years and is non-renewable.

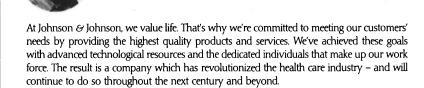
The next closing date for receipt of letters of intent is May 3, 1999.

Full details regarding this programme and required letter of intent forms may be obtained from:

The EJLB Foundation
1350 Sherbrooke Street West - Suite 1050
Montréal, Québec
CANADA H3G 1J1.
Fax (for inquiries only) 514-843-4080.

# EXCELLENCE WHERE IT MATTERS Most.







## Raritan, NJ

## Postdoctoral Fellow Molecular Pharmacology

In this position, you will work in a new, exciting and rapidly evolving area of drug discovery using molecular biology approaches to investigate the mechanisms of gene induction/repression in penile myocytes. Opportunities for collaboration within the company and with outside consultants are available.

To qualify, candidates must have a Ph.D. in Biology, Molecular Biology, Physiology or a related discipline with a strong background in eucaryotic cell culture techniques. Expertise in differential display or subtractive mRNA hybridization, cloning and expression, and detection of mRNA by Northern blot analysis is essential. Experience in muscle physiology, calcium flux measurement, and muscle second messengers would be an asset. Strong written/verbal communication skills and the ability to work in an interactive environment are a must. **Dept. 2961.** 

## Associate Scientist/Senior Associate Scientist Immunology Drug Discovery

In this position, you will use state-of-the-art molecular biological and cellular approaches for the discovery of new drugs and for research-driven identification of drug targets.

A BS or MS in Molecular Biology, Biochemistry, Molecular Immunology, or a related field and 5+ years' experience in pharmaceutical or academic research are required. Additionally, you must have a mastery of molecular biological techniques. Experience in protein expression/purification, assay development, signal transduction, and/or bioinformatics is desired. **Dept. 2962.** 

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## www.jnj.com

If you do not have Internet access, please forward a scannable resume, noting the appropriate department code and salary requirement, to: **Dept. # of position of interest, Johnson & Johnson Recruiting, PO Box 16597, New Brunswick, NJ 08906–6597.** An equal opportunity employer, m/f/d/v, committed to diversity in the workplace.



## **EXPERIMENTAL PATHOLOGIST**

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

Qualified candidates are invited to apply for a professorial position at the level of ASSISTANT or ASSOCIATE PROFESSOR, depending upon qualifications. An experimental pathologist is sought as a pivotal member of the UC Davis Center for Comparative Medicine, a new research center that uniquely interdigitates research and teaching programs of the Schools of Medicine and Veterinary Medicine, with close affiliation with the California Regional Primate Research Center and the University of California Mouse Biology Program. Applicants must have M.D. or M.D./Ph.D. degrees. AP boards desirable, but not required. Applicants must have a record of publication in mainstream journals that exemplifies enthusiasm for comparative anatomic pathology. Faculty are sought whose research encompasses mechanisms of host-agent interactions during persistent infection or pathogenesis of infectious diseases at the host interface. Desired areas of emphasis include viral oncology, and infectious disease immunology. The candidate must establish and maintain a robust extramurally funded research program and participate in professional and graduate education with an academic appointment in the Medical School Department of Pathology. This is a tenure-track position in which start-up funding and long-term state-sponsored ½ base salary support is provided. Review of applications will commence immediately and be accepted through July 1, 1999 or until position is filled. Submit applications with letter of interest, curriculum vitae, concise statement of present and future research plans, summary of teaching experience/philosophy, up to 3 representative reprints, and 4 letters of reference (including addresses, telephone numbers and email addresses) to: Murray Gardner, M.D., Search Committee Chair, Center for Comparative Medicine, University of California, Davis, CA 95616. The University of California is an Equal Opportunity/ Affirmative Action Employer.

## CONFERENCE

## **NEW YORK ACADEMY OF SCIENCES CONFERENCES**

## Toxicology for the Next Millennium

• September 20-23, 1999

· Warrenton, Virginia

CHAIRS: Robert Isfort and Joshua Lederberg

This meeting will explore the application of advances in molecular biology and other biological sciences to the field of toxicology. Discussion topics will include: genomics, proteomics, chip based technologies, model organisms, organoid systems, and computer models of complex biological systems. Application of new technologies to areas such as cancer toxicology, neurotoxicology, immunotoxicology and developmental toxicology will also be discussed.

## Role of Neural Plasticity in Chemical Intolerance

- June 16-19, 2000
- · New York, New York

CHAIRS: Barbara A. Sorg and Iris R. Bell

Chemical intolerance (CI) or multiple chemical sensitivity is an intriguing problem in environmental health. This conference will review the primary clinical findings of CI and focus on the basic and clinical research related to neural plasticity as a potential critical link for mechanisms leading to CI.

Both conferences will include poster sessions.

TO RECEIVE PROGRAM AND REGISTRATION DETAILS CONTACT:



Science and Technology Meetings
NEW YORK ACADEMY OF SCIENCES
2 East 63rd Street
New York, New York 10021

Tel: 212.838.0230, ext. 324 Fax: 212.838.5640 E-mail: conference@nyas.org

Website: http://www.nyas.org

# Diversity in the Scientific Workplace

## Recruitment Advertising Supplement

Issue Date: 26 March 1999

Space Reservation Deadline: 9 March 1999

Feature your recruitment message in this full-color supplement that acknowledges the benefits of diversity in the scientific workplace.

This issue will be distributed to the attendees of the 5-10 April NOBCChE meeting, San Diego, CA, and the members of several Minority Scientific Organizations.



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## HUMAN FRONTIER SCIENCE PROGRAM 10th Anniversary Workshops

## May 31<sup>st</sup> to June 2<sup>nd</sup> 1999 European Parliament, Strasbourg, France

Two international workshops will be held in connection with the 10<sup>th</sup> anniversary celebrations of the Human Frontier Science Program.

## **Replicon Theory and Cell Division**

Organisers: W. Fangman (Seattle), T. Kishimoto (Yokohama), M. Kohiyama (Paris)

## Topics include:

Replication, chromosome segregation and cell division in procaryotes, yeast and higher eucaryotes.

## Speakers include:

Stephen P. Bell, MIT, USA
Frederick R. Cross, Rockefeller University, USA
Jeffery Errington, University of Oxford, UK
Arturo Falaschi, ICGEB, Trieste, Italy
Walton L. Fangman, University of Washington, USA
Susan Gasser, ISREC, Switzerland
Sota Hiraga, Kumamoto University, Japan
Eric Karsenti, EMBL, Germany
Takeo Kishimoto, Tokyo Institute of Technology, Japan
Masamichi Kohiyama, Institut Jacques Monod, Paris, France

Ronald A. Laskey, University of Cambridge, UK Joe Lutkenhaus, University of Kansas, USA Bruce Nicklas, Duke University, USA Terry L. Orr-Weaver, MIT, USA Mark D. Rose, Princeton University, USA Joan V. Ruderman, Harvard Medical School, USA Ted A. Weinert, University of Arizona, USA Masayuki Yamamoto University of Tokyo, Japan Mitsuhiro Yanagida, Kyoto University, Japan Virginia A. Zakian, Princeton University, USA

## The Regulation of Sleep

Organisers: A. Borbély (Zurich), O. Hayaishi (Osaka), T. Sejnowski (La Jolla)

## Topics include:

Neurophysiology, neurochemical mediators, molecular genetics, circadian rhythms, functional brain imaging.

## Speakers include:

Peter Achermann, University of Zurich, Switzerland Joëlle Adrien, INSERM, Paris, France Michael J. Berridge, The Babraham Institute, UK Alexander A. Borbély, University of Zurich, Switzerland Derk-Jan Dijk, Harvard Medical School, USA Martha Gillette, University of Illinois, USA J. Christian Gillin, University of California, San Diego, USA Osamu Hayaishi, Osaka Bioscience Institute, Japan Craig Heller, Stanford University, USA Michel Jouvet, Université C. Bernard, Lyon, France James M. Krueger, Washington State University, USA

Fernando H. Lopes da Silva, University of Amsterdam,
The Netherlands
Pierre Maquet, University of Liege, Belgium
Robert W. McCarley, Harvard Medical School, USA
Bruce McNaughton, Arizona Research Labs, USA
Emmanuel Mignot, Stanford University, USA
Ferenc Obal, University Medical School, Szeged, Hungary
Terrence J. Sejnowski, The Salk Institute, USA
Mircea Steriade, University of Laval, Canada
Irene Tobler, University of Zurich, Switzerland
Giulio Tononi, The Neurosciences Institute, San Diego, USA

In addition to the workshops, a ceremony will be held in honour of the 10th Anniversary of the Human Frontier Science Program, which will include a round-table discussion on perspectives in the life sciences in the next century.

Attendance at the workshops is open to interested scientists. There will be a registration fee of US\$160, and registrants will be expected to pay their own travel and accommodation expenses. Further information and registration forms can be obtained from our web site or by writing to the address below, giving your name, address, e-mail address, telephone and fax numbers, and specifying which of the two workshops you are interested in attending. Please register early as the number of participants will be limited.

## The deadline for registration is 30th April 1999.

Human Frontier Science Program,
Bureaux Europe, 20, place des Halles,
67080 Strasbourg Cedex, France
E-mail: smetzger@hfsp.org, Fax: +33 3 88 32 54 47, Web: www.hfsp.org



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## Senior Scientist Molecular Biologist

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Visit our website at www.promega.com

EOE

## **EUROPEAN OPPORTUNITY**



## Postdoc Statistical Genetics

## Who we are

Roche Genetics is a cross-divisional organization with the mandate to integrate and optimize the deployment of approaches based on human genetics toward the development of individual health care concepts and products that will emphasize integrated diagnostics, therapeutics, and disease prevention. The Genetics/Genomics Technology Platform in Basel supports this Genetics Initiative by developing and/or applying novel technologies for DNA sequence variation analysis, experimental genetics, transcript profiling and proteomics.

## The position

We are looking for a postdoc with practical experience in Genetics/ Bioinformatics to join a young and dynamic team working in the field of positional cloning/DNA sequencing/DNA sequence variation analysis. She/he will be responsible for applying current genetics and gene hunting software tools and for co-developing new concepts for SNP discovery and detection.

## Who you are

You must have a strong background in genetics and information technologies. You should have a PhD in molecular biology, genetics, or biostatistics, and working experience using bioinformatics and statistical genetics tools.

## Who to contact

If the above profile fits your background and experience, and you are interested in working in a challenging environment please forward your full application documentation to: F. Hoffmann-La Roche Ltd, Mr Werner Aschwanden, PSPB-1, 52/205, P.O. Box, CH-4070 Basel, quoting reference As1351.

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www.scienceonline.org Select Science Careers. At Myriad Genetics, we've made an art of our science. As a world leader in the discovery of human disease genes, we've developed a powerful combination of positional cloning, protein interaction technologies, and drug target discovery technologies. Our achievements include the discovery of BRCA1, BRCA2, and MMAC1 cancer genes, the CHD1 coronary heart disease predisposing gene, and genes in their pathways. Continuing forward, we currently have major programs in asthma, cancer, depression, dementia, coronary heart disease, obesity, and osteoporosis. In addition, the wealth of novel genes and drug targets, arising from our existing programs, has allowed us to establish a THERAPEUTICS DIVISION.



Our location is another work of art. Situated in the foothills above Salt Lake City, you'll enjoy breathtaking views at work and an incredible lifestyle away from the office. Salt Lake City is home to a wide variety of cultural activities, a renowned NBA Basketball team, and the site of the 2002 Winter Olympics. It also features an endless array of summer and winter outdoor activities.

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### DIRECTOR, TARGET IDENTIFICATION

Establish a group of professionals who will: identify genes associated with the etiology of common diseases, input these genes into ProNet™, analyze output from ProNet™; and construct screens suitable for high throughput screening.

You must have 6+ years' experience (research in a variety of disease areas), and be familiar with molecular biology and bioinformatics tools. Experience in the pharmaceutical/biotechnology industry will be particularly valuable.

## DIRECTOR, SCREENING GROUP

Establish a group of professionals who will design/build the infrastructure required for high-throughput screening. This team will be responsible for the outline design of screens, purchase of equipment, establishment of informatics and day-to-day running of the facility. Additionally, the group will work closely with all other areas of Therapeutics to coordinate their efforts with Target Identification, downstream biology and medicinal chemistry.

You must be thoroughly familiar with the concepts behind high-throughput screening, and have a proven history of operating such facilities. Experience in the pharmaceutical/biotechnology industry is extremely important.

We offer an excellent compensation package, and a stimulating interactive research environment. Please mail/fax your letter of interest, including a complete resume and the names of three professional references to: Human Resources Department, Myriad Genetics, Inc., 320 Wakara Way, Salt Lake City, UT 84108; Fax: 801-584-3640. EOE



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

## DEFINING SUCCESS in BIOTECHNOLOGY

## SCIENTIST

Cambridge.

Entry level position responsible for assisting in the design, conduct, and reporting of preclinical metabolism studies supporting IND, BLA and NDA programs. A Ph.D. or equivalent, specific expertise in pharmacokinetics and metabolism issues, and a publication record indicative of strong scientific potential are required. Will also consider an exceptional post-doctoral candidate or an individual with an interest in an industrial career who has completed a recent post-doctoral appointment in a relevant scientific area.

Job Code: JT/Scientist

## SCIENTIST IMMUNOTOXICOLOGY

Entry level position responsible for assisting in the design, conduct, and reporting of toxicology studies supporting IND, BLA and NDA programs. A Ph.D. in toxicology, specific expertise in immunotoxicology, and a publication record indicative of strong scientific potential are required. Preference will be given to an exceptional post-doctoral candidate or individual who has completed a recent post-doctoral appointment in a relevant area of toxicology and demonstrates interest in an industrial career.

Job Code: JT/Scientist

Both positions will work collaboratively with other senior scientists and scientific managers in a matrix environment, participate in interdisciplinary project teams, and work with contract research organizations. Each presents a unique opportunity for the right individual to train for a successful career in pharmaceutical development in a leading biopharmaceutical company. These positions are based in our Cambridge facility.

Biogen has an outstanding record of leadership and accomplishment in the biotechnology field. We have one of the strongest financial profiles in the industry, and our compensation and benefits package, including equity participation, is unmatched. We've created an environment designed to attract and retain the world's most accomplished talent, and we invite you to forward your resume. These positions are based in our Cambridge facility.

Biogen, Inc., 14 Cambridge Center, Cambridge, MA 02142 fax: 617 679-2546 or e-mail: janet\_thompson@biogen.com (please include job code in subject line). Biogen is an Equal Opportunity Employer.

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## FACULTY POSITION ENVIRONMENTAL MICROBIOLOGY AND ENGINEERING

The Department of Civil and Environmental Engineering, College of Engineering and the Department of Animal Sciences, College of Agricultural, Consumer, and Environmental Sciences, University of Illinois at Urbana-Champaign invite applications for a full-time, tenuretrack position at the ASSISTANT PROFESSOR level in environmental microbiology and engineering with a strong background in modeling of microbially mediated processes. A Ph.D. in environmental engineering or microbiology or a closely related discipline is required. The ideal candidate should have training and research experience in biological process modeling and have sufficient background in experimental work to develop interactions with existing research programs at the University of Illinois. Essential are expertise and research interests applicable to the study of diversity, structure, and function of microbial communities in engineered and natural environments, for example those influenced by current and future agricultural and industrial practices. The successful candidate will be expected to develop a strong sponsored research program that complements existing strengths in the Department of Civil and Environmental Engineering and the Department of Animal Sciences and will develop and teach selected undergraduate and graduate courses in their area of specialization. The University of Illinois offers a competitive salary, a highly interactive, interdisciplinary research environment, and state-of-the-art research support facilities. This search is part of a commitment by the University Environmental Council for significant growth in the environmental sciences.

Applicants should submit curriculum vitae, statements of research and teaching interests, selected prints of publications, and a list of at least three references to: Professor Robert A. Easter, Head, Department of Animal Sciences, 116 Animal Sciences Laboratory, 1207 West Gregory Drive, Urbana, IL 61801. For full consideration, applications should be received by May 31, 1999. The proposed starting date for the position may be as early as January 6, 2000. The University of Illinois at Urbana-Champaign is an Equal Opportunity/Affirmative Action Employer.

#### DEPARTMENT OF MEDICINE DIVISION OF PULMONARY AND CRITICAL CARE MEDICINE University of California, Irvine

The University of California, Irvine, College of Medicine, is seeking a Senior Medical Academician as CHIEF of the Division of Pulmonary and Critical Care Medicine in the Department of Medicine. This is a tenured position. Qualified candidates must have either an M.D. or M.D.-Ph.D degree(s) and be nationally recognized for original research. Responsibilities include development and maintenance of quality educational, clinical practice, and research programs. Salary and rank are dependent upon experience. Interested candidates should send a copy of their curriculum vitae and a list of five references to: Ellis R. Levin, M.D., Professor and Vice Chair, Department of Medicine, University of California, Irvine Medical Center, Building 200, Suite 720, Orange, CA 92868. The University of California is an Equal Opportunity Employer, committed to excellence through diversity.

Diabetes. FACULTY POSITIONS (TENURETRACK) are available in a newly formed Center for Diabetes Research at the Indiana University School of Medicine. The School has embarked on a major initiative to enhance basic diabetes research. Faculty would have primary appointments in an appropriate basic science Department and would be expected to develop an externally funded basic research program with direct relevance to diabetes and its complications. Areas of interest include, but are not limited to, molecular mechanisms of insulin signaling and hormone action, molecular and cellular aspects of metabolic control, and islet cell biology. Successful candidates would also participate in training medical and graduate students. The levels of the positions are open and competitive space and start-up funding is available. Please send applications to: Dr. Peter J. Roach, Director, Center for Diabetes Research, Van Nuys Medical Science Building, MS405A, 635 Barnhill Drive, Indiana University School of Medicine, Indianapolis, IN 46202. Telephone: 317-274-1582; e-mail: diabetes@iupui.edu.

