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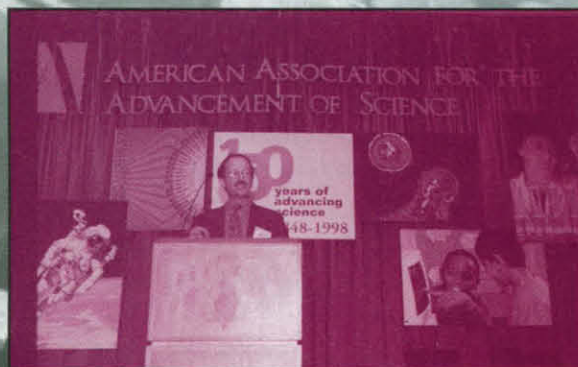


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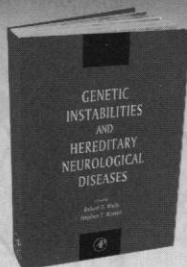
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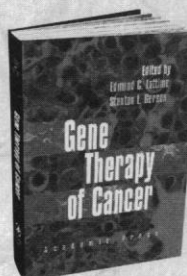


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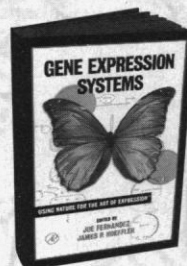
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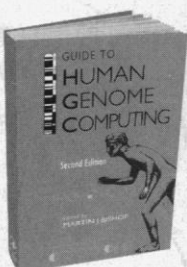
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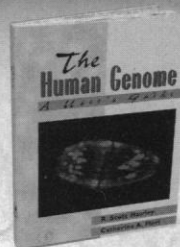
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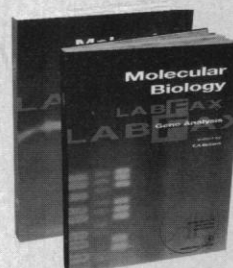
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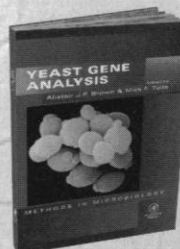
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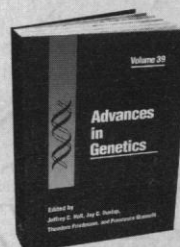
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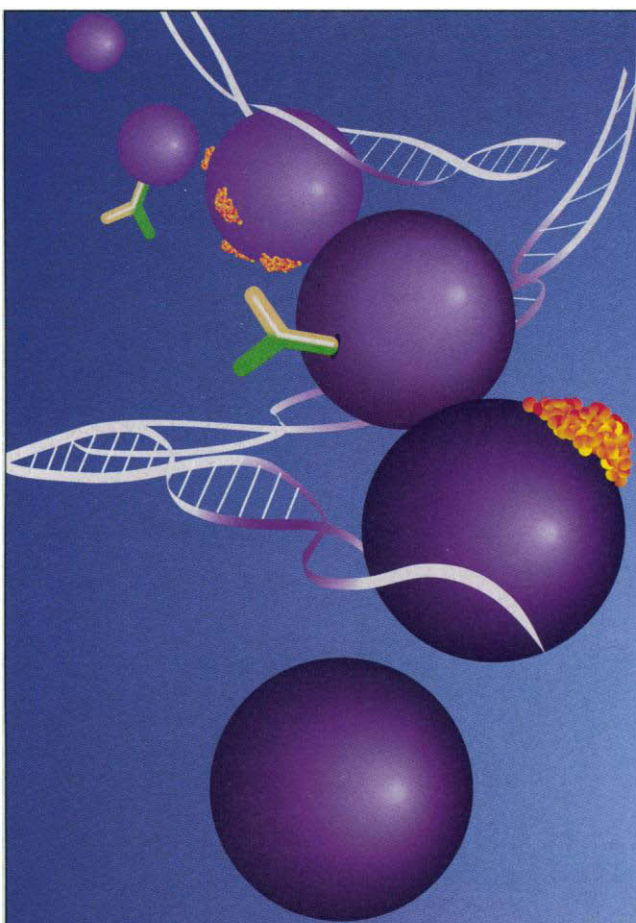
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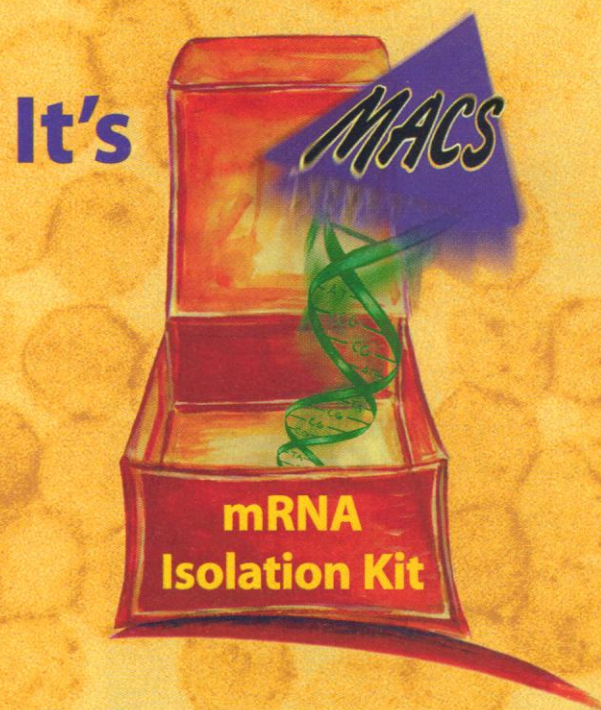
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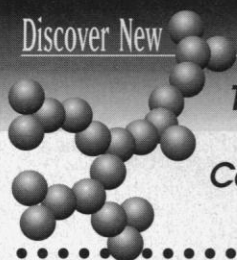
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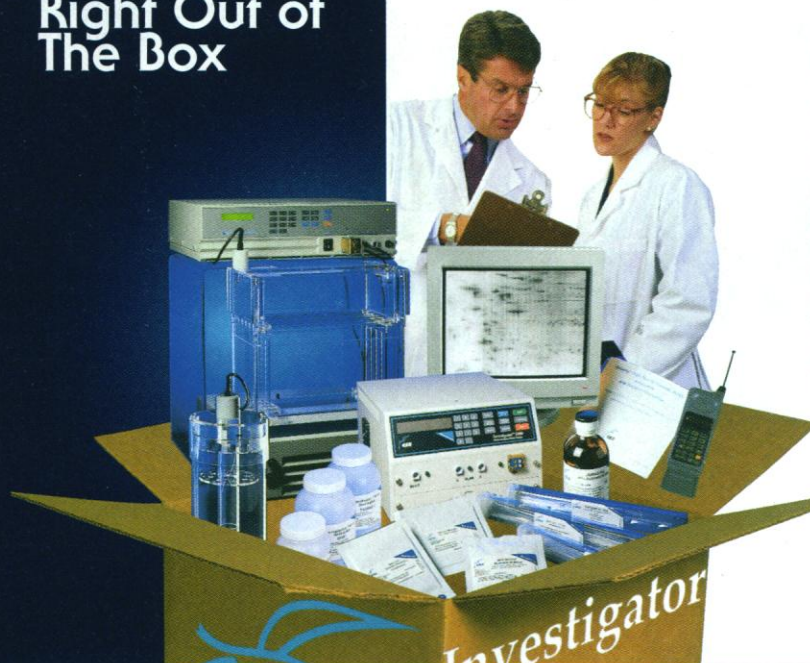
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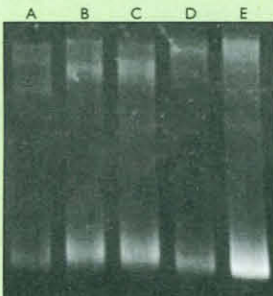
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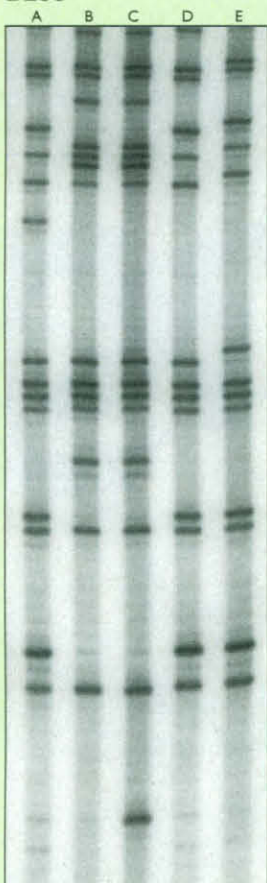
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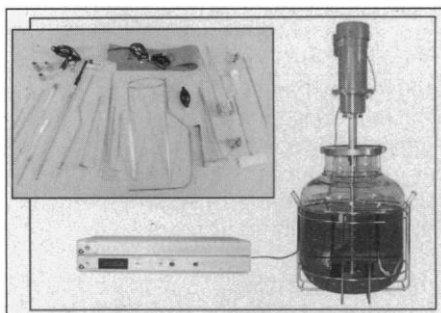
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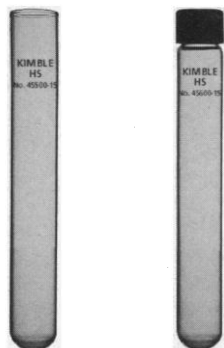
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CONTINUED ON PAGE 774