## POSITIONS OPEN



## FACULTY POSITIONS NEUROGENETICS AND NEUROSCIENCE

McLaughlin Research Institute is recruiting SCIEN-TIFIC STAFF members at all levels. Candidates should possess a Doctoral degree and a record of research excellence as a Postdoctoral Fellow or independent Investigator. The applicant should have, or be capable of developing, a productive independent research program that is able to compete successfully for extramural grant funding. Applicants with interests in neurodegenerative diseases or hearing are particularly encouraged to apply.

McLaughlin Research Institute offers a unique opportunity for research programs with an emphasis in mammalian genetics. The Institute is a small nonprofit organization and offers a nonbureaucratic, interactive research environment. The Institute is housed in a spacious new research building with an excellent facility that includes a transgenic service.

Applications, including names of individuals we may contact for references, should be sent to:

George A. Carlson, Ph.D. Director, McLaughlin Research Institute 1520 23rd Street South Great Falls, MT 59405

For additional information contact George Carlson, Bill Crain, John Mercer, or John Bermingham at McLaughlin Research Institute, or any of the following members of our Scientific Advisory Committee: Irw Weissman, David Baltimore, David Cameron, Neal Copeland, Jeff Frelinger, Leroy Hood, or Nancy Jenkins.

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CHAIR OF MICROBIOLOGY. The James H. Quillen College of Medicine, East Tennessee State University (ETSU), seeks a dynamic academic leader to Chair the Department of Microbiology. Candidates for the position must have scientific leadership capabilities, distinguished research productivity, a history of, as well as current, significant extramural funding and teaching experience. The successful candidate must hold a Doctoral degree (Ph.D. and/or M.D.) and meet the College's other requirements for a tenured faculty appointment at the rank of Professor. Candidates with special expertise in immunology are particularly encouraged to apply. However, exceptional candidates in all areas of microbiology will be considered. A competitive salary and start-up package will be provided, along with substantial laboratory space.

The location of James H. Quillen College of Medicine is Johnson City, Tennessee, a pleasant community situated between the Blue Ridge and Great Smoky Mountains. The region offers numerous opportunities for outdoor recreation.

Review of applications will begin on April 1, 1999, and will continue until the position is filled. Send a description of current research, representative reprints of published work, a curriculum vitae, and names and addresses of three references to: Dr. Michael Sinensky, Chair, Microbiology Chairman Search Committee, East Tennessee State University, Box 70579, Johnson City, TN 37614-0579.

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

#### TENURE-TRACK FACULTY POSITION MOLECULAR BIOLOGY AND GENETICS RESEARCH University of Maryland and VA Medical Center (GRECC), Baltimore

Ph.D. or M.D. molecular biology and genetics Research Scientist for ASSISTANT/ASSOCIATE PROFES-SOR position in endocrine-metabolic, obesity, diabetes, and cardiovascular aging research funded by a GRECC and Claude Pepper Center. Academic rank, tenure status, and salary commensurate with experience. Submit curriculum vitae and two academic references to: Andrew Goldberg, M.D., c/o JoAnn Gibbs, Department of Medicine, Room N3E10, University of Maryland Medical Center, Baltimore, MD 21201. Reference Job# 249. The UMB encourages women and minorities to apply and is an Affirmative Action/Equal Employment Opportunity/ADA Employer.

## POSITIONS OPEN

#### FACULTY POSITION IN NEUROPHYSIOLOGY DEPARTMENT OF NEUROLOGY UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Neurology Alcohol Research Program and The Ernest Gallo Clinic and Research Center

The University of California, San Francisco Neurology Alcohol Research Program and The Ernest Gallo Clinic and Research Center seek highly qualified applicants for a faculty position at the ASSISTANT PROFESSOR/ ASSOCIATE PROFESSOR level to pursue research in alcoholism and drug addiction. The Alchohol Research Program is a multidisciplinary team organized to investigate fundamental mechanisms of alcohol addiction. We have developed innovative approaches in molecular and cell biology, human genetics, and behavioral pharmacology, and we have pioneered in bringing invertebrate genetics to the forefront of alcohol research. As part of a major expansion, we seek applications from qualified and motivated individuals who have completed three to five years of relevant postdoctoral training or independent research. Candidates should hold an M.D. degree with specialty training in neurology and be capable of directing a rigorous research program in neurophysiology. Recruits are expected to participate in the teaching activities of the UCSF Department of Neurology and the UCSF Center for the Neurobiology of Addiction. For further information please view our website: http://gallo.ucsf.edu.
Applicants should send their curriculum vitae and the names, addresses, and telephone numbers of four references to:

> Neurophysiology Search Committee Robert O. Messing, M.D. University of California, San Francisco Gallo Center Building 1, Room 101 1001 Potrero Avenue San Francisco, CA 94110

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

#### CHAIR DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR GENETICS University of Alabama at Birmingham

The University of Alabama Schools of Medicine and Dentistry are seeking applications and nominations for the position of Professor and Chair of the Department of Biochemistry and Molecular Genetics. The Lee Chair of Biochemistry, an Endowed Research Chair, is also available to the successful candidate. The person filling this position will assume the leadership of an established faculty, and will have an opportunity to expand significantly the department in new directions.

The applicant must have a Ph.D., M.D., or equivalent degree, be internationally recognized for research, have a commitment to graduate, medical, and dental education, and have a record of leadership in administrative activities. The successful candidate is expected to be an established scientist with a strong ongoing, independent, and well-funded research program.

funded research program.

The Search Committee is headed by **Dale Benos**, **Ph.D.**, Chair of the Department of Physiology and Biophysics. Interested applicants should submit a curriculum vitae including the names of three references no later than May 28, 1999, to:

Amy Thompson, Director Administrative Services University of Alabama School of Medicine Medical Dean's Office 1813 6th South Avenue, MEB 310 Birmingham, AL 35294-3293

The University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer.

Saba University School of Medicine. Full-time, medical school FACULTY OPENINGS exist in anatomy, biochemistry, clinical medicine, epidemiology, histology, pathology, and physical diagnosis. Salary range \$30,000 to \$36,000 U.S. dollars, tax free. All positions on Saba, a small, tropical, Dutch island near St. Maarten. Clean, crime-free, English speaking, 5:1 student-faculty ratio. Write or call: Dr. David Fredrick, P.O. Box 386, Gardner, MA 01440. Telephone: 978-630-5122; e-mail: saba@tiac.net; website: www.saba.org.

## Editor-in-Chief

## AMA Scientific Publications and Vice President, Scientific Information

The American Medical Association, one of the world's largest and most acclaimed medical publishers, announces the search for the position of Editor-in-Chief, AMA Scientific Publications and Vice President, Scientific Information.

In this highly-responsible role of editor and senior manager of JAMA, the Editor-in-Chief will provide editorial direction to The Journal and its international publications, manage the scientific publications staff and provide overall guidance and direction to the 10 Archives journals. Assuring the quality, prestige and visibility of The Journal, the Editor will serve as the primary representative in interactions with physicians, the academic and scientific communities, government agencies and other organizations, the public and the media, and also will write editorials and other articles for publication.

An MD degree and extensive experience in editing a high caliber peer-reviewed medical journal are required. Candidates must also have demonstrable leadership experience, a track record of academic excellence, exceptional editorial judgment, and a high degree of integrity.

We are currently accepting applications for this prestigious position. For confidential consideration, send your curriculum vitae and letter of interest to:

> American Medical Association Editor-in-Chief PO Box 10944 Chicago, IL 60610-0944

## **American Medical Association**

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# NATIONAL INSTITUTES OF HEALTH NATIONAL EYE INSTITUTE

## **Division of Extramural Research**

The National Institutes of Health (NIH) invites applications for the position of Director, Division of Extramural Research, National Eye Institute (NEI). This is a civil service position in the Senior Executive Service (SES) with a salary ranging from ES-1 to ES-6 (currently \$110,351 to \$125,900 per annum including a locality allowance). A recruitment bonus of up to 25% of base pay may be available to a non-Federal candidate selected for this position, subject to individual approval. A relocation bonus of up to 25% of base pay may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. The individual selected, if not currently in the career SES, must serve a one-year probationary period.

The incumbent of this position serves as Director, Division of Extramural Research, and keeps the Director and Deputy Director, National Eye Institute, abreast of research developments and needs of the programs as they relate to the overall mission of the NEI. The incumbent maintains liaison with other government research programs, private foundations, universities and private research institutions, scientific societies, voluntary health agencies, and international health and research organizations with interest in the National Eye Institute. The position manages extramural and collaborative research programs that provide a national focus for the fight against eye disease and blindness. More than 1500 grants, cooperative agreements, research and development contracts, research training, and construction awards are currently administered, and more than 1000 competing applications are received and processed each year. The incumbent plans, directs, and evaluates this research, and supervises a staff of 27 with an FY99 appropriation of \$346 million. The Institute has a staff of approximately 250 employees with an FY99 appropriation of \$395.9 million.

The vacancy announcement with mandatory and technical/professional qualifications can be obtained via Fax by calling 1-800-728-JOBS (Fax ID#4609). Applicants are required to submit an Application for Federal Employment (SF-171), Optional Application for Federal Employment (OF-612), resume, or any other written format which addresses the requirements indicated in this announcement, to the following address:

NIH, National Eye Institute Attention: Cheryl Wild Building 31, Room 6A18 31 Center Drive - MSC 2510 Bethesda, Maryland 20892-2510

Applications must be postmarked no later than April 1, 1999.

Applicants with access to E-mail may transmit their materials to the following E-mail address: CWild@nei.nih.gov

Applicants with access to the Internet's World Wide Web may wish to browse the NIH/NEI Home Page (www.nei.nih.gov) and may apply through the Web at the following: <a href="URL:http://www.nih.gov/news/">URL:http://www.nih.gov/news/</a>

Application materials may be Faxed to (301) 496-3958 (Please limit Faxed materials to no more than 10 pages).

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 NONMEMBERSHIP IN AN EMPLOYEE ORGANIZATION.

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## ECOLOGY/EVOLUTION POSITION BUCKNELL UNIVERSITY

Applications are invited for a one-year VISITING PO-SITION in ecology/evolution to begin in August 1999. Ph.D. preferred; A.B.D. considered. The position will involve teaching introductory courses for majors and non-majors. Curriculum vitae, evidence of teaching effectiveness, a cover letter offering teaching philosophy, and three letters of recommendation should be submitted to:

Dr. Wayne F. McDiffett, Chair
Department of Biology
Bucknell University
Lewisburg, PA 17837
E-mail: mcdifftt@bucknell.edu
Telephone: 570-577-1124
FAX: 570-577-3537
Website: http://www.bucknell.edu/
department/biology/

Review of applications will occur upon receipt and the search will remain open until the position is filled. Buckneil University Encourages applications from women and members of minority groups. Equal Employment Opportunity/Affirmative Action.

ASSISTANT/ASSOCIATE PROFESSOR of nematology available in Department of Crop Sciences, University of Illinois at Urbana-Champaign. Nematology posi-tion with research emphasis on the biology of plantparasitic nematodes at the molecular level. Nine-month tenure-track position with opportunity for summer appointment. Responsibilities 75 percent research, 25 percent teaching. Ph.D. in plant pathology, entomology, or a related discipline with proven expertise in nematology required. Excellent interpersonal communication skills, demonstrated ability to design, conduct, and report independent research, and clear ability and desire to excel in classroom required. Salary commensurate with training and experience. Starting date August 21, 1999, or when available. For full consideration, applications accepted until May 14, 1999. Submit application dossier consisting of introductory cover letter, curriculum vitae, and statement of research goals and teaching philosophy. Arrange for receipt of full set of certified undergraduate and graduate transcripts, three letters of reference, and the packet by: Professor G. H. Heichel, Head, Department of Crop Sciences, University of Illinois, 1102 South Goodwin Avenue, Urbana, IL 61801-4798. Telephone: 217-333-9480. For additional information and full announcement contact: Professor G. R. Noel, Search Committee Chair, Telephone: 217-244-3254; FAX: 217-244-8222; e-mail: g-noel1@uiuc.edu. For more information on department, website: http://w3.aces.uiuc.edu/cropsci/. Cite announcement #02/99B/6448 when applying. Affirmative Action/Equal Opportunity Employer.

The Department of Medical and Molecular Genetics at Indiana University School of Medicine is seeking applicants for a tenure-track research position in molecular genetics at the ASSISTANT/ASSOCIATE PROFESSOR level. Candidates must have M.D. or Ph.D. degree with established research experience and be capable of attracting extramural funding on a national level. Applicants should submit a letter of interest, a curriculum vitae, and a list of references to:

Merrill D. Benson, M.D., Chairman Indiana University School of Medicine Department of Medical and Molecular Genetics 975 West Walnut Street, IB-130 Indianapolis, IN 46202-5251

Indiana University is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages minority and women applicants.

Carnegie Mellon's College of Engineering seeks to add a FACULTY MEMBER at any level to teach and do research in air pollution and atmospheric chemistry, including fine particles, acid rain, and global change. Appointments possible in Mechanical, Civil and Environmental, or Chemical Engineering or jointly with Engineering and Public Policy. Résumé and list of references to: Professor Cliff Davidson, 123E Porter Hall, Carnegie Mellon University, Pittsburgh, PA 15213.

#### POSITIONS OPEN

## AVIAN BIOLOGIST HARVARD UNIVERSITY

The Department of Organismic and Evolutionary Biology and the Museum of Comparative Zoology invite applications from Avian Biologists for an appointment to be made at a level commensurate with the qualifications of the chosen candidate (ASSISTANT, ASSOCIATE (nontenured), or FULL PROFESSOR). Research interests may be in any of a range of subfields of biology including, but not restricted to, behavior, ecology, functional morphology, neurobiology, physiology, and systematics. The incumbent will be expected to teach at the undergraduate and graduate levels in appropriate areas of biology, and to assume responsibilities for curatorial oversight of a major ornithological collection. Prior to April 30, 1999, applicants should submit a curriculum vitae, a statement of research interests and teaching experience, and the names and addresses of three references to: James J. McCarthy, Avian Biology Search Committee, Museum of Comparative Zoology, Harvard University, 26 Oxford Street, Cambridge, MA 02138. Harvard University is an Affirmative Action/Equal Opportunity Employer. We encourage applications from women and minority candidates.

#### ASSISTANT/ASSOCIATE PROFESSOR THE UNIVERSITY OF SOUTHERN MISSISSIPPI HYDROGRAPHIC SCIENCE

The University of Southern Mississippi (USM), Institute of Marine Sciences, invites applications for a full-time, tenure-track faculty position in an anticipated hydrographic science degree program in the Department of Marine Science. Applications for two (2) other anticipated non-tenure-track positions are also welcome. More information is available on website: http://www.marine.usm.edu.

The tenure-track appointment will be made at either the Assistant or Associate Professor level, depending on qualifications. The non-tenure-track positions will be filled at the INSTRUCTOR or RESEARCH SCIENTIST level. The successful applicant should hold a Ph.D. in hydrographic science, coastal engineering, geography, oceanography, marine science, or a closely related field. Applicants should also have strong teaching and research interests in a wide range of hydrographic science topics, including multi-beam and side-scan sonar systems, ocean and sediment acoustics, bathymetry, classical geodesy, satellite geodesy and positioning, nautical charting and geographical information systems (GIS), and hydrographic data management. Research interests in offshore construction hydrography or hydrography for coastal zone management are also applicable for these positions.

The appointee is expected to maintain an externally funded research program, to supervise graduate students, and to teach courses primarily at the graduate level. It is anticipated that the successful applicant will take a leadership role in the continuing development of the hydrographic science program in the Department of Marine Science.

The USM Department of Marine Science is a multidisciplinary academic unit (M.S. and Ph.D.), with research and teaching programs in biological, chemical, geological, and physical oceanography. The Department of Marine Science is located at NASA's John C. Stennis Space Center (SSC) on the Mississippi-Louisiana border. Besides NASA research activities, the Stennis Space Center is also the home of the NASA Commercial Remote Sensing Program, the U.S. Naval Oceanographic Office, NOAA's National Data Buoy Center, the Naval Research Laboratory ((NRL)–SSC, and the Maury Oceanographic Library.

Review of applications will begin April 1, 1999, and continue until the positions are filled. The positions are available August 18, 1999.

Qualified applicants should mail a complete curriculum vitae, a statement of teaching and research interests, and names of four references to: Search Committee Chair, Department of Marine Science, The University of Southern Mississippi, Building 1103, Room 102, Stennis Space Center, MS 39529 USA. E-mail: marine@ssc.usm.edu.

Affirmative Action/Equal Opportunity Employer/ADA Institution.

### **POSITIONS OPEN**

## TENURE-TRACK WILDLIFE ECOLOGIST POSITION AG-38

Michigan State University

The Department of Fisheries and Wildlife at Michigan State University (MSU) invites applications for a 12month, tenure-track Wildlife Ecologist position at the ASSISTANT PROFESSOR level. A Ph.D. is required, and preference will be given to applicants with strong quantitative skills and interest in the impact of habitat management on wildlife species or communities on private lands or urban landscapes. The candidate is expected to develop a strong extension and research that interacts closely with state and federal agencies and conservation organizations. Additionally, the candidate is expected to teach courses at the undergraduate and graduate levels, obtain research grants, and publish findings. The candidate will also advise undergraduate and graduate students and serve on university, college, and department committees.

Application deadline: March 31, 1999, or until a suitable candidate is found. Salary is competitive and commensurate with education, experience, and demonstrated ability. Interested persons should submit a letter of application stating professional goals and objectives; statements of teaching, research, and extension interests and philosophy; a curriculum vitae with supporting materials including transcripts; and three letters of recommendation to: Dr. Harold H. Prince, Search Committee Chairperson, Department of Fisheries and Wildlife, Michigan State University, 13 Natural Resources Building, East Lansing, MI 48824-1222. Telephone: 517-355-3697; FAX: 517-432-1699; e-mail: hhprince@pilot.msu.edu.

Michigan State University is an Equal Opportunity/Affirmative Action Employer, Minority and women candidates are encouraged to apply. Disabled persons have the right to request and receive reasonable accommodations.

#### FACULTY POSITION IN PULMONARY BIOLOGY DEPARTMENT OF PHYSIOLOGY Michigan State University

Applications are invited for a tenure-track ASSIST-ANT/ASSOCIATE PROFESSOR appointment. The successful candidate will develop a research program in pulmonary biology utilizing molecular, cellular, or imaging techniques to investigate diseases such as asthma and cystic fibrosis. Candidates must hold a Ph.D. or equivalent, have postdoctoral experience, and demonstrate potential for developing an externally funded research program and for outstanding teaching. Interested individuals should provide a curriculum vitae, statement of research interests, key publications, and three references. Review of applications will begin on April 15, 1999.

Send applications to:

Pulmonary Biology Search Committee Department of Physiology Michigan State University East Lansing, MI 48824-1101

Michigan State University is an Equal Opportunity/Affirmative Action Employer. Disabled have the right to request and receive reasonable accommodation.

#### CASE WESTERN RESERVE UNIVERSITY

Two visiting teaching positions are available at the AS-SISTANT PROFESSOR level for the academic year 1999–2000 with a possible extension to an additional year, in the areas of (i) cell and molecular biology, and (ii) physiology. Previous teaching experience is required. Candidates should send a current curriculum vitae and a statement of their teaching experience and philosophy, and have three letters of recommendation sent to: Dr. Norman Rushforth, Chair, Department of Biology, Case Western Reserve University, Cleveland, OH 44106. E-mail: nbr@po.cwru.edu. Affinnative Action/Equal Opportunity Employer.

Pharmacology/toxicology. Tenure-track ASSISTANT PROFESSOR position available July 1, 1999. Ph.D. in pharmacology/toxicology required. A degree in pharmacy is desirable. Team teaching of biomedical science and graduate courses, student advising, and extramurally supported scholarly research is expected. Submit letter of intent, curriculum vitae, statement of research interests, names, addresses, and telephone numbers of three references to: F. W. Fochtman, Ph.D., Chair, Search Committee, Department of Pharmacology/Toxicology, School of Pharmacy, Duquesne University, Pittsburgh, PA 15282. Application deadline March 31, 1999.

## National Institutes of Health National Institute on Aging

Public Health Service
Department of Health and Human Services
Chief, Laboratory of Neurosciences

The National Institute on Aging (NIA), the NIH lead institute in Alzheimer's disease research, is recruiting a scientific leader for its research efforts in neuroscience. This is a Civil Service position. Starting salary is commensurate with qualifications and experience. Candidates may be eligible for Physician's Comparability Allowance up to \$20,000 per year. Alternatively, candidates may be eligible for appointment in the Senior Biomedical Research Service or under the Title 42 mechanism.

The Chief of the Laboratory of Neurosciences is responsible for a sizable intramural research laboratory with the potential to recruit at least four other independent tenured and/or tenure track senior investigators. The Laboratory of Neurosciences conducts basic and clinical research on brain aging and on the characteristics, mechanisms, and potential therapies for Alzheimer's disease and related dementias as well as other agerelated neurodegenerative diseases. The laboratory may have resources on both the Bethesda and the Baltimore campuses of the NIH. The ideal candidate will have demonstrated a body of significant accomplishments in neuroscience in general and the neurobiology of aging in particular with a proven record of excellence in laboratory and/or clinical research as demonstrated by publication in the highest quality peerreviewed journals, participation in invited national and international meetings, and receipt of research awards. Furthermore, an established track record of success in mentoring scientists-in-training consistent with the priorities of the NIH will contribute to the evaluation process.

Further information may be obtained by contacting Ms. Karen Maben at 410-558-8118. A current curriculum vitae and bibliography and six letters of recommendation should be submitted to: Personnel Office, National Institute on Aging, Gerontology Research Center, 5600 Nathan Shock Drive, Baltimore, MD 21224-6825. Applications must be postmarked by **April 5**, **1999**.

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mithKline Beecham, a world class leader in Research and Development, continues to pioneer innovative pharmaceutical and healthcare products and services. We have the following opportunity in our state-of-the-art suburban Philadelphia facility.

## **Preclinical Pharmacokineticist**

Working in our Drug Metabolism and Pharmacokinetics (DMPK)/Preclinical Pharmacokinetics Department, you will be a key participant representing DMPK within interdisciplinary matrix teams. You will also utilize, implement, and/or develop animal models and pharmacokinetic methods, determine PK parameters, and collaborate on understanding biotransformation pathways in the evaluation of the dispositional properties of experimental molecules.

To qualify, you must have a PhD in pharmacokinetics, toxicology, pharmacology, pharmaceutics, biochemistry, chemistry or equivalent with demonstrated experience in theoretical, experimental and practical applications of

pharmacokinetic techniques and analysis. A working knowledge of biotransformation/drug metabolism pathways and/or interspecies extrapolation of PK parameters to man is desired.

SmithKline Beecham offers a competitive benefits and compensation package, as well as a challenging work environment. Please submit your confidential resume with salary requirements to: SmithKline Beecham Pharmaceuticals, Job Code: K80390, PO Box 40047, Philadelphia, PA 19106. Indicating Job Code is essential. For more information and to apply online, visit our website at www.sb.com/careers

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# TENURE-TRACK FACULTY POSITION DEPARTMENT OF PHARMACEUTICAL SCIENCES University of Nebraska Medical Center

The University of Nebraska Medical Center invites applications for a tenure-track ASSISTANT or ASSO-CIATE PROFESSOR position in the Department of Pharmaceutical Sciences (website: www.unmc.edu/ PharmSciences). Candidates must have a Ph.D. or equivalent degree. Preference will be given to candidates with a broad background in membrane-protein biophysics or a related field as applied to pharmaceutical sciences. The successful candidate will be expected to establish an externally funded research program, develop multidisciplinary collaborations, and teach in professional and graduate programs. The review process will begin April 1, 1999, and continue until the position is filled. Qualified individuals are invited to send a curriculum vitae; names of at least three references; a summary of current research and teaching activities; and a statement of career goals to: William F. Elmquist, Ph.D., Faculty Search Committee, 986025 Nebraska Medical Center, Omaha, NE 68198. E-mail: wfelmqui@mail.unmc.edu. The University of Nebraska is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.

#### PRINCETON UNIVERSITY

The Department of Chemical Engineering and the Princeton Materials Institute seek outstanding applicants for a tenure-track position at the ASSISTANT PRO-FESSOR level, effective as early as September 1, 1999. The area of interest is the experimental design, synthesis, and processing of novel materials. The successful candidate should have a Ph.D. in chemical engineering, materials science, chemistry, or related field; demonstrated excellence in academic research; and a strong commitment to teaching and advising undergraduate and graduate students. Applicants should send a curriculum vitae, a detailed description of teaching and research interests, reprints of selected publications, and the names and addresses of at least three references to: Professor Ilhan A. Aksay, Chair, Search Committee, Department of Chemical Engineering, Princeton University, Princeton, NJ 08544-5263. Applications are encouraged before May 1, 1999. Princeton University is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply,

Tenure-track faculty position, developmental biology, Division of Basic Biomedical Sciences, University of South Dakota School of Medicine. A state-supported tenure-track position is available in the area of developmental biology at the ASSISTANT or ASSOCIATE PRO-FESSOR level. Rank and salary commensurate with experience. Applicants must have a Ph.D. and/or M.D. degree, postdoctoral experience, and the ability to develop an independent research program. Current research inter ests include molecular aspects of differentiation, morphogenesis, extracellular matrix involvement in differentiation. The successful candidate will participate in teaching of medical, graduate, and undergraduate students. Competitive salary and start-up funds. Send curriculum vitae, statement of research plans, and three letters of reference to: Carleen McNeely, Developmental Biology Search Committee, Division of Basic Biomedical Sciences, University of South Dakota School of Medicine, Vermillion, SD 57069. Consideration of applications will begin April 5, 1999. USD is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially invited to apply.

## NEUROSCIENCE POSITION VACANCY ANNOUNCEMENT

Florida A&M University College of Pharmacy is seeking individuals to fill two ASSISTANT/ASSOCIATE PROFESSOR positions in a neuroscience multidisciplinary program. A Molecular Neurobiologist position is available immediately and a Neuro-electrophysiologist position will be available in June 1999. The applicant should have a Ph.D. or equivalent degree, postdoctoral experience, and the ability to develop an independent research program that will attract nationally competitive research funds. Some teaching will be involved, and the applicant will be involved in training at the M.S. and Ph.D. graduate levels. Send résumé to: Dr. Clivel Charlton, Florida A&M University College of Pharmacy, Tallahassee, FL 32307. Telephone: 850-599-3063.

## POSITIONS OPEN

ASSISTANT PROFESSOR of maize functional genomics/genetics available in Department of Crop Sciences, University of Illinois at Urbana-Champaign. Maize functional genomics/molecular genetics position with emphasis on fundamental research related to the study and characterization of the genetic control of important physiological processes, pathways, or traits of maize. Nine-month tenure-track position with opportunity for summer appointment. Responsibilities 75 percent research, 25 percent teaching. Ph.D. in relevant area of life or plant science required. Postdoctoral training or equivalent experience highly desired. Demonstrated ability in modern genomic technologies and maize genetics desired. Excellent interpersonal and communication skills, demonstrated ability to design and carry out independent research, and clear ability and desire to excel in classroom teaching required. Salary commensurate with training and experience. Starting date August 21, 1999, or when available. For full consideration, applications accepted until April 15, 1999. Interviews may be conducted before closing date, but all applications received by that date will receive full consideration. Submit application packet consisting of introductory cover letter, curriculum vitae, and statement of teaching and research experience and goals. Arrange for receipt of full set of certified undergraduate and graduate transcripts, three letters of reference, and the packet by: Professor G. H. Heichel, Head, Department of Crop Sciences, University of Illinois, 1102 South Goodwin Avenue, Urbana, IL 61801. Tele-phone: 217-333-9480. For additional information and full job announcement contact: Dr. T. R. Rocheford, Search Committee Chair, Telephone: 217-333-9643; FAX: 217-333-9817; e-mail: trochefo@uiuc.edu. For more information on department, website: http:// w3.aces.uiuc.edu/cropsci/. Cite announcement #02/ 99A-6443 when applying. Affirmative Action/Equal Opportunity Employer.

#### TENURE-TRACK POSITION IN HUMAN MOLECULAR GENETICS University of California, San Francisco Department of Orthopaedic Surgery

A tenure-track position is available in the Department of Orthopaedic Surgery and Program in Biomedical Science for an ASSISTANT/ASSOCIATE PROFESSOR. Outstanding candidates whose research examines the genetic, molecular, or cellular basis of human diseases, affecting the musculoskeletal system will be given preference. The successful candidate will be expected to establish a vigorous, independent research program and contribute to teaching Residents and medical students. Qualifications include a M.D., Ph.D., or both. Candidates with demonstrated experience in teaching and success in acquiring independent funding are especially encouraged to apply.

Submit a letter of application, a summary of teaching research goals, a curriculum vitae with names of three references and send to: Dr. David S. Bradford, Department of Orthopaedics, University of California, San Francisco, 500 Parnassus Avenue, San Francisco, CA 94143-0728; Dr. Charles Epstein, Department of Pediatrics and Co-Director, Program in Human Genetics, University of California, San Francisco, Box 0748, San Francisco, CA 94142-0748; and Dr. Ira Herskowitz, Department of Biochemistry, University of California, San Francisco, Box 0448, HSE 201J, San Francisco, CA 94143.

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

Two visiting ASSISTANT PROFESSOR positions, invertebrate zoology and insect ecology, for August 1999 (tenure-track search the following year). Ph.D. required. Teaching includes introductory biology, invertebrate zoology, parasitology, ecology, and entomology. Research activity involving students expected. Department information at website: www.shsu.edu/~bio\_www/. Send résumé, statements of teaching philosophy and research interests, three letters of reference, and transcripts by March 20, 1999, to: Search Committee, Department of Biological Sciences, P.O. Box 2116, Sam Houston State University, Huntsville, TX 77341. A member of the Texas State University System. An Equal Opportunity/Affirmative Action Institution.

### POSITIONS OPEN

#### RESEARCH MICROBIOLOGIST

The United States Department of Agriculture (USDA), Agricultural Research Service, Clay Center, Nebraska is accepting applications for a permanent, full-time Research Microbiologist. The objectives of this position will be to investigate host-microbial interaction at mucosal surfaces to (1) define the host, microbial, and environmental factors that influence colonization and clearance of infection, and (2) develop and evaluate rational intervention strategies to be applied on a population basis. Highly desirable candidates will have a Ph.D. in microbiology or a related field, with an emphasis on molecular aspects of virulence or other host-pathogen interactions. Experience and working knowledge of molecular biology, cell biology, and microbiology is required. Applicants must be U.S. citizens. Salary range is \$47,891 to \$74,035. For a copy of Announcement Number ARS-D9W-9228 and an application package, please call: USDA, ARS, Human Resources Division, Telephone: 301-504-1484 or print it from the Internet at website: http://www.ars. usda.gov. Specific questions regarding the position may be directed to: Dr. William Laegreid, U.S. Meat Animal Research Center, Telephone: 402-762-4177; e-mail: laegreid@email.marc.usda.gov. All applications must be postmarked by April 5, 1999. USDA-ARS is an Equal Opportunity Provider Employer.

Animal behavior/physiology. The Reed College Biology Department invites applications for a one-year VIS-ITING ASSISTANT PROFESSOR starting in the fall of 1999. A Ph.D. is required and postdoctoral experience is highly desirable. The successful applicant will teach in a team-taught introductory course; an upper-division lecture/laboratory course; and an upper-division lecture course. In addition, s/he will direct year-long senior thesis research in areas related to animal behavior or physiology. Reed College is a selective liberal arts institution with a distinguished record of educational accomplishment and a strong commitment to scholarship (website: http://www.reed.edu/). This position is subject to final administrative approval. Applications including curriculum vitae and three recent letters of reference should be sent to: Search Committee Chair, Biology Department, Reed College, Portland, OR 97202-8199.
Completed applications will be reviewed starting March 29, 1999.

The USDA, Agricultural Research Service, National Program Staff, Crop Production, Product Value, and Safety, in Beltsville, Maryland is seeking a NATIONAL PROGRAM LEADER for Horticulture and Sugar (PLANT PATHOLOGIST/HORTICULTURIST/PLANT PHYSIOLOGIST, GS-434/437/435-15). Salary is commensurate with experience (GS-15: \$80,658 to \$104,851 per year). Candidates must be U.S. citizens. The position is responsible for coordinating ARS' horticulture and sugar research programs. This position has specific education and experience requirements, and factors that must be addressed. In order to ensure submission of a complete application, applicants must request a copy of the vacancy announcement by Telephone: 301-504-1484 or by printing it from the Internet at website: http://www.ars.usda.gov. The vacancy announcement number for this position is ARS-D9E-9179. This announcement closes April 5, 1999. For program information, contact: Dr. Judy St. John, Telephone: 301-504-6525; FAX: 301-504-6719; e-mail: jsj@ars.usda.gov. USDA/ARS is an Equal Opportunity Employer and Provider.

Position in endocrinology at University Medical Center. We invite applications at the level of ASSISTANT PROFESSOR. The candidates must have Board certification in internal medicine and endocrinology with academic achievement in these fields. Also required is advanced training (at least two years) in pituitary diseases. Must have experience in running drug trials for acromegaly and other pituitary diseases. Experience in protocol preparation and IRB submission preferred. Previous experience in basic research (molecular biology) is required. Salary is commensurate with appointment. Apply to: David Kleinberg, M.D., Professor of Medicine, New York University, 550 First Avenue, New York, NY 10016. Telephone: 212-263-6772; FAX: 212-447-6219.

## Opportunities for... RESEARCH SCIENTISTS & POSTDOCTORAL RESEARCH ASSOCIATES



The Agricultural Research Service is an agency within the U.S. Department of Agriculture that provides the means for solving food and farm problems. Our research assures that Americans have the best quality and supply of food and fiber (leather, cotton, wool, timber). The ARS mission is to plan, develop and continue research for new knowledge and technologies, including six research objectives:

1) Natural Resources; 2) Plant Science; 3) Animal Science; 4) New

Opportunities exist nationwide in many research areas, including:

- Human Nutrition
- Genetics
- Immunology
- Virology
- Biochemistry
- Chemistry
- Microbiology
- Animal Science
- Entomology
- Plant Physiology
- Plant Pathology
- Agronomy
- Soil Science
- Engineering

Individual vacancies will be advertised and announcements can be accessed on the ARS Home Page at: http://www.ars.usda.gov.