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THE MCKNIGHT ENDOWMENT FUND FOR NEUROSCIENCE

THE MCKNIGHT TECHNOLOGICAL INNOVATIONS IN NEUROSCIENCE AWARD

The McKnight Endowment Fund for Neuroscience has established a new McKnight Technological Innovations in Neuroscience Award to stimulate the development of novel approaches to exploring and understanding how the brain functions. The Fund is especially interested in catalyzing new ways of (1) monitoring brain activity in awake, behaving animals; (2) increasing the spatial and temporal resolution of brain imaging methods; (3) simultaneously measuring the activity of ensembles of neurons; (4) monitoring synaptic plasticity in developing and living organisms; (5) delineating changing patterns of gene expression; and (6) introducing genes and controlling gene expression in specific classes of neurons.

Each award will provide \$100,000 annually for two years as seed funding for highly innovative projects. Interested investigators, who are conducting work at a not-for-profit institution in the United States, should submit a letter of intent presenting the essence of their project and indicating how an award would accelerate its realization. The Selection Committee, whose members are listed below, will invite a small number of applicants to provide more detailed descriptions before selecting up to three awardees. Funding will begin on July 1, 1999. Additional rounds of awards are anticipated in the future.

Letters of intent, not to exceed two pages, should be sent to:

The McKnight Technological Innovations
in Neuroscience Award
The McKnight Endowment Fund for Neuroscience
600 TCF Tower • 121 South Eighth Street
Minneapolis, Minnesota 55402

Letters must be received by **January 29, 1999**.