**Research Scientist** appointments may be permanent or temporary and require U.S. citizenship.

## Postdoctoral Research Associate

opportunities are initially for up to 2 years. There are some employment restrictions for non-U.S. citizens.

If access is unavailable via internet, you may call or write for written descriptions of positions and application procedures:

Susan Dixon
Human Resources Division
USDA/ARS/REDS
5601 Sunnyside Avenue
Beltsville, MD 20705-5103
301-504-1407
sdixon@ars.usda.gov
Please do not send or E-mail resumes to this address.

ARS is an Equal Opportunity Employer

Uses for Farm Commodities:

5) Nutrition; and 6) Data Systems.

#### Pri7

## **KUWAIT PRIZE 1999** Invitation for Nominations

The Kuwait Foundation for the Advancement of Sciences (KFAS) institutionalized the KUWAIT Prize to recognize distinguished accomplishments in the arts, humanities, and sciences. The Prizes are awarded annually in the following categories:

- A. Basic Sciences
- B. Applied Sciences
- C. Economics and Social Sciences
- D. Arts and Letters
- E. Arabic and Islamic Scientific Heritage

### The Prizes for 1999 will be awarded in the following fields:

- 1. Basic Sciences
- 2. Applied Sciences
- 3. Economic and Social Sciences
- 4. Arts and Literature
- 5. Arabic and Islamic Scientific Heritage
- : Seismology.
- : Climatic Changes.
- : The New System of International Trade and its Impact on The Arab World Economies.
- : Biographies.
- : Arabic Calligraphy.

## Foreground and Conditions of the Prize:

- 1. Two prizes are awarded in each category:
  - \* A Prize to recognize the distinguished scientific research of a Kuwaiti citizen, and,
  - \* A Prize to recognize the distinguished scientific research of an Arab citizen.
- 2. The candidate should not have been awarded a Prize for the submitted work by any other institution.
- 3. Nominations for these Prizes are accepted from individuals, academic and scientific centers, learned societies, past recipients of the Prize, and peers of the nominees. No nominations are accepted from political entities.
- 4. The scientific research submitted must have been published during the last ten years.
- 5. Each prize consists of a cash sum of K.D. 30,000/-(approx. U.S.\$100,000/-), a Gold medal, a KFAS Shield and a Certificate of Recognition.
- 6. Nominators must clearly indicate the distinguished work that qualifies their candidate for consideration.
- 7. The results of KFAS decision regarding selection of winners are final
- 8. The documents submitted for nominations will not be returned regardless of the outcome of the decision.
- 9. Each winner is expected to deliver a lecture concerning the contribution for which he was awarded the Prize.

Inquiries concerning the KUWAIT PRIZE and nominations including complete curriculum vitae and updated lists of publications by the candidate with four copies of each of the published papers should be received before 31/10/1999 and addressed to:

### The Director General

The Kuwait Foundation for the Advancement of Sciences P.O. Box 25263, Safat - 13113, Kuwait Tel: (+965) 2429780 / Fax: (+965) 2403891 / E-Mail: prize@kfas.org.kw

#### RESEARCH MICROBIOLOGIST

The USDA, Agricultural Research Service, Clay Center, Nebraska is seeking a Microbiologist to be a member of a research team that conducts research to develop the necessary technology to reduce food-borne pathogens from red meat. The candidate will complement the capabilities of an experienced team of 10-plus scientists. Highly desirable candidates will have a Ph.D. degree in microbiology or related fields. The objective of the incumbent's research is to determine the relationship between preharvest contamination with E. coli O157:H7 (and other human pathogens) and levels of contamination on carcasses and subsequent beef products. Work experience with food-borne pathogens is desirable. Applicants must be U.S. citizens. Salary is commensurate with qualification and experience (\$47,891 to \$74,031). The U.S. Meat Animal Research Center is a modern, well-funded research facility located in south-central Nebraska. The 60plus researchers currently working at the center represent a wide range of scientific disciplines, from basic molecular genetics and mathematical modeling to population biology and biological engineering. For information on the research program and position, contact: **Dr. Mohammad Koohmaraie**, **Telephone**: **402-762-4221**. For a copy of vacancy announcement number ARS-D9W-9230, Telephone: 301-504-1484 or print it from the Internet at website: http://www.ars.usda.gov. All applications must be postmarked by May 10, 1999. USDA/ARS is an Equal Opportunity Provider Employer.

### RESEARCH MICROBIOLOGIST

The USDA, Agricultural Research Service, Clay Center, Nebraska is seeking a Microbiologist or Molecular Biologist or Biochemist to be a member of a research team that conducts research to develop the necessary technology to reduce food-borne pathogens from red meat. The candidate will complement the capabilities of an experienced team of scientists by providing molecular biology expertise. Highly desirable candidates will have a Ph.D. degree in microbiology or biochemistry, and have extensive work experience in molecular biology techniques. Work experience with food-borne pathogens is desirable. Applicants must be U.S. citizens. Salary is commensurate with qualification and experience (\$47,891 to \$74,031). The U.S. Meat Animal Research Center is a modern, well-funded research facility located in south-central Nebraska. The 60-plus researchers currently working at the center represent a wide range of scientific disciplines, from basic molecular genetics and mathematical modeling to population biology and biological engineering. For information on the research program and position, contact: Dr. Mohammad Koohmaraie, Telephone: 402-762-4221 For a copy of vacancy announcement number ARS-D9W-9232, **Telephone:** 301-504-1484 or print it from the Internet at website: http://www.ars.usda.gov. All applications must be postmarked by May 10, 1999. *USDA/* ARS is an Equal Opportunity Provider Employer

## ASSISTANT RESEARCH SCIENTIST

The Department of Surgery at the University of Michigan seeks candidates for a faculty position in the area of gastrointestinal physiology. Applicants should have extensive research experience in the application of microspectrofluorimetry to the study of intracellular ion concentrations, confocal microscopy, and related cellular biological techniques. Competitive applicants will have a Ph.D. with at least two years of postdoctoral experience and a record of research productivity. The candidate will be expected to participate in an extramurally funded research program and to teach medical students and Research Fellows. We offer an interdisciplinary research environment, competitive salary, and research space. Please send inquiries along with current curriculum vitae to: Michael W. Mulholland, M.D., Ph.D., Department of Surgery, 2922TC, 1500 East Medical Center Drive, Ann Arbor, MI 48109-0331.

The University of Michigan is a nondiscriminatory/Affirmative Action Employer and strongly encourages females and minorities to apply.

NIH-funded POSTDOCTORAL POSITIONS in the laboratory of Dr. Chih-Pin Liu to study TCR/CD3-mediated signal transduction events in T-cell development. Experience in signal transduction or cellular immunology, etc. helpful. Please send a curriculum vitae and names, addresses, telephone/FAX numbers, and e-mail addresses of three references to: Adrienne Fryhoff, Beckman Research Institute of the City of Hope, 1450 East Duarte Road, Duarte, CA 91010 USA. FAX: 626-301-8843.

## POSITIONS OPEN

#### USDA AGRICULTURAL RESEARCH SERVICE

The USDA, Agricultural Research Service, Plant Genetics Unit in Columbia, Missouri is seeking two RE-SEARCH GENETICISTS/MOLECULAR BIOLO-GISTS, GS-12/13/14, salary range \$47,891 to \$87,489 per annum. These two positions form a team in a newly funded, permanent project conducting a multidisciplinary research effort to understand the genetic basis soybean seed composition and its manipulation and interactions within the plant. The focus of the first position (Announcement Number ARS-X9W-9236) is to use biochemical, molecular, genetic, and functional genomics approaches to develop a fundamental understanding of important seed/embryo components and developmental pathways. The incumbent will focus on development and regulation aspects of pathways that contribute to seed composition. The second position (Announcement Number ARS-X9W-9237) will identify and characterize genes, both qualitative and quantitative, affecting seed composition of soybean, particularly genes controlling modification and interactions of the oil and protein fractions. Cooperative research efforts are expected with re-searchers from the University of Missouri and other ARS researchers. The successful applicants will be considered for Adjunct Professor appointments in the Agronomy/ Biochemistry Departments at the University of Missouri United States citizenship is required. Candidates at the GS-12 level must have a Ph.D. or equivalent Doctoral degree or one year of indirectly related, specialized experience equivalent to the GS-11 level; candidates at the GS-13 and GS-14 grade levels must have one year of directly related, specialized experience at the next lower grade level. Specialized experience at all levels is experience involving molecular and quantitative genetic techniques and the modification of biological functions, as opposed to simple marker-assisted selection of chromosome regions. For information on the research program and/or positions, contact: Dr. L. L. Darrah, Research Leader, Telephone: 573-882-2349; e-mail: agrolld1@showme. missouri.edu. For general information on application procedures and forms, contact: The Columbia Administrative Officer, J. L. Fernandez, Telephone: 573-875-5293; e-mail: agrojlf@showme.missouri.edu. Applications must be postmarked by April 30, 1999. USDA is an Equal Opportunity Provider and Employer

#### FIELD STATION DIRECTOR

Hiram College seeks applications for Director of the James H. Barrow Field Station (FS), which is associated with the Department of Biology. The FS encompasses 260 acres (about half in forest preserve and half as former farm land), two ponds, and facilities for teaching, research, and group meetings. Candidates need expertise in environmental science, conservation biology, or related field(s), teaching experience, and familiarity with field station operations. Ph.D. preferred (M.S. candidates considered). Duties: manage facilities and budget; develop academic program; facilitate student and faculty work in courses, research, and outreach education; foster interdisciplinary activities of other faculty; teach one or two courses (e.g., environmental education, environmental monitoring, GIS, conservation biology); initiate collaborative research involving undergraduates and faculty at FS; submit proposals to fund academic programs; and oversee management of captive animal collections. This is a full-time, 12-month, professional staff position. Hiram College is a small, selective undergraduate liberal arts college in rural northeast Ohio, about 45 minutes from Cleveland, Akron, and Youngstown. Send curriculum vitae, statement of philosophy on teaching and research (including a vision for the role of a field station in undergraduate research), and three letters of reference to: Matthew H. Hils, Department of Biology, Hiram College, P.O. Box 67, Hiram, OH 44234. Review of applications will begin April 5, 1999, and continue until the position is filled. Position begins July 1, 1999. Website: http://www.hiram.edu.

Hiram College is an Equal Opportunity Employer committed to

Hiram College is an Equal Opportunity Employer committed to excellence through diversity.

POSTDOCTORAL FELLOWSHIP. A two-year Research Fellowship at the University of Maryland School of Medicine is available immediately. Candidates should have an M.D. or Ph.D. with experience and interest in molecular biology, protein chemistry, and/or cell receptor physiology. Send curriculum vitae to: Susan Keay, M.D., Ph.D., VA Medical Center, Room 3B184, 10 North Greene Street, Baltimore, MD 21201. Affinnative Action/Equal Employment Opportunity/ADA Employer.

### POSITIONS OPEN

#### PROGRAM DIRECTOR IN MARINE BIOLOGY

Florida International University (FIU) is seeking applications from senior faculty in the marine biological sciences to lead the development of its new program in marine biology at FIU's North Miami Campus. The North Miami Campus is home to over 8,000 students and is located on a 200-acre campus on Biscayne Bay. Benthic algal, seagrass, and mangrove communities are adjacent to campus, and coral communities are two miles away. A marine biology program has been approved, and will be the only discipline in the biological sciences with its own B.S. degree. All biological sciences programs are currently administered by the Department of Biological Sciences located on the 23,000-student University Park Campus, where the majority of Biological Sciences (and Marine Biology faculty) currently reside. Additional information about the Department can be obtained through our website: http://www.fiu.edu/~biology/.

Since the program is new, the Director will be expected to lead the physical, as well as the academic development of Marine Biology and will report to both the Chair of the Biological Sciences Department and the chief administrative officer for the North Miami Campus. The successful applicant will hold a Ph.D. in the marine biological sciences or directly related fields at the Associate or Full Professor level, will have proven administrative and interpersonal skills, sustained success in competitive funding, and a demonstrated commitment to programmatic development.

Administrative duties will constitute a negotiable proportion of this tenured or tenure-track position, with the remaining time devoted to teaching and research.

Salary will be competitive and commensurate with qualifications. Applicants must submit a letter of interest and qualifications, curriculum vitae, representative reprints, and the e-mail and postal addresses of five references to:

Walter M. Goldberg, Chair Marine Biology Program Search Committee Department of Biological Sciences University Park Miami, FL 33199

Applications must be postmarked before April 8, 1999. FIU is an Equal Opportunity/Affirmative Action/Equal Access Employer.

## BIOLOGIST STAFF SCIENTIST SOFTWARE DEVELOPMENT PROGRAM

The Ernest Orlando Lawrence Berkeley National Laboratory's Physical BioSciences Division is seeking a Biologist Staff Scientist to conduct research in structural biology, molecular biology, or biophysics and lead the division's software development program. Incumbent will play a key national role in outreach, dissemination and service for activities in computational biology centered at the Berkeley Laboratory and NERSC high-performance computing facility, and will manage the development of software programs in biophysics using computational tools in biology. Plan and deliver computational biology workshops, writing online World Wide Web tutorials, and contribute in general to the work performed by NERSC's User Services group with an eye to the needs of Computational Biologists.

The successful candidate will have several years research experience in structural/molecular biology or biophysics combined with a broad computational background including scientific applications programming with expertise in distributed memory parallel computers, developing code, using debuggers and performance analysis tools, UNIX, Fortran, and C.

Applicants are requested to submit a curriculum vitae, list of publications, statement of research interests, and the names of at least three references no later than March 31, 1999, to: Chair, Search Committee, Job# PBS10322/JSCI, Physical BioSciences Division, MS Hildebrand, Lawrence Berkeley National Laboratory, 1 Cyclotron Road, Berkeley, CA 94720. Berkeley Lab is an Affinative Action/Equal Opportunity Employer committed to the development of a diverse work force.

POSTDOCTORAL POSITION available immediately, to study T cell immunity to human prostate cancers. Experience in cellular immunology, including T cell culture techniques, and molecular biology is essential. Send curriculum vitae and names of three references to: Dr. D. Peace, Room 3170 MBRB, M/C 734, Section of Hematology and Oncology, University of Illinois Chicago, 900 South Ashland Avenue, Chicago, IL 60607. E-mail: dpeace@uic.edu. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.



Pfizer scientists are involved in some of the most critical research in the world today. Recently voted Company of the Year by Forbes Magazine, we have established a product pipeline that is unparalleled and an intellectual, collaborative environment that inspires scientific achievement. Pfizer Inc's Animal Health Department is currently seeking candidates for the following positions.

## **RESEARCH SCIENTISTS (2)**

Based in Groton, CT, the Animal Health Biological Discovery group currently has two openings for Research Scientists. The successful candidates will be responsible for disease model development and providing support to project teams in the assessment of safety and efficacy of veterinary biologicals for swine and cattle, Other duties include close participation in the design and implementation of animal experiments, gross pathology examinations, conducting clinical evaluations, analysis and interpretation of clinical results, and preparation of reports. A DVM with a minimum of three years of experience in veterinary science in the areas of swine and/or cattle research is required. Ph.D. or post graduate training and comprehensive experience in clinical veterinary medicine for swine and/or cattle as well as sound understanding of disease pathogenesis and laboratory clinical assays are highly desirable. Strong verbal and written communication proficiency and organizational and interpersonal skills are also essential.

Pfizer offers exceptional salaries and benefits, as well as tremendous growth potential. Please send your resume in confidence to: Pfizer Inc, Job Code #3078, Imaging Services, 235 East 42nd Street 4-42, New York, NY 10017-5755. As an Equal Opportunity Employer. Pfizer is focused on building a diverse workforce.



## **DEFINING GENE FUNCTION**

Lexicon Genetics is a genomics-based biopharmaceutical company focused on harnessing the power of molecular genetics for the discovery of novel gene-based therapeutics. Proprietary gene trapping technology is propelling a mass insertional mutagenesis assault on the mouse genome that will enable the elucidation of gene function at an unprecedented rate. In addition, Lexicon's novel gene-traps provide rapid and efficient access to the transcribed portion of the genome. To advance our programs in gene definition, we seek to fill the following positions:

## Scientists

Genomics

Qualified candidates will possess a Ph.D. in Molecular Biology or related field, with proven expertise in cDNA library manipulation, PCR, and the use of sequencing software. Computer proficiency with experience utilizing bioinformatics to update, manage, and mine large datasets is required. Supervisory experience, excellent communication skills, team orientation and multiple project management ability are pluses.

Lexicon Genetics employees enjoy a pleasant working environment in The Woodlands,TX located 30 miles north of Houston where a full range of cultural experiences awaits.

We provide competitive salaries, stock options and benefits. Please send your CV and cover letter referencing Job Code SCI-GEN-1 to: **Human** 

Resources, LEXICON GENETICS
INCORPORATED, 4000 Research Forest
Drive, The Woodlands, Texas 77381. Fax
(281) 364-0155. Or, email to
thompson@lexgen.com. E.O.E.



## GLOBAL OPPORTUNITIES



Equal opportunity in employment is University policy.

## **DEPARTMENT OF ZOOLOGY AND ENTOMOLOGY**

# Lecturer/Senior Lecturer (Level B/C) in Coral Reef Ecology

The Department of Zoology and Entomology invites applications for an appointment at either Lecturer or Senior Lecturer in the field of coral reef ecology.

The University operates a small research station at Low Isles in the northern Great Barrier Reef region, a large teaching and research station at Heron Island in the southern Great Barrier Reef, and a similar facility is under construction in Moreton Bay. All research stations have an appropriate range of small boats, and the University has recently purchased a 11.15m catamaran capable of offshore operations.

The appointee will coordinate and further develop a third level field subject in coral reef ecology and contribute to other appropriate undergraduate subjects. The successful candidate will be expected to attract and supervise postgraduate students, especially those interested in coral reef ecology, to foster use of the University's Heron Island Research Station, to pursue an active, externally-funded research program in coral reef ecology, and contribute to the academic life of the Department, the Centre for Marine Studies and the University.

Applicants should possess a PhD degree, have demonstrably relevant achievements in tertiary level teaching and research, proven ability to supervise postgraduate students, a documented record of high research productivity, an ability to work cooperatively in a team environment, and experience in administration and research. Preference will be given to applicants with a strong background in tropical and sub-tropical coral reef ecology.

The appointment, commencing in mid 1999, will be continuing, with a probationary period of three years (Senior Lecturer) or five years (Lecturer), with appointment beyond probationary periods subject to satisfactory performance against agreed criteria. The level of appointment and commencement salary will be dependent on qualifications and experience.

Salary range: Lecturer (Level B) A\$48,327 – A\$57,388 per annum; Senior Lecturer (Level C) A\$59,200 – A\$68,261 per annum.

Information about the Department of Zoology and Entomology, and the University's Centre for Marine Studies/School of Marine Science, can be found on the web (http://www.zoology.uq.edu.au/

Details of the position and further information about the Centre for Marine Studies/School of Marine Science can be obtained by contacting Associate Professor Jack Greenwood on email JGreenwood@zoology.uq.edu.au or telephone +61-7-3365-2504. Further details of duties and selection criteria are available from the Department of Zoology and Entomology Senior Administration Officer, Janine Armitage, email JArmitage@zoology.uq.edu.au.

Send nine (9) copies (an original plus eight copies) of your application to Ms Emily Fraser, Assistant Personnel Officer, Faculty of Biological and Chemical Sciences, The University of Queensland, Brisbane Qld 4072 Australia. Please quote **Reference No. 08699**, address the selection criteria and include a résumé and the names and contact details (mail, fax and email) of three referees.

Closing date for applications: 16 April 1999.



#### ASTROPHYSICIST

The NASA/Goddard Space Flight Center (GSFC), NASA's Center of Excellence for scientific research, invites applications for an experienced Infrared Astrophysicist to perform a leading role in the development of Next Generation Space Telescope (NGST) instrumentation and to carry out an active infrared scientific research program.

The successful applicant will join the Infrared Astrophysics Branch, which is currently engaged in the formulation of new mission and instrument concepts, in the analyses of past and current mission data, and in the planning and execution of the space-flight research program. The Branch is engaged in submillimeter, cosmic microwave background, and infrared astrophysical research. The instrument development activities of the Branch have supported COBE, HST, MAP, NGST, WIRE, and SOFIA.

Established Infrared Astrophysicists with demonstrated instrumental capabilities and leadership qualities are encouraged to apply. The salary range is from \$68,570 to \$104,851, and is commensurate with the experience of the successful candidate.

Applicants must submit either an "Optional Application for Federal Employment" (OF-612) or SF-171, "Application for Federal Employment," or a résumé. In addition, applicants should submit a professional curriculum vitae, a list of refereed publications, and a cogent (approximately 1,000-word) statement of career interests. Applications should be sent to:

#### NASA/Goddard Space Flight Center Human Resources Operations Office, Code 113.8 Attn: Ms. Dorenda Small Greenbelt, MD 20771

For more information about position requirements and application procedures, please call: Ms. Small, Telephone: 301-286-6958; TDD: 301-286-7918.

Applications must be submitted by June 1, 1999. Equal Opportunity Employer. U.S. citizenship required.

#### BIOCHEMIST U.S. MEAT ANIMAL RESEARCH CENTER USDA/ARS

A permanent Biochemist position in molecular genetics of livestock is available at the U.S. Meat Animal Research Center, Clay Center, Nebraska. The scientist will join an interdisciplinary team using gene mapping and gene expression approaches to identify the basis of genetic varia-tion within and among breeds of cattle, sheep, and swine. Research focus may include aspects of growth, development, reproduction, or other traits of economic importance. Highly desirable candidates will have a Ph.D. and a strong background in biochemistry and experience in standard molecular biology techniques, with relevant postdoctoral experience and publications in peer-reviewed journals. *Applicants must be U.S. citizens.* For a copy of Announcement Number ARS-D9W-9231, see website: http://www.ars.usda.gov. All application material must be postmarked by April 12, 1999. Specific questions regarding the position may be directed to: Dr. Gary Bennett, U.S. Meat Animal Research Center, Telephone: 402-762-4254; e-mail: bennett@email.marc. usda.gov. USDA, ARS is an Equal Opportunity Provider and Employer.

## RESEARCH ELECTRON MICROSCOPIST TO START JULY 1999

Highly motivated, conscientious individuals with experience in TEM tissue preparation protocols and ultramicroscopy, negative staining, frozen hydrated, or other high-resolution biological specimen preparation techniques. Work independently, team player. Candidate will assist with maintenance of microscopes, operating/testing/developing instrumentation (e.g., transmission electron microscopes, cryo-holders, cryo-microtome). Experience with and aptitude for such activities is desirable, although some on-the-job training is possible. Other duties include routine and publication-quality photographic work and general assistance in examining biological specimens. Applications should include a statement of experience and goals plus three letters of reference. B.A./B.S., preferably in one of the biological or physical sciences, or in bioengineering or equivalent experience. Knowledge of the operation of a high-resolution TEM is required. Send applications to: The Burnham Institute, 10901 North Torrey Pines Road, La Jolla, CA 92037, Attn: Human Resources-Job Code DH. Salary commensurate with experience. Equal Opportunity Employer.

### POSITIONS OPEN

The Metropolitan Water Reclamation District of Greater Chicago is an independent government agency serving an area that includes the City of Chicago and 124 suburban communities. The District serves a population of 5.1 million people, treats an average of 1.4 billion gallons of wastewater each day, and owns and operates one of the world's largest water reclamation plants, in addition to six other plants and 34 pumping stations. The District's laboratories are recognized nationally and internationally as leaders and innovators in the field of wastewater treatment.

The District will conduct civil service examinations for the following positions:

RESEARCH SCIENTIST III. The successful applicant will have a Master's degree or a Ph.D. in water resource sciences, environmental engineering, sanitary engineering, or environmental sciences from an accredited college or university. Six years of research experience in the fields of wastewater and sludge treatment technology of which four years must have involved direct supervision of technical personnel. Related graduate study above the Master's degree may be substituted for the required experience. The annual salary range is \$64,009.14 to \$93,445.04.

TNSTRUMENTATION CHEMIST I and II. The successful applicant will have a Master's degree majoring in chemistry or a closely related field. The Instrumentation Chemist I also requires one year of full-time professional work experience in a wastewater laboratory involving methodology development, conducting of quality control/quality assurance programs or GC/MS analysis according to U.S. EPA methods and protocol of organic priority pollutants in wastewater and sludge. The Instrumentation Chemist II also requires four years of full-time professional work experience as described above, one year of which must have been at the supervisory level. Related postgraduate work above the Master's degree may be substituted for the nonsupervisory experience on a year-for-year basis. The annual salary ranges are Instrumentation Chemist II: \$47,718.32 to \$71,023.68; Instrumentation Chemist II: \$52,526.24 to \$78,133.90.

The District offers a competitive salary, an outstanding benefits package including medical, dental, pension plan, and excellent career opportunities. If you are seeking a challenging career opportunity, contact the District at:

Metropolitan Water Reclamation District of Greater Chicago Public Service Office Attn: Research Recruitment 100 East Erie Street Chicago, IL 60611 Telephone: 312-751-5100 FAX: 312-751-5073

The University of Florida seeks an ASSISTANT SCI-ENTIST for the Division of Nephrology, Department of Medicine. This is a full-time, non-tenure-track position. Ph.D. degree and three years of experience with in vitro microperfusion. Responsibilities include isolation and perfusion of nephron segments; measurement of net and isotopic fluxes and microanalysis of microdissected nephron segments; supervising graduate students and Laboratory Technicians; collaborating with other re-search scientists, Postdoctoral Research Fellows, and Clinical Fellows in the laboratory; overseeing the transport program of research; and writing grants seeking extramural research support. Salary and benefits commensurate with experience. Recruiting deadline: February 25, 1999. Anticipated start date: March 14, 1999. Please reply with curriculum vitae to: I. David Weiner, M.D., Associate Professor of Medicine, Department of Medicine, Division of Nephrology, Box 100224, JHMHC, Gainesville, FL 32610. An Equal Opportunity/Affirmative Action Employer.

#### ACADEMIC POSITION ANNOUNCEMENTS UNIVERSITY OF CALIFORNIA, IRVINE SCHOOL OF BIOLOGICAL SCIENCES

Occasional openings for academic RESEARCHERS, POSTDOCTORALS, SPECIALISTS, and LECTURERS in our Departments of Developmental and Cell Biology, Ecology and Evolutionary Biology, Molecular Biology and Biochemistry, and Psychobiology, are posted on our website: http://www.bio.uci.edu/. Inquiries may also be sent by FAX to: J. Swenson, School of Biological Sciences, University of California, Irvine, FAX: 949-824-7407.

UCI is an Equal Opportunity Employer Committed to excellence through diversity.

### POSITIONS OPEN

WILDLIFE LANDSCAPE ECOLOGIST POSITION TENURE-TRACK ASSISTANT/ ASSOCIATE PROFESSOR Position #AG-1380 Michigan State University

The Department of Fisheries and Wildlife at Michigan State University (MSU) invites applications for a 12-month, tenure-track Wildlife Landscape Ecologist position at the Assistant/Associate Professor level. This is a collaborative position with the Wildlife Division of the Michigan Department of Natural Resources (MDNR) and the Department of Geography at MSU and is part of the Partnership for Ecosystem Research and Management (PERM) at MSU. A Ph.D. is required and preference will be given to applicants with strong quantitative and GIS skills applied to landscape-scale research. Research interests and experience in wildlife ecology and management at the landscape scale are required. Collaborative research with university and MDNR personnel is expected and the successful candidate will be called upon to provide technical and theoretical guidance on research and management at the landscape level. Additionally, the successful candidate will teach one graduate-level course in landscape ecology or a closely related topic and should have demonstrable ability to work effectively with state and federal agencies and conservation organizations, obtain research grants, and publish findings. The candidate will also advise undergraduate and graduate students and serve on university, college, and departmental committees.

Application deadline: March 15, 1999, or until a suitable candidate is found. Salary is competitive and commensurate with education, experience, and demonstrated ability. Interested persons should submit a letter of application stating professional goals and objectives, statements of research interests and teaching philosophy, a curriculum vitae with supporting materials including transcripts, and three letters of reference to: Dr. Scott R. Winterstein, Search Committee Chairperson, Department of Fisheries and Wildlife, 13 Natural Resources Building, Michigan State University, East Lansing, MI 48824-1222. Telephone: 517-353-2022; FAX: 517-432-1699; e-mail: winterst@pilot.msu.edu.

Michigan State University is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply. Disabled persons have the right to request and receive reasonable accommodation.

#### FISHERIES CONSERVATION BIOLOGIST

National Audubon's marine conservation program seeks a Fisheries Scientist to bring scientific information to bear on the management of living marine resources. Identify and conduct population assessments relevant to marine fish management. Interact in a multidisciplinary, team-oriented environment. Participate in multi-organizational marine conservation campaigns, scientific and public policy forums. Duties include identifying species at risk and scientific gaps in proposed management plans; assessing status of selected marine fish populations including development of improved methodology; defending conservation needs of species in scientific and public policy forums; publish results; develop new areas for programmatic growth in marine conservation science. Qualifications: Ph.D. in a relevant field (experience beyond postdoctoral level preferred); ability to conduct population assessments; ability and desire to become a leading authority in a particular area of marine conservation; strong communication skills. Send a letter of application profiling career goals and salary requirements, curriculum vitae, copies of recent publications, and three letters of recommendations to: D. Wilmot, National Audubon Society, Living Oceans Program, 550 South Bay Avenue, Islip, NY 11751. FAX: 516-581-5268.

National Audubon Society is an Equal Opportunity Employer.

## POSTDOCTORAL POSITION

To study voltage-gated ion channels in dendrites and their impact on synaptic integration and plasticity. The laboratory uses various parch-clamp and optical imaging techniques to record from the dendrites of CA1 pyramidal neurons in hippocampal slices.

Ph.D. in physiology or related field and experience with electrophysiological techniques is required. Previous experience with patch-clamp, imaging, and/or brain slice physiology is preferred. Send curriculum vitae and names of three references to: Jeff Magee, Louisiana State University Medical Center Neuroscience Center, 2020 Gravier Street, Suite D, New Orleans, LA 70112. LSUMC is an Affirmative Action/Equal Employment Opportunity Employer.



## RESEARCH TECHNOLOGIST

The Department of Orthopaedics at Massachusetts General Hospital is seeking candidates for a full-time Research Technologist to participate in studies investigating the cause of arthritis. Responsibilities will focus on articular cartilage analysis using biomechanical loading protocols, immunopercipitation, immunoblotting and quantitation of enzyme activity. Qualifications include a BS degree in Biochemistry, Molecular Biology or a closely related discipline. Experience in cell biology is desirable. Job Code S/RE-4911

Please email resume, indicating Job Code, to: jobfile@partners.org; or mail/fax to: Partners HealthCare System, Inc., Human Resources, 101 Merrimac Street, 5th Floor, Mail Code M01518, Boston, MA 02114-4719. Fax: (617) 724-2266.

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## MAYO CLINIC

Research on zinc finger transcriptional repressors, epithelial cell growth, and cancer. Postdoctoral position immediately available for a highly motivated individual to study the role of novel zinc finger proteins in transcriptional repression and in the regulation of normal and neoplastic pancreatic epithelial cell growth. (J Clin Invest 1997;99(10):2365; J Biol Chem 1998;273(40):25973) The successful candidate will be part of a multidisciplinary team using state-of-theart molecular and cell biological techniques. Applicant should have previous experience in protein chemistry and/or molecular biology. Send curriculum vitae and three references to:

> Raul Urrutia, MD GI Research Unit Mayo Clinic, Alfred 2-435 200 First Street SW Rochester, MN 55905 Fax: 507/255-6318

E-mail: urrutia.raul@mayo.edu
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# U NOVARTIS

## POSTDOCTORAL FELLOWS

Innovative. Progressive. Responsive. This best describes our philosophy at Novartis Pharmaceuticals Corporation, a Novartis Group Company formed from the merger of Ciba and Sandoz. Novartis is a world leader in Life Sciences with core businesses in Healthcare, Agribusiness and Nutrition. Focused on novel healthcare solutions, we sustain our leadership position by discovering, researching, developing and manufacturing innovative prescription drugs that treat a wide variety of diseases and conditions, and in the process, help people live longer, healthier lives. To do this effectively, the Novartis Group invests more than \$2 billion annually in healthcare research and development. In Pharmaceuticals, our technologies and focus is on the therapeutic areas of transplantation/immunology, arthritis/inflammation/bone, cardiovascular and metabolic, nervous system, dermatology, oncology and respiratory.

We invite you to join us at our state-of-the-art facility:

## Transplantation Research

You will perform *in vivo* and cellular immunological experiments, including the characterization of dendritic and T-cell populations in experimental mice. A Ph.D. in Life Sciences, experience handling lab animals and strong knowledge of *in vitro* immunological methods required. Additional experience with molecular biology strongly preferred. Please refer to Position HB-PD/76 on resume and envelope, or as the subject of your e-mail.

## Metabolic & Cardiovascular Disease Research

You will conduct independent research on a newly discovered cardiovascular disease susceptibility gene. Facility with a wide range of molecular biological techniques is required. A Ph.D. in the Life Sciences, a publication record demonstrating technical competence and strong verbal/written communication skills are necessary. Please refer to Position HB-PD/75 on resume and envelope, or as the subject of your e-mail.

## Discovery Technologies

Working with a dynamic, multi-disciplinary team from multiple disease areas, you will carry out targeted screening of enzymes and receptors using small rationally designed libraries. A strong background in enzymology and excellent laboratory skills are required. Additional opportunities exist for assay optimization and diversity and structure based library design. Qualifications include a Ph.D. in Biochemistry, Chemistry or a related discipline. Strong communication skills are essential. Please refer to Position HB-PD/77 on resume and envelope, or as the subject of your e-mail.

Our postdoctoral assignments, which encourage creative thinking and offer ample opportunities for publication and research presentations, are for one year and may be renewable for a second year by mutual agreement.

PRINCIPALS ONLY: send your resume/curriculum vitae and letter of interest, indicating position code on resume AND envelope, or as the subject of the e-mail, to: R&D Staffing, Novartis Pharmaceuticals Corporation, 556 Morris Ave., Bldg. SEF 1029, Summit, NJ 07901; e-mail: hrstaffrd.phuseh@pharma.novartis.com. We are an equal opportunity employer M/F/D/V. We appreciate your interest in our Company. Unfortunately, we will only be able to respond to those candidates chosen for interviews or additional follow-up.

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The Division of Diagnostic Molecular Pathology in the Department of Pathology at University of California, Irvine seeks an individual with a PH.D. in molecular biology to MANAGE a newly established molecular pathology to MANAGE a newly established molecular pathology laboratory. The laboratory will perform clinical tests that utilize molecular biologic techniques, including detection of thrombosis-associated polymorphisms, triplet expansions, viral genotypes, and gene rearrangements. Training in the genetics of human disease or in molecular pathology is highly desirable. Applicants should have previous managerial experience. Candidates should send a curriculum vitae and the names and telephone numbers of three references to: Michael Selsted, M.D., Ph.D., Department of Pathology, Medical Sciences, Room D440, University of California, Irvine, CA 92697-4800. E-mail: meselste@uci.edu. UCI is an Equal Opportunity Employer committed to excellence through diversity.