Selection Committee

Lubert Stryer (Chair)
Catherine Dulac • Anthony Movshon
David Tank • Roger Tsien • Robert Wurtz

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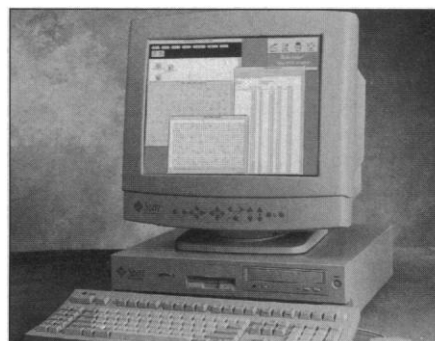
INSTRUMENTATION, APPARATUS, AND LABORATORY MATERIALS

CONTINUED FROM PAGE 773

eight-lamp holder with built-in power supplies for hollow cathode and electrodeless convenience. The instrument includes a transversely heated graphite atomizer furnace assembly and longitudinal Zeeman-effect background correction.

HIGH DENSITY ARRAY ANALYSIS

The Visage High Density Grid Analyzer provides a tool to identify and quantify more than 200,000 spots in high-density array images. The device's software can calculate the hybridization levels of all possible grid locations. The analyzer accommodates all rectangular grid layouts, including glass slides, and makes it easy to create the reference matrix. A constellation mapping algorithm requires only three anchor points on a refer-



ence image to accurately overlay multiple study images. This method, unlike rigid grid methodologies, compensates for any distortion or skewing that may occur within a sample array. Through proprietary algorithms, the software quantifies the actual spot, not only grid locations.

LUMINESCENT IMAGE ANALYZER

The Fujifilm LAS-1000 is a new luminescent image analyzer that allows the researcher to see weak light images with high sensitivity and at high resolution. Once images are captured by the LAS-1000's cooled charge-coupled device camera system they are promptly displayed using the automatic range scope. Capture of weak light images, even in normal room light, is possible using the LAS-1000's Dark Box. The system can capture chemiluminescent, fluorescent,

and chemifluorescent images from membrane and gel samples up to 25 cm by 25 cm in size. The system is built around a new, proprietary, cooled 1.3 M pixel charge-coupled device camera that acquires images with high sensitivity and high resolution and is capable of continuous exposures up to one full hour in length. Other camera features include a 1-inch-square chip, an integrated electronic cooling device, four orders of magnitude linearity, and 14-bit image display for enhanced quantitation.

GEL SOFTWARE

IPLab Gel software, version 2.2, is designed for one-dimensional gel applications such as gel documentation and analysis in autoradiography, chemiluminescence, and fluorescent imaging. It offers a collection of routines designed for densitometry and molecular weight determination, as well as an overlay for annotating gel images. The new version includes a new scripting mechanism and an upgraded acquisition module for added frame grabber support.

LITERATURE

A Guide to Freeze Drying for the Laboratory is a basic guide that describes the three steps of the freeze drying process: prefreezing, primary drying, and secondary drying. It examines a typical freeze drying cycle and methods available to facilitate the process.

SuperSignal Western Blotting Substrates Handbook includes abbreviated and full-length protein immunoblot protocols, as well as recommendations for antibody concentration and blocking buffer optimization. A troubleshooting guide explains possible causes of and solutions for problems.

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

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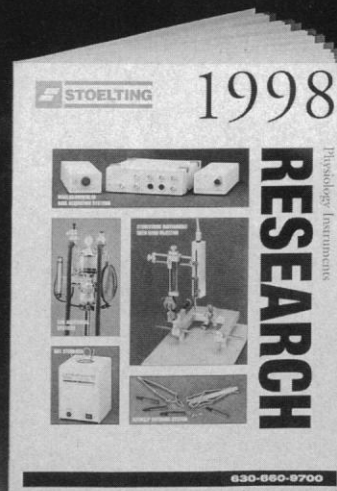
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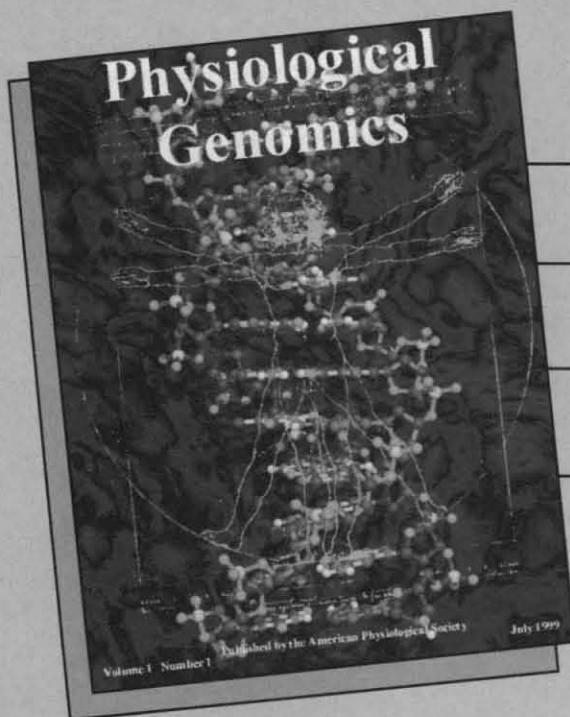
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The Department of Plant Biology invites applicants for an **ASSISTANT** or **ASSOCIATE PROFESSOR** to work in conjunction with the University's Central Arizona-Phoenix Urban LTER. We seek an Ecosystem/Landscape Ecologist who can synthesize and understand controls on ecosystem processes, such as primary productivity, biogeochemistry, and plant-soil interactions across the scales from patches to landscapes. The successful applicant will be expected to work with an interdisciplinary group of faculty and students who are monitoring the spatial and temporal dynamics of the urban ecosystem, develop a vigorous research program, and participate in the undergraduate and graduate teaching programs. Salary and start-up funds are competitive. Applicants must possess a Ph.D. or equivalent degree and a record of research productivity appropriate to rank. Postdoctoral experience and use of remote sensing, systems modeling, or geostatistics are preferred. For further information about the position, the department, and faculty interests, connect with website: <http://lsvl.la.asu.edu/plantbiology/>. Applicants must provide statements of research interests and teaching philosophy, a curriculum vitae, and names and addresses of four references by December 11, 1998, to: Chair, Ecology Search Committee, Department of Plant Biology, P.O. Box 871601, Arizona State University, Tempe, AZ 85287-1601. *Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION IN HUMAN GENETICS