#### POSTDOCTORAL POSITIONS

Positions available (Ph.D. or M.D.) for research in an NIH-sponsored training program at the Cardeza Foundation for Hematologic Research, Thomas Jefferson University. Areas of interest include angiogenesis, cytoskeletal structure and the role of the filamins, gene expression by endothelial and smooth muscle cells, biology of the platelet and endothelial GpIb complexes, megakaryopoicsis, oxygen-regulated gene expression, and lipid-binding proteins in thrombosis. Please send curriculum vitae and three letters of recommendation to:

Dr. Sandor S. Shapiro Cardeza Foundation for Hematologic Research 1015 Walnut Street Philadelphia, PA 19107-5099 E-mail: sananto1@jcflin.tju.edu

U.S. citizenship or permanent residency required. Equal Opportunity Employer.

#### HUMAN ANATOMY/ PHYSIOLOGY INSTRUCTOR

A full-time, non-tenure-track position is available at the University of Alabama at Birmingham. Teaching responsibilities will include human anatomy, human physiology, pathophysiology, and shared supervision of associated laboratories. Review of applications will begin 1 May 1999 and continue until position is filled. Desired starting date is 1 September 1999. Applicants should submit curriculum vitae, names of three references, and a brief statement of teaching philosophy. Please forward application materials to: Dr. Daniel D. Jones, Chair, Department of Biology, University of Alabama at Birmingham, 1300 University Boulevard, Birmingham, AL 35294-1170. The University of Alabama at Birmingham is an Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL FELLOW RESEARCH ASSOCIATE IN CARDIOVASCULAR-THORACIC SURGERY

Carry out research activities such as performing flow cytometry cellular assays, immunohistochemical staining of various tissues, and Western blot protein assays. Overall conceptualization, development, coordination, and written/verbal communication of research projects in talks, posters, and writing is necessary. Ph.D. in immunology, special interests in transplant immunology, and computer experience with regard to medical data required. Please submit résumé to: Rush-Presbyterian-St. Luke's Medical Center, Department JN-56374, 729 South Paulina Street, Chicago, IL 60612. FAX: 312-942-3212. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS to study the regulation of herpes virus gene expression in vitro and in vivo. The studies may include structure/function analysis of the viral regulatory proteins, the biochemistry of virus/host interactions, or the development of viral vectors. Applicants should possess a Doctoral degree in molecular genetics, biochemistry, or virology. Applicants should send a current curriculum vitae, and list of references to: Neal DeLuca, Ph.D., Professor, Department of Molecular Genetics and Biochemistry, E1257 Biomedical Science Tower, University of Pittsburgh School of Medicine, Pittsburgh, PA 15261. E-mail: neal@hoffman.mgen.pitt.edu.

### **POSITIONS OPEN**

Stanford University. Positions are available to pursue studies aimed at characterizing the molecular basis of endothelial cell lineage commitment and differentiation, and the relationship between these processes and blood vessel formation by vasculogenesis and angiogenesis. Genes are identified and studied in the context of embry onic vascular formation, employing the mouse as a model system, with an emphasis on cell surface receptors and signaling. One gene under study encodes a factor that mediates an endothelial cell-specific integrin signaling pathway (Genes and Dev. 12:21–33, 1998). Genes identified through prior studies and current screens will be evaluated through gene targeting in embryonic stem cells and through in vitro angiogenesis assays. Training in molecular biology is required and experience with in situ hybridization or embryonic stem cell methodology a plus. Trainees will become part of a highly interactive research community, which includes scientists in the medical and basic science departments at Stanford, and biotechnology companies in the Bay area. Please submit curriculum vitae and the names of three references to: Thomas Quertermous, M.D., Chief, Cardiovascular Medicine Division, Falk CVRC, Stanford University School of Medicine, 300 Pasteur Drive, Stanford, CA 94305-5406. E-mail: tomq1@leland.stanford.edu. Stanford University is committed to increasing representation of women and members of minority groups on its staff and particularly encourages applications from such candidates.

#### POSTDOCTORAL FELLOWSHIP

Cedars-Sinai Medical Center's Neurosurgical Institute is recruiting for a Ph.D. or M.D.-Ph.D. scientist with special training in molecular biology. The Neurosurgical Institute is affiliated with the University of California at Irvine's College of Medicine. This position will participate in the investigation of gene expression and functions in brain tumors. Currently the Gene Discovery Array to identify novel genes is used. Approaches involve a variety of techniques in molecular biology, as well as molecular histopathology. Candidates should be highly motivated with a recent Doctoral degree. Basic familiarity with cancer biology is desirable. Applicants may apply by submitting a curriculum vitae with bibliography, a brief statement of research experience/interests, and the names of three references to: Julia Y. Ljubimova, M.D., Ph.D., Cedars-Sinai Medical Center, Neurosurgical Institute, 8700 Beverly Boulevard, D-2056, Los Angeles, 90048. Telephone: 310-855-7632; FAX: 310-652-8010; e-mail: ljubimovaj@cshs.org. Equal Opportunity Employer/Affirmative Action

## POSTDOCTORAL POSITIONS IN NEUROBIOLOGY

Several Postdoctoral positions available immediately to study

(1) The use of transgenically modified cells in animal models of Parkinson's disease. Candidate must have previous experience in stereotaxic surgery/transplantation.

(2) The regulation of neurotransmitter genes, receptors, second messengers during development and disease. Candidate must have previous experience in molecular biology/protein biochemistry.

Send curriculum vitae and names of three references to: Dr. Lorraine Iacovitti, Department of Neurology, Suite 501 College, Thomas Jefferson University Medical College, 1025 Walnut Street, Philadelphia, PA 19107. FAX: 215-955-2993; e-mail: lorraine. iacovitti@mail.tju.edu.

POSTDOCTORAL RESEARCH ASSOCIATE.

Ph.D. in a natural science field required. Must have experience in molecular biology and biochemistry. Experience and/or knowledge of signal transduction of protein kinases and tissue culture. Research in characterization of endothelin receptors and its second messenger systems in ocular tissues. Please submit curriculum vitae and cover letter to e-mail: lbarber@hsc.unt.edu; FAX: 817-735-0243. University of North Texas Health Science Center at For Worth is an Equal Employment Opportunity/Affirmative Action Institution.

### POSITIONS OPEN

## POSTDOCTORAL POSITIONS MARINE BIOMEDICAL RESEARCH

The Whitney Laboratory, a center for marine biomedical research in the University of Florida, announces the availability of Postdoctoral Training in the areas listed below. The Laboratory is exceptionally well equipped for research in cell and molecular biology and offers a highly interactive research and training environment.

Barry W. Ache: cellular mechanisms of olfactory transduction; functional organization of olfactory glomeruli. Peter A. V. Anderson: structure and function of cal-

cium channels; nervous system evolution.

Barbara-Anne Battelle: molecular mechanisms underlying circadian changes in retinal function.

William R. Harvey: ATPases, ion exchangers, and cotransporters of invertebrate epithelia.

Dietmar Kultz: cellular adaptations to environmental stress.

Paul J. Linser: molecular characterization of ion reg-

ulatory transporters and enzymes.

Leonid Moroz: nitric oxide signaling in simple ner

Leonid Moroz: nitric oxide signaling in simple nervous systems.

Further information about the Laboratory, details of the positions, and application instructions are available at our website: www.whitney.ufl.edu. The University of Florida is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP or RESEARCH ASSOCIATE POSITION immediately available in vascular biology in a NIH-funded laboratory at Baylor College of Medicine. Studies will examine the molecular and cellular effects of specific L-arginine metabolites and carbon monoxide on vascular cell function. Studies will utilize overexpression and antisense approaches in delineating effects on cell function. Experience in molecular biology and mammalian protein expression required. Send curriculum vitae and the names of three references to: William Durante, Ph.D., VA Medical Center, Building 109, Room 130, 2002 Holcombe Boulevard, Houston, TX 77030. E-mail: wdurante@bcm.tmc.edu.

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

POSTDOCTORAL POSITION available immediately to study novel proteases required in the biosynthesis of active peptide hormones and neurotransmitters. Project focuses on multiple molecular cloning approaches to obtain the structural identities of novel prohormone processing proteases. Experience in molecular cloning (including lambda phage) and cellular gene expression is desirable. Send curriculum vitae, brief description of research experience, and three references to: Dr. Vivian Hook, University of California, San Diego, Department of Medicine, 9500 Gilman Drive #0822, La Jolla, CA 92093. E-mail: vhook@ucsd.edu.

## SYSTEMS NEUROBIOLOGY, UCLA

POSTDOCTORAL POSITION available immediately to join a productive well-funded laboratory to study the cellular basis of movement in vitro (Ann. Rev. Physiol. 60:385, 1998). Prior experience in electrophysiology using in vitro preparations is essential. Please post or e-mail curriculum vitae, a brief statement of research interests, and the e-mail addresses of three references to: Jack L. Feldman, Department of Neurobiology, UCLA, Box 951763, Los Angeles, CA 90095-1763. E-mail: feldman@ucla.edu.

POSTDOCTORAL POSITION available for a Wildlife Ecologist/Computer Specialist with a background in computer graphics and programming (C or LISP) to design and develop a novel PC software program for a two-year environmental education project involving wildlife telemetry research. Please send curriculum vitae and names of three references to: Dr. Margery Oldfield, Seatuck Environmental Association, P.O. Box 31, Islip, NY 11751. Telephone: 516-581-6908.

### POSTDOCTORAL FELLOWSHIP

Seeking Ph.D. with background in molecular biology to study factors that induce growth and differentiation of embryonic kidney. Salary negotiable. Send curriculum vitae and names of references to: Mr. Sean Kelly, Columbia University, Department of Medicine, 630 West 168th Street, Box 84, New York, NY 10032. Columbia University is an Equal Opportunity/Affimative Action Employer.



Paradigm Genetics, Inc., applies genomic technologies to enhance worldwide food and fiber production. As one of the first companies to apply functional genomics in the agricultural arena, we are developing unique and powerful computer applications for analyzing genetic information, and rapidly becoming a leader in agricultural bioinformatics.

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## MANAGER PLANT MOLECULAR BIOLOGY AND GENETICS

A Ph.D. in Molecular Biology, Genetics or Biotechnology and extensive experience in the plant research area is required. At least 5 years of experience in a group leader-like position is preferred, and leadership experience within an industrial setting is an advantage. Responsibilities include supervision of groups involved in high throughput gene discovery, gene cloning, plant transformation, and gene modification systems. In addition, the position is responsible for the development and implementation of novel technologies concerning gene modification and plant transformation systems. Responsible for all aspects of management of our Plant Molecular Biology & Genetics Group, including the development of research plans, monitoring of performance of the research operation, direct supervision of Ph.D. and Master-level personnel, and the establishment of third-party research collaborations. Job #149.

## **PLANT MOLECULAR BIOLOGY**

A Ph.D. in Molecular Biology or Plant Molecular Biology is required with postdoctoral experience in the field. Responsibilities include library construction, development of gene expression and gene modification systems, and manipulation of transcription machinery in plants. Experience in plant biology or plant transformation is an advantage. **Job #150.** 

Successful candidates will be offered a competitive salary and benefits package, stock options as well as an exciting team environment with emphasis on achievement and career development. For consideration, please include the job number on your cover sheet and submit a resume to: Human Resources, Paradigm Genetics, Inc., P.O. Box 14528, RTP, NC 27709; or Email: hr@paradigmgenetics.com; FAX: (919) 544-6076. EOE

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Cephalon, Inc., headquartered in West Chester, PA, is an international biopharmaceutical company that is dedicated to the discovery, development and marketing of innovative products to treat neurological diseases and cancer.

## RESEARCH SCIENTIST

Drug Development Formulation Development Dept.

Ph.D. in Pharmaceuticals or equiv. 2+ yrs. relevant pharmaceutical exp. Development and delivery systems and dosage forms for preclinical studies. Interact with discovery chemists for screening of potential development compounds; evaluate/improve bioavailability of drug compounds through formulation technologies. **Code PP** 

## PREFORMULATION CHEMIST

Formulation Development Dept.

B.S. 3+ years experience. Determine physical and chemical characteristics of new drug candidates. Prepare formulated drug product for animal and human studies. **Code CH** 

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## Postdoctoral Fellow

Applications are invited for a postdoctoral research position in the laboratory of Dr. Chris Richardson. Research projects involve the study of measles, hepatitis B, and hepatitis C viruses related to virus-host cell receptor interactions, anti-apoptotic pathways, and mouse models for virus infection. Qualified applicants will possess a firm grounding in recombinant DNA technology, have experience in cell culture and hold a PhD. A knowledge of transgenic mouse systems and basic virology would be an asset. Good written and verbal communication skills, strong organizational and interpersonal talents, and the ability to work independently are also important attributes for this role.

For confidential consideration, please send a complete copy of your curriculum vitæ, together with the names and addresses of three referees, by April 15, 1999, to: Dr. Chris Richardson, Amgen Institute, 620 University Avenue, Suite 7-706, Toronto, Ontario, Canada M5G 2C1.

AMGEN. INSTITUTE Affiliated with Ontario Cancer Institute / University of Toronto

POSTDOCTORAL POSITIONS. Center for Molecular Toxicology Penn State. The Center for Molecular Toxicology (CMT) is seeking applicants for Postdoctoral appointments in xenobiotic-receptor signal transduction research with the following emphasis: (1) Arylhydrocarbon receptor (AhR). Postdoctoral position immediately available to study cellular regulation of the Ah receptor pathway. Current studies are focused on delineating the role of coactivators, immunophilins, heat shock proteins, protein kinases, and protein phosphorylation in regulating Ah receptor activity. Applicants should have a Ph.D. in toxicology, biochemistry, or related field. Salary is competitive and commensurate with experience. Submit curriculum vitae and names of three references to: Dr. Gary H. Perdew, Center for Molecular Toxicology, Department of Veterinary Science, 115 Henning Building, Penn State, University Park, PA 16802. E-mail: ghp2@psu.edu; website: http://www.cas.psu.edu/ docs/CASDEPT/VET/ppl/perdew.html. (2) Peroxisome proliferator-activated receptor (PPAR). Postdoctoral position available to study cellular regulation of the PPAR. Current research includes examination of genes regulated by this steroid hormone receptor and the crosstalk between PPAR and growth factor signal transduction processes. Applicants should have a Ph.D. in toxicology, biochemistry, or related field. Salary is competitive and commensurate with experience. Submit curriculum vitae and names of three references to: Dr. Jack Vanden Heuvel, Center for Molecular Toxicology, Department of Veterinary Science, Pos#: S-4433, 115 Henning Building, Penn State, University Park, PA 16802. E-mail: jpv2@psu.edu; website: http://www.cas.psu. edu/docs/CASDEPT/VET/jackvh/research.htm. Review of résumés will begin immediately and continue until the position is filled. Affirmative Action/Equal Opportunity

#### POSTDOCTORAL POSITION

NIH-sponsored Postdoctoral position for candidate with expertise in molecular biology in the Khavari laboratory (website: http://cmgm.stanford.edu/khavari). Projects include gene therapy and epithelial biology. Must be U.S. citizen or permanent resident. Send curriculum vitae and names of three references to: Paul A. Khavari, M.D., Ph.D., c/o Nancy Griffiths, Stanford University School of Medicine, MSLS Building P206, Stanford, CA 94305. FAX: 650-723-8762. Stanford University is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITION in computer simulation available July 1, 1999, to study the effects of cosolvents on hydrophobic hydration and applications in protein folding studies. Candidates should possess a Ph.D. in biochemistry, chemistry, or physics, with a strong background in biophysics. For additional information visit website: www.ksu.edu/bchem. Send a curriculum vitae, three letters of reference, and one to three recent publications to: Dr. Paul E. Smith, Department of Biochemistry, Kansas State University, Willard Hall, Manhattan, KS 66506-3702. Deadline: April 1, 1999. Kansas State University is an Equal Opportunity Employer.

POSTDOCTORAL POSITION. Johns Hopkins School of Medicine. A position is available immediately for a Fellow with experience in instrumentation/software development for magnetic resonance applications. The candidate should have experience and interest in EPR/MR applications to chemical and biological systems. Salary commensurate with experience. Send curriculum vitae to: Dr. Jay L. Zweier, JHAAC, 5501 Hopkins Bayview Circle, Room LA.14, Baltimore, MD 21224.

A POSTDOCTORAL POSITION is available immediately for an NIH-funded project to study early postentry events in HIV-1 replication. A strong background in molecular biology, virology, or biochemistry is desirable. Send curriculum vitae and the names of three references to: Michael D. Powell, Ph.D., Microbiology and Immunology, Morehouse School of Medicine, 720 Westview Drive S.W., Atlanta, GA 30310. E-mail: powellm@msm.edu. MSM is an Equal Opportunity Employer.

## POSTDOCTORAL POSITIONS HARVARD MEDICAL SCHOOL

To study the molecular and cellular mechanisms of autoimmune disease. Experience in chemokines/cytokines required. Experience in macrophage biology, gene transfer, and kidney disease desired. Send résumé and references to: Dr. Vicki Rubin Kelley, e-mail: vicki@bustoff.bwh.harvard.edu; FAX: 617-525-5830.

### **POSITIONS OPEN**

## TOXICOLOGY OREGON STATE UNIVERSITY

Oregon State University (OSU) offers interdisciplinary training in toxicology through its Predoctoral degree program in the Department of Environmental and Molecular Toxicology and through Postdoctoral Fellowships. The NIEHS Training Grant offers financial support and provides unique research opportunities to selected PREDOCTORAL CANDIDATES and POSTDOCTORAL FELLOWS. Support is available on a competitive basis to applicants with a B.S., M.S., or Ph.D. in chemistry, biochemistry, pharmacology, toxicology, or the biological sciences. A limited number of graduate Fellowships are also available through the Linus Pauling Institute.

Affiliated faculty members provide challenging basic science academics while mentoring students as they develop individual research projects; this intensive course of study leads to the M.S. or Ph.D. degree in toxicology. Training is provided in diverse areas including analytical, aquatic, biochemical, comparative, environmental, and molecular toxicology with an emphasis on a mechanistic approach. Research projects focus on some aspect of toxicology or environmental health. Former graduates hold professional positions in government, academia, and industry. OSU has two NIEHS-designated research centers-the Environmental Health Sciences Center (EHSC) and the Marine/Freshwater Biomedical Sciences Center-both with state-of-the-art equipment, as well as specialized research facilities and opportunities. A number of faculty are affiliated with the Linus Pauling Institute, dedicated to the study of the relationship between dietary micronutrients and human health.

Visit the EHSC website: http://www.ehsc.orst.edu (see "Training Programs") for information on the Toxicology Program faculty and their areas of research.

For more information contact: Dr. David E. Williams, Department of Environmental and Molecular Toxicology, Oregon State University, Corvallis, OR 97331. E-mail: david.williams@orst.edu; Telephone: 541-737-3277; FAX: 541-737-7966.

Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973. Minority applications are encouraged.

## POSTDOCTORAL RESEARCH FELLOWSHIP

Postdoctoral position in cancer genetics to investigate the genetic basis of kidney cancer. This program is part of a multidisciplinary effort at the National Cancer Institute to identify genes that predispose to human kidney cancer. We have demonstrated that the VHL tumor suppressor gene, and the MET proto-oncogene predispose to kidney cancer. We are analyzing kidney cancer families to identify additional kidney cancer genes. Conditional knockout methods are being used to develop mouse models of kidney cancer. A Drosophila laboratory is available for cross species studies. Applicant must be within five years of their Ph.D. or M.D. degrees with experience in molecular biology or biochemistry. Contact: Bert Zbar, M.D., Laboratory of Immunobiology, Building 560, Room 12-89, National Cancer Institute–Frederick Cancer Research and Development Center, Frederick, MD 21702. E-mail: zbar@ncifcrf.gov. NCI/NIH is an Equal Opportunity Employer.

## POSTDOCTORAL POSITION MOUNT SINAI SCHOOL OF MEDICINE

Mount Sinai School of Medicine is a leader in medical education and research. We have a position available for studying the role of adhesion molecules in hematopoiesis (see: NEJM 335:43, 1996; Cell 84:563, 1996; PNAS 95:14423, 1998; JEM 188:465, 1998). Candidates with a background in molecular/cellular biology and experience with murine models are strongly encouraged to apply for this position.

For consideration, send curriculum vitae, a brief description of research experience, and names of three references to: Dr. Paul S. Frenette, Mount Sinai School of Medicine, Department of Medicine (Hematology), Box 1079, One Gustave L. Levy Place, New York, NY 10029-6574. FAX: 212-849-2574. We are Equal Opportunity Employer fostering diversity in the workplace.

Johns Hopkins School of Medicine. A position is available for a POSTDOCTORAL FELLOW or INSTRUCTOR with experience in the enzymology and/or molecular biology of nitric oxide synthase. Salary commensurate with experience. Send curriculum vitae to: Dr. Jay L. Zweier, Director, EPR Center, JHAAC, 5501 Hopkins Bayview Circle, Room LA.14, Baltimore, MD 21224.

### POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS are available to study dynamic processes within single, living GnRH neurons and anterior pituitary cells. The specific objectives are to elucidate molecular mechanisms underlying pulsatile patterns of gene expression, stimulus-transcription coupling, and calcium coding of gene expression. Our experimental strategies include combinations of the following techniques: (1) video imaging of cells transfected with promoter-luciferase constructs for making multiple, "real-time" measurements of gene expression; (2) digital-imaging fluorescence microscopy of calciumsensitive dyes for dynamic analysis of calcium oscillations; and (3) continuous monitoring of secretory events by fluorescence analysis of a membrane turnover dve. A background in molecular biology is desirable, but not essential. Salary and benefits are highly competitive and commensurate with experience. Send curriculum vitae and names and telephone numbers of three references to: Dr. L. Stephen Frawley, Laboratory of Molecular Dynamics, Department of Cell Biology and Anatomy, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425-2204. Telephone: 843-792-3526; FAX: 843-792-0664; e-mail: frawleys@musc.edu. Women and minorities are encouraged to apply. An Equal Opportunity/Affirmative Action Employer.

## POSTDOCTORAL POSITION MOUNT SINAI SCHOOL OF MEDICINE

Mount Sinai School of Medicine is a leader in medical research and education. We have a position available immediately to study integrin-extracellular matrix interactions and integrin-mediated cell signaling and their role in the development of pulmonary and cardiovascular diseases. Experience in molecular and/or cell biology required.

For consideration, send curriculum vitae and three references to: Dr. Lynn Schnapp, Department of Medicine, Box 1232, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. E-mail: Ischnapp@smtplink.mssm.edu. We are an Equal Opportunity Employer fostering diversity in the workplace.

#### CELLULAR NEUROBIOLOGY, UCLA

POSTDOCTORAL POSITION available immediately to study the roles of protein phosphatases, kinases, and G-proteins in the modulation of synaptic transmission and neuronal excitability in a well-funded laboratory (J. Physiol. 509.1:255, 1998). Prior experience in electrophysiology using in vitro techniques is essential. Please post or e-mail curriculum vitae, a brief statement of research interests, and the e-mail addresses of three references to: Jack L. Feldman, Department of Neurobiology, UCLA, Box 951763, Los Angeles, CA 90095-1763. E-mail: feldman@ucla.edu.

POSTDOCTORAL POSITION available to study the cell biology of MHC class I antigen processing and presentation. Research is focused on the intracellular trafficking and processing of tumor and viral antigens. Ph.D. required, preferably in cell biology or molecular biology. Experience in DNA subcloning, gene transfection, and mutagenesis is also desired. Please send curriculum vitae to: Matthew J. Androlewicz, Ph.D., H. Lee Moffitt Cancer Center and Research Institute, Immunology Program, 12902 Magnolia Drive, Tampa, FL 33612. E-mail: androlma@moffitt.usf.edu; Telephone: 813-979-3935; FAX: 813-979-6700.

POSTDOCTORAL POSITION available. Research includes the molecular analysis of the actions of vitamin A and retinoic acid during embryonic development and in cancer. Send curriculum vitae, names of three references, and a statement of research interests to: Dr. Lorraine J. Gudas, Department of Pharmacology, Weill Medical College of Cornell University (formerly Cornell University Medical College), 1300 York Avenue, New York, NY 10021. An Equal Opportunity Employer/Affirmative Action/Minorities/Females/Disabled/Veterans.

A POSTDOCTORAL POSITION is available at University of California, Davis to study the mitochondrial cause of neurodegeneration in Friedreich's ataxia (ref.: Hum. Mol. Genet. 8:425–430, 1999). Molecular and tissue culture experience and native English proficiency will be strongly preferred. E-mail or mail curriculum vitae to: VM: Molecular Biosciences, University of California, Davis, CA 95616-8741. E-mail: gacortopassi@ucdavis.edu. UC Davis is an Affirmative Action/Equal Opportunity Employer.

## EMINENT SCHOLAR/RICHARDSON CHAIR ENDOWED PROFESSORSHIP---NEUROBIOLOGY/ NEUROPROTECTION

University of Florida College of Medicine Department of Ophthalmology

Applications are invited for a full-time position for a prestigious Endowed Chair in the field of Ophthalmic Neurobiology. Qualified applicants in all areas of Ophthalmic Neuroscience research are encouraged to apply. Research programs of applicants should complement existing departmental programs and might emphasize retinal cell biology, molecular biology, molecular genetics, glaucoma or neuroprotection. Candidates must hold a Ph.D. and/or M.D., have obtained, or be eligible the rank of Professor, and demonstrate a superlative record of accomplishment in an area of retinal biology. Researchers who are not currently members of a Department of Ophthalmology are encouraged to apply. The successful candidate will have a primary appointment in the Department of Ophthalmology with a joint appointment at the University of Florida. Research space and startup funds will be provided for establishing a new laboratory.

Deadline for receipt of applications will be May 21, 1999.

Candidates should submit a curriculum vitae, a statement of research objectives and the names of three referees to Search Committee, William Hauswirth, Ph.D., and Paul Hargrave, Ph.D., cochairs. Department of Ophthalmology, College of Medicine, Box 100284 JHMHC, University of Florida, Gainesville, Florida, 32610-0284.

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

Merck Research Laboratories in Rahway, New Jersey, a world leader in Biological and Pharmaceutical Research, is recruiting Application Molecular Modelers for their Molecular Design and Diversity group. This is an excellent opportunity for individuals interested in joining an exciting, creative, teamoriented environment focused on New Lead Discovery.

## **Application Molecular Modelers**

The successful candidates will apply and extend methodology directed towards pharmacophore development and representation, SAR extraction from traditional medicinal chemistry approaches as well as from combinatorial and modular chemical libraries, and have an active interest in data and knowledge-based development and mining. Experience in applying typical modeling techniques to problems of interest to the pharmaceutical industry is essential. Candidates will be expected to provide computational support and function as a member of multidisciplinary teams for various Merck therapeutic projects in a stimulating and challenging environment.

Candidates should have a Ph.D. in chemistry, biochemistry, biophysics or equivalent with experience in using computational approaches to solve problems of biological interest. Skills in any of the following areas would be an asset: data and knowledge-based mining, bioinformatics, 3D structure generation from biophysical information, receptor-based ligand design or homology modeling.

For consideration, please send resume and letters of reference to Merck Research Laboratories, Human Resources, P.O. Box

**2000, Ad #83, RY80A-3, Rahway, NJ 07065**. EEO/AA/VH Employer.



## GLOBAL OPPORTUNITIES

# THE AUSTRALIAN NATIONAL UNIVERSITY Lecturer (Level B)

The Division of Botany and Zoology in the Faculty of Science and the Research School of Biological Sciences at The Australian National University is seeking to fill a standard, full time Lecturer (Level B) position in computational biology, involving analysis and/or management of either genetic, phylogenetic, ecological or biodiversity data. The position is funded jointly by the Faculty of Science and the Research School of Biological Sciences. The successful applicant will be actively involved in the development, coordination and teaching of a new undergraduate course and a new Honours Program in Biological Informatics, in supervision of graduate students and in interacting with scientists from the Faculty of Science and the Institute of Advanced Studies. He/she will also be expected to undertake original research in the field of biological informatics in collaboration with researchers in Botany and Zoology, in the Bioinformatics Group at the Research School of Biological Sciences and in other areas. The position is available from 1 June 1999.

Enquiries to Dr Penny Gullan, Acting Head, Division of Botany and Zoology, tel: (61 2) 6249 2866 or email: Penny.Gullan@anu.edu.au Additional information regarding the Division may be obtained from Internet address: http://www.anu.edu.au/BoZo/ whilst information regarding the Research School of Biological Sciences may be obtained from Internet address: http://biology.anu.edu.au/rsbsweb/ Further particulars, including selection criteria, should be obtained before applying from the Staffing Recruitment Officer, telephone: (61 2) 6249 5903; facsimile: (61 2) 6249 5011 or email: employment.services@anu.edu.au Applications should be written against the selection criteria and submitted in duplicate to the Staffing Recruitment Officer, Chancelry 2A, The Australian National University, CANBERRA ACT 0200, quoting reference number FS12.1.1, including CV, list of publications and the names and addresses (email if available) of three referees. Closing date 19 March 1999

## **EUROPEAN OPPORTUNITIES**



Institute of Biotechnology

# Arabidopsis developmental biology

Jim Murray's lab is interested in the relationship between cell division and plant growth. The commitment to cell division is regulated by extracellular signals through D-type cyclins (see *Science*, this issue and *Plant Phys. 119:343-351*), and our particular focus is the integration of this mechanism with developmental controls. A 3 year postdoc position is available in this active group to investigate how meristem activity and cell division are coordinated, and how meristem function can be manipulated by control of cell division. A strong background in structural and functional studies of the meristem, or the analysis of mutant developmental phenotypes in Arabidopsis would be a distinct advantage. Salary is age-related £17,570-£20,867.

A second postdoc position requires experience in *either* Arabidopsis/ tobacco development, or cell cycle analysis, or the use of antisera for protein analysis and immunofluorescence, or two hybrid screening. A 3 year research technical post requiring experience in any one of the above areas or plant transformation is also available.

The Institute of Biotechnology (http://www.biot.cam.ac.uk/) occupies modern well-equipped laboratories in central Cambridge with a stimulating multi-disciplinary research environment. Applications (full CV and details of two referees) by March 29 to Applications, Institute of Biotechnology, Tennis Court Road, Cambridge CB2 1QT, UK. Tel. +44 1223 334160; fax +44 1223 334162; admin@biotech.cam.ac.uk.

The University promotes an Equal Opportunities Policy

## POSTDOCTORAL POSITIONS HEMOSTASIS AND THROMBOSIS

Postdoctoral positions available supported by the Hemostasis and Thrombosis Program for Academic Trainees and related NIH-funded projects at the University of Vermont College of Medicine. Research includes regulation and assembly of procoagulant enzyme complexes, modulation of endothelial cell function, platelets/monocytes/macrophages in thrombin generation, and the epidemiology of thrombosis. Research areas include protein chemistry, vascular biology, enzymology, molecular biology, cell biology, genetics, pathology, cardiology, and hematology. Send curriculum vitae, a description of research experience and interests, and three letters of reference to: Dr. Kenneth G. Mann, Department of Biochemistry, College of Medicine, University of Vermont, Burlington, VT 05405. E-mail: kmann@protein.med.uvm.edu. Open to candidates with a Ph.D. or M.D. Minority applicants and women are encouraged to apply.

## POSTDOCTORAL POSITIONS

Two Postdoctoral positions are available to carry out mitochondrially related research. One is for work on gene regulation in cancer focused on a key metabolic enzyme, which is highly expressed and bound to the outer mitochondrial membrane. The second is for studies of structure and function of the mitochondrial ATP synthase complex. Applicants for both positions are expected to be highly motivated, to have training in both protein chemistry and molecular biology, and to have published at least two recent papers in refereed journals. Please send curriculum vitae and the names of three references via surface mail to: Dr. Peter L. Pedersen, Department of Biological Chemistry, Johns Hopkins University, School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205-2185. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS immediately available for graduated Ph.D's (1) to purify a novel compound regulating neuronal differentiation, experience in isolation, purification, and characterization of proteins is required; (2) to study signal transduction mechanisms in neuronal differentiation; experience in cell culture, Western blotting, and design and use of eukaryotic expression vectors required. Send curriculum vitae and e-mail addresses of three references to: Dr. G. Miller Jonakait, Department of Biological Sciences, Rutgers University, 101 Warren Street, Newark, NJ 07102. FAX: 973-353-1007; e-mail: jonakait@newark.rutgers.edu. Rutgers, The State University of New Jersey is an Equal Employment Opportunity/Affinnative Action Employer.

#### POSTDOCTORAL FELLOWSHIP MICROBIAL PATHOGENESIS University of Connecticut Health Center School of Medicine

Postdoctoral Fellowship position available to study the molecular pathogenesis of Babesia microti infection. Babesia microti is an emerging tick-borne protozoan that causes human babesiosis. The candidate must be proficient in molecular techniques. Please send curriculum vitae and names of three references to: Dr. Peter Krause, University of Connecticut Health Center, Center for Microbial Pathogenesis, 263 Farmington Avenue, Farmington, CT 06030-1317. E-mail: pkrause@ccmckids.org.

A POSTDOCTORAL POSITION available to investigate structure and function of membrane network proteins, analyze transgenic cell and animal models, and develop technologies involved in gene transfer and stem cell transplantation. Experience in molecular biology essential. Knowledge in hematology and cardiology helpful. U.S. citizens or pennanent residents. Please send curriculum vitae and three references to: Dr. L. Amy Sung, Department of Bioengineering, 0412, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0412. FAX: 619-822-0240; e-mail: amysung@bioeng.ucsd.edu.

POSTDOCTORAL POSITION available immediately to investigate intercellular signaling mechanisms, with emphasis on receptor tyrosine kinase-mediated signal transduction during neuronal development, using Drosophila as a model system. Applicants must have a Ph.D. in biology with a strong background in molecular biology and genetics. Please send curriculum vitae and names and addresses of three references to: Ilaria Rebay, Ph.D., Whitehead Institute for Biomedical Research, Nine Cambridge Center, Cambridge, MA 02142. E-mail: rebay@wi.mit.edu.