The Department of Biology, Middle Tennessee State University invites applications for a tenure-track position (Number 103440). **ASSISTANT/ASSOCIATE PROFESSOR.** Ph.D. required by August 1999 starting date. The successful candidate should have a strong background in genetics and human biology. Responsibilities include teaching human genetics, general genetics, freshman biology, and possibly develop an advanced course in the specialty. Teaching excellence, research/public service expected. Applicant reviews begin November 16, 1998. Send application referencing position number, proof of employment-eligibility, copies of transcripts, and three letters of reference to: Dr. Deborah Clark, Committee Chair, Box 60, Middle Tennessee State University, Murfreesboro, TN 37132. E-mail: dclark@frank.mtsu.edu. *Equal Opportunity/Affirmative Action/ADA Employer.*

FACULTY POSITION IN ANATOMY AND PHYSIOLOGY

The Department of Biology, Middle Tennessee State University invites applications for a tenure-track position (Number 103280). **ASSISTANT/ASSOCIATE PROFESSOR.** Ph.D. required by August 1999 starting date. Responsibilities include teaching human anatomy and physiology, other vertebrate courses, and develop a course in comparative/environmental physiology. Research/public service is expected. Applicant reviews begin November 16, 1998. Send application referencing position number, proof of employment eligibility, copies of transcripts, and three letters of reference to: Dr. William Stewart, Committee Chair, Box 60, Middle Tennessee State University, Murfreesboro, TN 37132. E-mail: wstewart@frank.mtsu.edu. *Equal Opportunity/Affirmative Action/ADA Employer.*

POSITIONS OPEN

FACULTY POSITIONS

The Department of Biochemistry at the University of Kentucky is recruiting a number of tenure-track or tenured faculty at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level. The successful candidates will be expected to develop a strong independent research program, obtain extramural funding, and participate in departmental teaching activities. Competitive start-up funds, state-funded salary commensurate with experience, and modern research facilities will be provided. Recruitment is being made for the following positions:

Full or Associate Professor in the area of structural biology with an established research program applying physical, chemical, or biochemical approaches such as protein engineering, X-ray crystallography, experimental protein chemistry, or NMR spectroscopy to the study of molecular mechanisms. This individual will serve as the leader of the Center for Structural Biology at the University of Kentucky. Search Committee Chair: **Dr. Thomas Vanaman.**

Assistant Professor in the area of structural biology similar to the senior-level position described above but at a tenure-track level. Search Committee Chair: **Dr. Thomas Vanaman.**

Assistant Professor in the area of molecular genetics/genomics including molecular epidemiology, studies of genetic markers of human disease, bioinformatics, and experimental models of genes. Search Committee Chair: **Dr. Daniel Noonan.**

Assistant Professor in the area of signal transduction studying mechanisms that regulate the cell cycle, development, stress responses, or intracellular communication. Search Committee Chair: **Dr. Robert Dickson.**

Applicants must have a Ph.D. and/or M.D. or equivalent degree and at least two years of postdoctoral experience. Interested individuals should send a curriculum vitae, a summary of past experience, future research plans, and arrange for three letters of recommendation to be sent to the appropriate Search Committee Chair at: The Department of Biochemistry MS607, University of Kentucky College of Medicine, Lexington, KY 40536-0298. *The University of Kentucky is an Equal Opportunity Employer, and encourages applications from qualified women and minorities.*

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Send a curriculum vitae, statement of research and teaching interests, copies of graduate transcripts, and three letters of reference to: The Office of Human Resources, Christopher Newport University, 1 University Place, Ferguson Hall Room 123, Newport News, VA 23606-2998. Only completed applications will be considered. All materials must be in hand by December 16, 1998.

FACULTY POSITION IN MICROBIAL PHYSIOLOGY

The Department of Biology, Middle Tennessee State University invites applications for a tenure-track position (Number 103430). **ASSISTANT/ASSOCIATE PROFESSOR.** Ph.D. required by August 1999 starting date. Responsibilities include teaching general microbiology/laboratories and developing a course in microbial physiology. Research/public service is expected. Prefer research interest in bioremediation and/or microbial adhesion/biofilms. Applicant reviews begin November 16, 1998. Send application referencing position number, proof of employment eligibility, copies of transcripts, and three letters of reference to: Dr. Stephen Wright, Committee Chair, Box 60, Middle Tennessee State University, Murfreesboro, TN 37132. E-mail: smwright@frank.mtsu.edu. *Equal Opportunity/Affirmative Action/ADA Employer.*

PLANT GENOMICS

FOCUS ON CAREERS

Genomics Sows Seeds of Agricultural Revolution

In recent months, researchers have started to apply genomics, the science that identifies the ways in which genes affect organisms' characteristics, to plants. Specialists expect this new research to lead to commercial crops within a few years.

BY PETER GWYNNE



Support for plant genomics comes from several sources. The National Science Foundation has started funding research on the topic in academic laboratories. Major industrial players such as Monsanto, Pioneer, Novartis, du Pont, and Dow are also making significant commitments to the technology. Pharmaceuticals companies are monitoring the work keenly, in hopes that it might provide methodologies for drug discovery.

Synergistically, several specialists in plant genomics gained their first genomics experience in pharmaceuticals research. Academic geneticists with agricultural backgrounds are also moving into industry, because corporations can often support research projects too large for academic departments.

At a more junior level, recruiters seek scientists with some genomics training and experience in hard-core technologies, such as DNA sequencing, or more peripheral areas, such as bioinformatics. Backgrounds in statistical genetics are in high demand, as is the ability to work in large teams.

We discussed career opportunities with two groups building expertise in plant genomics from scratch. One is the research arm of DEKALB Genetics Corporation, a company long established in agricultural genetics. The other, Cereon Genomics LLC, is a new entity formed by Monsanto Corporation in collaboration with Millennium Pharmaceuticals, Inc., to undertake genomics research with potential applications in agriculture.

DEKALB Genetics Corporation
Cereon Genomics LLC

Mystic, CT: As soon as he arrived at the research arm of DEKALB Genetics Corporation in May, Mike Edgerton started to put together a genomics group. "I'm looking for scientists with a strong grounding in basic plant biology," he says. "The ability to deal with large amounts of data is very useful. And you need to understand what's happening in molecular biology."

"I'm currently hiring at all levels," adds Edgerton, who moved to DEKALB from pharmaceuticals giant Glaxo Wellcome. "At the Bachelor's level, any sort of lab experience is helpful. At the Ph.D. level, I look for somebody with a good, strong understanding of the fundamentals—plant physiology and development, and molecular biology."

The most difficult recruits to locate, he finds, are highly skilled individuals with Master's degrees. "As genomics becomes more generic," he points out, "we will need very technically competent people who have the ability to move between fields. The Master's degree with a background in molecular biology and PCR ability will become increasingly useful."

DEKALB also values flexibility. "Projects are big enough so that no one person is doing an entire project," Edgerton explains. "So you have to work with other people to accomplish a joint goal."

Cambridge, MA: "Since we started building Cereon last October, we've hired over 50 scientists for production line sequencing and supervision," says Bill Timberlake, co-president of Cereon Genomics LLC. "By its nature, genomics is very interdisciplinary. So we've scanned the area for plant geneticists, software engineers, computational biologists, and others." Ideally, adds David Fischhoff, Cereon's other co-president, "we want a high degree of skill and training in one specific aspect of genomics technologies and their application to plants. We'd also be interested in people who have similar skills from working on, say, microbial systems."

They seek individuals with Bachelor's degrees or two-year diplomas in biotechnology, as well as scientists with more advanced training. They face a sellers' market. "Many of the areas in which we're recruiting are very competitive," notes Timberlake. For example, Cereon must frequently bid against pharmaceutical companies for individual recruits. Scientists at the top of the company's wish list—individuals trained in plant genomics who also have some background in bioinformatics and computational biology—"are exceedingly rare and much sought after," Timberlake adds.

Like DEKALB, Cereon expects its entire work force to be flexible. "The ability to continue learning, and to engage colleagues from widely different disciplines is very important," Timberlake says. "We're looking for scientists eager to expand their intellectual horizons and broaden their area of expertise." ■

Peter Gwynne writes about science and technology from his base on Cape Cod.

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Cereon Genomics is a collaborative start-up offering an unprecedented opportunity to impact the future of genomics technology. Our mission is clear: we are applying genomics technology to the discovery and development of agricultural products. These products will improve the quality and quantity of the world's food supply.

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To fulfill our charter, we need more dedicated, high-impact performers. People who will make us even stronger. People who absolutely want to make a difference in one of today's most critically important fields.

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SCIENTISTS - Functional Genomics

A number of excellent opportunities exist to use your proven expertise and experience to build Cereon's gene identification and function effort for agriculturally relevant microorganisms and plants. We seek top performers with excellent communication and interpersonal skills, plus the ability to work well as part of a multidisciplinary research team. Some positions are oriented towards a molecular understanding of gene functions. Others deal with identification of quantitative trait loci. All positions require a Ph.D., or equivalent in Genetics, Microbiology, Biochemistry, Plant Biology, or related field. 2 - 3 years of postdoctoral training are essential. Plant or microbial experience desirable.

BIOINFORMATICIANS & COMPUTATIONAL BIOLOGISTS

Cereon continues to assemble a high profile team to extract biological meaning from vast amounts of plant genomic data. We seek interdisciplinarians with genomics and software skills, with a Ph.D. or equivalent experience. Skills should include sequence analysis, functional genomics analysis, programming (C/C++, Java, SQL, Perl, Web programming, LIMS), statistics, or algorithm design.