#### **POSITIONS OPEN**

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#### POSTDOCTORAL POSITIONS MOLECULAR GENETICS OF MOLECULAR MOTORS AND NEURODEGENERATIVE DISEASES

Postdoctoral positions for individuals with fewer than three years of postdoctoral training are available to study Alzheimer's disease (**George Carlson**) or molecular motors in organelle transport and inner-ear hair cell adaptation (**John Mercer**). Send curriculum vitae, including names and addresses of individuals we may contact for references, to:

George A. Carlson, Ph.D.

or
John A. Mercer, Ph.D.
McLaughlin Research Institute
1520 23rd Street South
Great Falls, MT 59405
E-mail: gac@po.mri.montana.edu

E-mail: umbjm@montana.edu

For additional information about the Institute contact George Carlson, Bill Crain, John Mercer, or John Bermingham at McLaughlin Research Institute, or any of the following members of our Scientific Advisory Committee: Irv Weissman, David Baltimore, David Cameron, Neal Copeland, Jeff Frelinger, Leroy Hood, or Nancy Jenkins.

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POSTDOCTORAL RESEARCH POSITION in lung cell biology available immediately to study molecular mechanisms of endothelial cell contractility and barrier dysfunction. Work will focus on agonist-stimulated contractile processes in endothelium under shear stress conditions. Knowledge of basic molecular, biochemical, and cellular techniques desirable. Salary commensurate with experience and institutional guidelines. Position available to U.S. citizens or permanent resident applicants only. Please send curriculum vitae and three references to:

Joe G. N. Garcia, M.D., Director Johns Hopkins University Department of Medicine Division of Pulmonary and Critical Care Medicine The Johns Hopkins Asthma and Allergy Center, 4B.77 5501 Hopkins Bayview Circle Baltimore, MD 21224-6801

### UNIVERSITY OF PENNSYLVANIA

POSTDOCTORAL POSITION available to study the role of the transcription factor HNF3beta in pancreatic development and diabetes. This project involves the generation and analysis of Crc transgenic mice that will allow for deletion of the HNF3beta (loxP flanked) gene at various stages of development. Ph.D. in biochemistry, molecular biology, or related field required. Please send curriculum vitae and names of three references to: Klaus H. Kaestner, Ph.D., Department of Genetics, 564 CRB, University of Pennsylvania Medical School, Philadelphia, PA 19104-6145. E-mail: kaestner@mail.med.upenn.edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE position available to study the regulation of gene expression and signal transduction by glutathione. Applications should have a Ph.D., M.D., or equivalent degree and a strong background in cellular and molecular biology. Please send curriculum vitae with three references to: Michael W. Lieberman, M.D., Ph.D., Department of Pathology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. FAX: 713-798-6001; e-mail: mike@bcm.tmc.edu.

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

Great Lakes. POSTDOCTORAL/GRADUATE STU-DENTS wanted to study the molecular cell biology of newly-cloned adapters Grb10 and PSM in insulin, IGF-1, PDGF action (see: Nature 324:68, 1986; Science 236:197, 1987; EMBO J. 8:2943, 1989; J. Virol. 68:411, 1994; JBC 271:8882, 1996; J. Biochem. 122:1105, 1997; JBC 273:3136, 1998) by: Heimo Riedel, Ph.D., 2171 BIO SCI, Wayne State University, Detroit, MI 48202. Telephone: 313-577-7870; e-mail: hriedel@sun.science.wayne.edu. Wayne State University is an Equal Opportunity/Affirmative Action Employer.

### **POSITIONS OPEN**

## POSTDOCTORAL RESEARCH ASSOCIATE IN STRUCTURAL BIOLOGY State University of New York at Stony Brook

As part of a multidisciplinary program, positions are available to examine the conformation and dynamics of damaged DNA and repair proteins. We use NMR spectroscopy and computational methods to determine structures of lesion containing DNA molecules, repair proteins, and DNA/protein complexes. Applicants must have a Ph.D. in chemistry, biophysics, or a related field, strong background in NMR spectroscopy, and/or experience in protein expression and purification and less than three years of postdoctoral experience. Send curriculum vitae and the names of three references to: Dr. Carlos de los Santos, Department of Pharmacological Sciences, BST8-140, State University of New York at Stony Brook, Stony Brook, NY 11794-8651. FAX: 516-444-3649; e-mail: cds@pharm.sunysb.edu. Affirmative Action/Equal Opportunity Employer.

#### POSTDOCTORAL/RESEARCH ASSOCIATE POSITIONS STEM CELL AND HEMATOLOGY Case Western Reserve University

NIH-funded Postdoctoral Research positions for M.D's, M.D.-Ph.D's, Ph.D's. Research focus in hematopoietic and stromal stem cells, gene therapy, regulation of differentiation, marrow transplant immunology, iron metabolism, angiogenesis, and leukemogenesis.

Send curriculum vitae, names of three references, and research interests to: Dr. Stanton Gerson, School of Medicine (BRB), Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4937. Eligibility for NIH training preferred (U.S. ditzen or permanent resident). Minorities and women are encouraged to apply.

Well-motivated, highly skilled individual with training in molecular biology and protein chemistry is sought for a POSTDOCTORAL POSITION in the laboratory of Dr. Steven Idell, M.D., Ph.D. at the University of Texas Health Center at Tyler. Overall thrust of this well-endowed, well-supported (NIH, Foundations, AHA) laboratory is the investigation of how pathways of coagulation or fibrinolysis influence lung remodeling. Posttranscription regulation and cellular signaling are ongoing projects. Four Investigators in the group headed by Dr. Idell. Good laboratory space, excellent professional environment in a beautiful college town. Curriculum vitae and three references required. Reply to: Dr. Idell, e-mail: idell@uthct.edu; Telephone: 903-877-7379/7917/7753; FAX: 903-877-5566.

SENIOR POSTDOCTORAL POSITION immediately available to study the molecular mechanism of fibrosis following immune injury. Experience and background in fibroblast biology essential. Training in immunology, cellular and molecular biology preferred. Position suitable for individuals working on wound healing. Must demonstrate capability of working independently. Salary commensurate with experience and productivity. Send curriculum vitae, name and address of three referees to: Dr. A. Razzaque Ahmed, Department of Oral Medicine and Diagnostic Sciences, Harvard School of Dental Medicine, 188 Longwood Avenue, Boston, MA 02115. FAX: 617-432-4436.

RESEARCH ASSOCIATE or POSTDOCTORAL POSITIONS available immediately to characterize (1) DNA repair pathways or (2) macromolecular transport pathways in human malaria parasites. Expertise in one of these areas is required. Previous experience with malaria parasites is desirable, but not required. Applicants should submit a curriculum vitae and the names of three references to: Theodore F. Taraschi, Department of Pathology, Anatomy, and Cell Biology, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107. FAX: 215-923-2218; e-mail: theodore. taraschi@mail.tju.edu. Equal Opportunity Employer.

## POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Regulation of cell proliferation and differentiation in hematopoiesis and leukemia. Background in one of the following areas: molecular biology, protein chemistry, cell cycle regulation, hematology, and transgenic mice. Send curriculum vitae including names of three references to: Dr. Dong-Er Zhang, Room 953, Harvard Institutes of Medicine, 77 Avenue Louis Pasteur, Boston, MA 02115 USA. E-mail: dzhang@caregroup.harvard.edu.

#### POSTDOCTORAL ASSISTANT

(99UC3905) College of Medicine. Pathology and Laboratory Medicine. Postdoctoral position available to study the structure and lipid-binding characteristics of plasma apolipoproteins. The successful applicant will join a laboratory in a rapidly growing cardiovascular disease research unit. Candidates should have a recent Ph.D. degree and experience in at least one of the following areas: generation of monoclonal antibodies, protein-to-cell interactions, intestinal lipid absorption, site-directed mutagenesis, and protein structural studies. Résumés accepted until filled. Please send cover letter (noting control #) and a curriculum vitae containing the names, addresses, and telephone numbers of three references to: W. Sean Davidson, Ph.D., Department of Pathology and Laboratory Medicine, University of Cincinnati, 231 Bethesda Avenue, Cincinnati, OH 45267-0529. E-mail: sean.davidson@uc.edu. Affirmative Action/Equal Opportunity Employer.

#### UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE

POSTDOCTORAL POSITION available immediately to perform neurophysiology experiments in behaving monkeys to study functions of brain monoaminergic systems. The successful applicant will join an active group recording noradrenergic and dopaminergic neurons in locus coeruleus and midbrain during performance of cognitive tasks aimed at testing the roles of these systems in attention, reinforcement, and learning. Applicants with neurophysiology experience preferred. Excellent salary and benefits. Send curriculum vitae and names of three references to: Dr. Gary Aston-Jones, Department of Psychiatry, University of Pennsylvania, VA Medical Center (151), University and Woodland Avenues, Philadelphia, PA 19104.

#### POSTDOCTORAL POSITION

The University of Illinois at Chicago, Department of Molecular Genetics has a Postdoctoral position available immediately. A Ph.D. and a strong background in molecular biology are required, as is familiarity with mammalian and yeast cell culture techniques. Project involves study of regulation of genes involved in anticancer drug action and resistance. Experience in this area of research is desirable. Please send a letter providing a brief synopsis of research experience, interest, and plans, a current curriculum vitae, and at least three references to: Rhonda Cadena, M.S., Manager of Laboratories (M/C 569), 900 South Ashland Avenue, Chicago, IL 60607. The University of Illinois at Chicago is an Affirmative Action/

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POSTDOCTORAL POSITION available immediately to study the molecular genetics of human gynecologic cancers. Candidates must have the Ph.D. degree and a strong background in basic techniques of cell and molecular biology and molecular genetics, such as cell culture, molecular cloning, PCR, sequencing, and mutation analysis. Salary commensurate with experience. Send curriculum vitae and names of three references to: Dr. Jeff Boyd, Department of Surgery, Box 201, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. MSKCC is an Equal Opportunity Employer.

## POSTDOCTORAL POSITION

Postdoctoral position available immediately to study endothelial cell signaling and cell-cell interactions. Candidates should have strong experience in molecular biology and/or cell biology. Please send curriculum vitae and the names of three references to: Elizabeth O. Harrington, Ph.D., Brown University School of Medicine, Providence VA Medical Center, Research Services 151, 830 Chalkstone Avenue, Providence, RI 02908. FAX: 401-457-3305; e-mail: elizabeth\_harrington@ brown.edu. An Equal Opportunity Employe

POSTDOCTORAL/RESEARCH ASSOCIATE needed immediately to study effects of oxidants/antioxidants on immune and vascular endothelial cell adhesion. Experience in cell culture, molecular biology, and biochemistry required. Recent Ph.D./M.D. preferred. Send curriculum vitae, names of three references to: Dr. Wohsen Meydani, Vascular Biology Laboratory, USDA Human Nutrition Research Center on Aging, Tufts University, 711 Washington Street, Boston, MA 02111. E-mail: meydani\_vbl@hnrc.tufts.edu; Telephone: 617-556-3126; FAX: 617-556-3224.

### **POSITIONS OPEN**

POSTDOCTORAL POSITIONS are available to study the organization and replication of a novel form of mitochondrial DNA (kinetoplast DNA). Areas of investigation include the cell cycle regulation of DNA replication genes, the role of histone-like proteins in the organization and segregation of kinetoplast DNA, and the identification of additional kinetoplast DNA replication genes. See: J. Biol. Chem. 273:23729, 1998; Mol. Biochem. Parasitol. 94:41, 1998. Please send curriculum vitae and names and addresses (including e-mail) of three references to: Dr. Dan S. Ray, Molecular Biology Institute, UCLA, 405 Hilgard Avenue, Los Angeles, CA 90095-1570. E-mail: danray@mbi.ucla.edu.

## RESEARCH POSTDOCTORAL POSITIONS

One to two Postdoctoral positions available immediately to study cellular and molecular aspects of hypertension. Applicants must have Ph.D. or M.D. with experience in molecular biology. Candidates must hold permanent visa or U.S. citizenship. Send curriculum vitae to: Dr. Harry Ward, Chief, Division of Nephrology and Hypertension, King/Drew Medical Center, 12021 South Wil-mington Avenue, Los Angeles, CA 90059. FAX: 323-563-4924; e-mail: haward@cdrewu.edu. Minority candidates are encouraged to apply.

#### POSTDOCTORAL POSITIONS COLUMBIA UNIVERSITY

Positions available to identify ligands and intracellular molecules that bind to polycystin-1. Ph.D. in biochemistry, cell biology, or related discipline required; expertise in protein purification methods and/or in vitro translation desirable. Contact: Dr. van Adelsberg, Department of Medicine, Columbia University, 630 West 168th Street, New York, NY 10032. E-mail: isv1@columbia. edu. An Equal Opportunity/Affirmative Action Employe

## GLOBAL OPPORTUNITIES

## CHAIRMAN DEPARTMENT OF CELLULAR AND MOLECULAR BIOLOGY

The College of Medicine, Ewha Womans University at Seoul, Republic of Korea invites nominations and/or applications for the position of Chairman, who will newly develop the Department of Cellular and Molecular Biology. Research programs in the newly developed Department are expected to include a variety of interdisciplinary areas such as cell cycle regulation and oncogenesis, gene transcription, regulation of anti-tumor immune responses, embryonic development and differentiation, signal transduction, and structural biology.

Individuals interested in this position should submit a

letter of application, curriculum vitae, a list of publica-tions, and three references to: Faculty Search Committee, College of Medicine, Ewha Womans University, 911-1 Mok-6-dong Yangchun-ku, Seoul 158-056 South Korea. The review process will begin April 1, 1999, and continue until the position is filled.

For further details and explanations of application procedures, please contact: FAX: +82-2-643-1146; e-mail: jhchung@mm.ewha.ac.kr.

#### TENURE-TRACK FACULTY POSITION DEPARTMENT OF PHYSIOLOGY FACULTY OF HEALTH SCIENCES Ben-Gurion University of the Negev, Israel

The Physiology Department at the Faculty of Health ciences, Ben-Gurion University, is seeking a CELLU-LAR PHYSIOLOGIST or NEUROBIOLOGIST for a tenure-track position. Competitive applicants should have a Ph.D. degree, postdoctoral experience, and a record of innovative research productivity. Preference will be given to candidates whose interests complement those of existing programs in the department. Applicants should forward a curriculum vitae, a short summary of current research interests and future plans, and arrange for five letters of recommendation by May 31, 1999, to be sent to: Prof. Yoram Grossman, Chairman, Division of Basic Sciences, Faculty for Health Sciences, Ben-Gurion University of the Negev, Beer-Sheva 84105 Israel. FAX: 972-7-6477628; e-mail: ramig@bgumail. bgu.ac.il.

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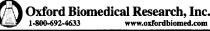
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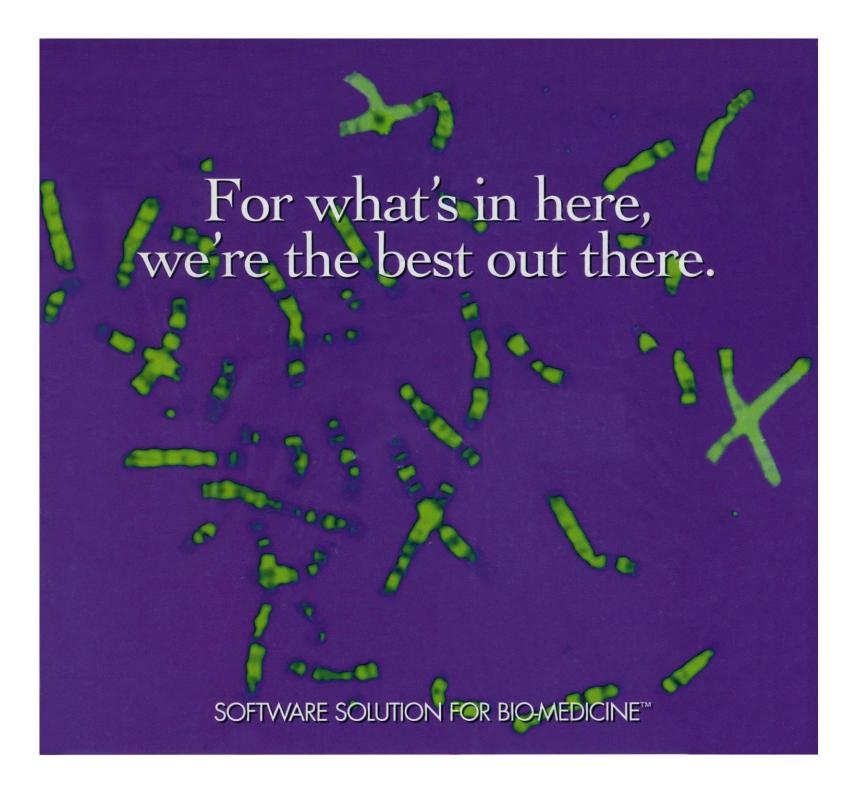
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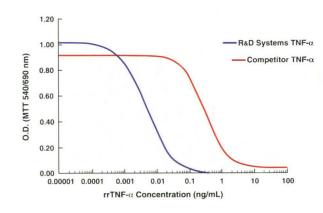
Bone Morphogenic Proteins (BMPs)

Ephrins/Ephs

Inhibins/Activins

TNF Superfamily

- Most proteins are greater than 97% pure, determined by SDS-PAGE and visualized by silver stain.
- All proteins are available for bulk purchase.



BONE MARROW

Results obtained from R&D Systems' recombinant rat TNF- $\alpha$  and a competitor's recombinant rat TNF- $\alpha$  showed R&D System's rrTNF- $\alpha$  to be 60-fold more active in the same assay. The biological activity was measured in a cytotoxic assay using a TNF-susceptible mouse L-929 cell line in the presence of metabolic inhibitor actinomycin D. The ED50 for R&D Systems' rrTNF- $\alpha$  was determined to be 0.005 ng/mL, while the competitor's rrTNF- $\alpha$  resulted in a ED50 of 0.324 ng/mL.

## FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES.

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