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We are seeking an individual to lead technology development for our high-throughput production sequencing laboratory. In this position, you will help drive an aggressive sequencing program aimed at microbes and plants, plus supervise QA/QC/Materials functions for production sequencing. The position demands a thorough grasp of DNA preparation, sequencing chemistry, and separation methods, and requires a proven ability to move a protocol from research into a production environment. Ph.D. or equivalent experience necessary.

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This is an excellent opportunity for a lab automation expert to build a state-of-the-art robotics facility to support a high-throughput screening lab designed to identify novel agricultural products. You will also interact with automation efforts in genomics, plus ensure the constant innovation of the company's automation systems. Industrial experience with integrated robotics systems (Matrix, Zymark, Saigen, Tecan, Tomtec) and workstation-based approaches (Tomtec, Platamate, Multidrop) are essential. Experience with associated data management programs (Oxford Molecular, MDL SCREEN) is a plus.

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Ph.D., M.S., and B.S. level will be responsible for the optimization and development of physiological screens focussed on the analysis of complex traits such as yield and characterization of plant metabolic pathways. Successful candidates will be responsible for the development of high throughput screens using robotics and state-of-the-art technologies. **Department code: DASPP-IS**

Molecular Biologist

Ph.D., M.S. and B.S. levels are required to assist in the development of libraries, vector construction, high throughput expression analysis and screening of genes in transgenic plants. Experience in genomics technologies and strong molecular biology skills are essential. **Department code: DASMB-IS**

Biochemist

Candidates must have broad background in plant physiology, biochemistry and chemistry, typically gained from a Ph.D. degree and post-doctoral training. Experience with instrumentation (GC, LC and mass spec) is desirable. Must have demonstrated skills in leading and developing fellow scientists, implementation and ownership of projects. **Department code: DASB-IS**

Protein Biochemist

M.S. and B.S. levels will be responsible for research in protein isolation and characterization. Successful candidates will work as part of highly motivated teams in our exceptionally well equipped biochemistry group. **Department Code: BPGB-IS**

Analytical Chemist

BS/MS analytical chemists up to 5 years work experience in analytical chemistry, GC or HPLC experience instrumentation. Must be able to work in a fast-paced atmosphere where large numbers of samples must be analyzed daily with very accurate, reproducible results. **Department code: DASAC-IS**

Bioinformatics Technical Leader

Ph.D. (or equivalent) for individual capable in management of a Bioinformatics Group which provides state-of-the-art support for the Genomics and Biotechnology Departments. Successful candidate will have background in bioinformatics and a good understanding of molecular biology. Experience in UNIX servers, LIMS and Oracle databases preferred. **Department code: DASBTL-IS**

Bioinformatics Specialists

B.S. or M.S. candidates up to 5 years of experience will develop database and provide on-going technical support to the Genomics and Biotechnology Departments high throughput robotics systems. **Department code: DASBS-IS**

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Successful Ph.D. candidates will demonstrate expertise in quantitative genetics, statistics, use of relational databases and a working knowledge of plant breeding. **Department code: BPGGT-5S**

We offer an excellent salary/benefits package, individualized scheduling, and a beautiful headquarters location which includes learning facilities, health and fitness programs and equipment, and a nature preserve with walking trails. Indianapolis, Indiana provides all the cultural advantages of a major metro area plus the comfortable hospitality of the Midwest. Interested candidates should send a letter of interest, resume, transcripts and references by **Dec. 1st, 1998**, to: **Dow AgroSciences LLC, Human Resources Recruiting (please indicate Department Code), 9330 Zionsville Road, Indianapolis, IN 46268-1054**. Be sure to visit our website at www.dowagro.com.



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Dow AgroSciences offers challenging opportunities within a stimulating and diverse work environment. We are an affirmative action/equal opportunity employer.



...A Revolution in Plant Functional Genomics

Over the past eleven years Biosource Technologies, Inc. has developed novel genetic transformational technologies for expression of foreign genes in plants. Biosource is the world leader in virus-based gene expression systems for plants, and uses its proprietary GENEWARE™ viral vectors for rapid expression, systemic knockout, and high-throughput screening of genetic sequences in higher plants. Biosource is applying its revolutionary genomics technology to the discovery of gene-based products for agricultural, industrial, pharmaceutical, and animal health markets.

Biosource Technologies, Inc., has recently established a new division, Biosource Genomics, and has assembled a high-powered team of top plant molecular biologists and plant virologists. We are now recruiting for a group of exceptionally motivated, creative, and visionary individuals to join forces with us in our state-of-the-art Northern California facility located 30 minutes from the world famous Napa Valley, and 45 minutes from the San Francisco Bay area. We offer the excitement of an entrepreneurial start-up, plus the committed resources of two respected industry leaders, Dow AgroSciences LLC and The Dow Chemical Company.

Candidates at the Ph.D./M.S./B.S. level are encouraged to apply in the following skill areas (up to 24 open positions). Candidates having several years of experience at major university or corporate genomic centers are especially desired. We anticipate hiring at the Research Scientist, Senior Scientist, and Research Director level within each category.

Genomic and cDNA library construction

The successful candidates must have proven expertise in phage and plasmid-based genomic and cDNA library construction from plant material, skills in relevant cDNA normalization, equalization and subtraction methods, ability to characterize and enrich libraries for full-length cDNAs representing low-abundance mRNA species, high-throughput PCR, and automated DNA sequencing. **Department code: HR-G10**

High-throughput robotic screening and laboratory automation

We seek skilled lab automation experts to expand and continually innovate our state-of-the-art robotics facility. The facility supports a high-throughput screening lab designed to identify novel agricultural gene products and phenotypic traits. You will interact with automated efforts in DNA manipulation, proteomics, and LC/MS analysis. Industrial experience with integrated robotics systems, workstation-based approaches, and data management programs and LIMS are essential. **Department code: HR-G11**

High-throughput DNA sequencing

We seek candidates to participate in the operation of a cutting-edge DNA sequencing facility with emphasis on high quality, rapid turnaround, state-of-the-art sequence generation and bioinformatic analysis, expertise in DNA template preparation and QC, robotic set-up of sequencing reactions, electrophoresis, data capture, data analysis and software/instrument troubleshooting. Ability to manage and track large plasmid libraries, skilled in UNIX, LIMS, databases, and liquid-handling robotics is essential. **Department code: HR-G12**

Bioinformatics, database administration, and computational biology

We are seeking bioinformatic specialists at all levels with knowledge of molecular biology, genetics, or genomics. Expertise with DNA and protein sequence databases and the common tools for analyzing and manipulating sequence data, programming skills (C, C++, Perl, VB or Java), database management systems (UNIX/Oracle environment) is essential. Experience with structured design in a production-scale data collection environment is especially useful. **Department code: HR-G13**

Plant molecular biology, plant biochemistry, plant physiology, and plant virology

Experienced researchers are sought in all areas of modern plant biotechnology, signal-transduction pathways, transcription factors, metabolic pathway engineering and analysis, and high-throughput assay development aimed at biochemical and physiological trait identification. Experience with virus expression systems especially advantageous. We prefer individuals with several years of relevant industrial experience. **Department code: HR-G14**

Please submit a detailed CV with cover letter indicating department code and the names of three references to: **Biosource Technologies, Inc. (Dept. 052), 3333 Vaca Valley Parkway, Vacaville, CA 95688.** Biosource is an equal opportunity employer.

Visit our website at www.biosource-technologies.com



Biosource Genomics™



The Endowment for SCHOLARS

in Biomedical Research

at
The University of Texas Southwestern Medical Center

UT Southwestern is pleased to announce the second year of the Endowed Program for Scholars in Biomedical Research. The Program, which is fully funded from private endowment, will provide \$600,000 over four years to support the research activities of each new **Assistant Professor** (tenure track) appointed to the Program; five will be appointed annually. In addition, regular funding for salary, as well as research space, will be provided by the medical school department or research center offering the appointment. Positions in both **basic science** and **clinical departments** are available. The goal of the program is to assure a successful beginning of the research careers of an ever-growing cadre of outstanding young investigators at UT Southwestern.

For detailed information about currently available faculty positions, please access our web page: <http://www.swmed.edu>

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GENOMICS RESEARCH

DEKALB Genetics Corporation is the fastest growing agricultural seed company in the United States. We seek bright, innovative and ambitious people to join our expanding biotechnology research team focused on the genetic improvement of crop plants.

STATISTICAL GENETICIST (GD-S10)

Statistician interested in identification of quantitative trait loci and application of genomics technologies to populations. Previous experience with maize desirable. Ph.D. and 0-3 years experience required.

PROTEIN EXPRESSION ANALYSIS (GD-S11)

Protein biochemist with experience in differential protein expression analysis. Experience with proteomics or mass spectroscopy desirable. Ph.D. and 0-3 years experience required.

TRANSPOSON BASED GENE TAGGING (GD-RA6)

Molecular biologist or geneticist with experience in transposon based gene tagging. Experience with heterologous transposon systems desirable. M. Sc. or B. Sc. with 3+ years experience required.

BIOINFORMATICS (GD-S12)

Integration and analysis of data arising from diverse, high throughput functional assays. Applicants must be able to lead a small group and work effectively on team objectives.

Positions are located at DEKALB's biotechnology research facility in Mystic, CT, a scenic shoreline community located on Long Island Sound, halfway between Boston and New York. DEKALB offers competitive compensation, attractive benefits package and an outstanding work environment. For more information on DEKALB visit our web site, www.dekalb.com. Please send/fax your resume, cover letter indicating which position you are applying for and 3 professional references to:

DEKALB Genetics Corporation
Human Resources
62 Maritime Drive
Mystic, CT 06355-1958
FAX: (860) 572-5240



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

Insect Expression Scientist

This position will explore and develop novel technologies for recombinant protein expression in insect cells. The successful candidate will have a Ph.D. in molecular biology or related field and extensive experience with baculovirus expression technologies. A basic understanding of glycosylation biology and proven molecular biology skills are an advantage. We are looking for an enthusiastic researcher with good oral and written communication skills.

Aggressive benefits package and rewarding professional environment. Please submit your résumé via our website, fax, or mail. **EOE**. No phone calls, please.



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LERNER RESEARCH INSTITUTE

Center for Molecular Genetics Human Genetics Research

We are seeking outstanding candidates to fill several faculty positions. Qualified **ASSISTANT** and **ASSOCIATE** staff candidates will be expected to establish independent research programs in areas of molecular genetics that relate to human disease. At this time no specific area is targeted, but individuals using genetic approaches to identify and isolate genes involved in complex or low-penetrance genetic traits are encouraged to apply. The Cleveland Clinic provides exceptional opportunities for interactions with clinical departments. The successful candidates should have developed an established record of competitive funding and supervision of a research program. The Center for Molecular Genetics currently has strong programs in cancer genetics, clinical genetics, and the genetics of heart disease. A phased program of recruitment over the next 4 years is designed to further broaden the areas of genetics research undertaken in the Institute. Excellent salaries and benefits together with generous start-up support for equipment supplies and personnel are available. The Lerner Research Institute, with approximately 100 principal investigators and an annual research budget of \$83M, provides an excellent environment for molecular genetics research.

Applications, including a curriculum vitae, a statement of research interests, and names of 3 references, should be sent to: **John K. Cowell, Ph.D., Chairman, Molecular Genetics Search Committee, Lerner Research Institute NC30, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195.**

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Affirmative Action Employer.*



Bristol-Myers Squibb

Pharmaceutical Research Institute

GENOMICS Our Focus: The Future

A company rich in history and accomplishments, we know that it is what we've yet to discover that will reshape the world as we know it. We believe our most serious undertaking is the future.

As we embark on the most ambitious expansion plan in our history, we've made a corporate commitment to growth. Growth in our people, in our discovery efforts, in our facilities, in our external collaborations, and in our programs to enhance and find new uses for existing products. By building leaders at all levels of the organization, we are, in fact, building a better tomorrow.

Bristol-Myers Squibb is committed to using genomic technologies to drive both the discovery and the development of the next generation of drugs.

The Applied Genomics division is dedicated to external alliances as a way to integrate cutting edge genomics technology within the company. Alliance partners include the Whitehead/MIT Functional Genomics Consortium with Dr. Eric Lander, Affymetrix, and Millennium; Molecular Dynamics/Amersham in the field of RNA profiling; Incyte and Genome Therapeutics in gene databases, Pangea in data mining algorithms, and Acacia and Cadus in model system genetics.

For positions in Applied Genomics respond within your area of expertise using the following codes: Bioinformatics (PRSM55WC); Proteomics (PRSM55SH); Expression Profiling and High-Throughput Molecular Biology (PRSM55MN1); Target Validation (PRSM55MN2); Model Systems (*C. elegans*, yeast and *Drosophila* - PRSM55ES); Pharmacogenomics (PRSM55PS); and Human Genetics (PRSM55DW).

For available opportunities, contact us. 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:

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Pharmaceutical Research Institute
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Princeton, NJ 08543-4000
FAX: 609-581-8841

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Sr. Associate Scientist/Associate Scientist (*Vascular and Cardiac Diseases*)

This position involves a multidisciplinary approach to study therapeutic angiogenesis utilizing cellular, biochemical, and molecular approaches to study mechanisms of microvessel growth regulation. Key responsibilities include identifying and implementing molecular and biochemical methods needed to evaluate the expression of angiogenic or angiostatic factors in diseased tissues.

To qualify, you must have a bachelor's degree in cell or molecular biology, biochemistry or a related field, and 4+ years of related experience or a master's degree in cell or molecular biology, biochemistry or a related field with 2+ years of related experience. Knowledge of western blotting, PCR, northern analysis, RNase protection assays and cell culture techniques is essential. Familiarity with endothelial cell signalling pathways is desirable.

Help create the future of health research by joining the Parke-Davis research team. We offer competitive salaries, outstanding benefits, and an environment that's conducive to professional growth. Qualified candidates please mail, fax, or e-mail your resume, indicating **Job Code RJB-98557**, to: **Warner-Lambert, Attn: Resume Processing Center, PO Box 92242, Los Angeles, CA 90009-2242, fax: 888-223-8312 or e-mail: warner@isearch.com**



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MENDEL BIOTECHNOLOGY, INC. **Plant Functional Genomics**

Mendel Biotechnology is a functional genomics company that is focused on exploring the *Arabidopsis* genome to both discover genes of agricultural value and understand the fundamental processes of plant growth and development. The science advisory board consists of **Chris Somerville** (Carnegie Institution), **Fred Ausubel** (Harvard Medical School), **Jonathan Jones** (Sainsbury Laboratory, UK), **Brian Staskawicz** (UC Berkeley), and **Elliot Meyerowitz** (Caltech).

We seek individuals with exceptional creativity, motivation, and scientific abilities to join us in this challenging and exciting opportunity.

Staff Scientist positions

Positions are available in i) biochemistry; ii) plant physiology; and iii) molecular genetics. Candidates should have a Ph.D. and several years of postdoctoral experience, and the ability to work well in multidisciplinary teams. We are particularly interested in scientists who use multidisciplinary approaches to solve biological problems.

Bioinformatics positions

Candidates should be familiar with standard sequence analysis, genome databases, and have excellent communication skills. Positions will involve curation and processing of data on a large scale. Programming experience is desirable.

Postdoctoral positions

Candidates should have expertise in modern plant biology. Postdoctoral candidates will work in freezing, drought, or specialty products programs. You will have access to the unique *Arabidopsis* resources and functional genomics capabilities at Mendel to make discoveries in these areas in collaboration with senior scientists.

Research Associate positions

Research associates will work in a multidisciplinary team, providing molecular biology expertise. You should have a M.Sc. or B.Sc. degree with experience in molecular biology and the ability to work well in a team setting.

Mendel's state-of-the-art gene discovery and plant growth facilities are situated in the San Francisco Bay area. We offer an attractive package of salary, benefits, stock options, a 401(k) plan, and an exciting scientific environment. Résumés should be sent to **Dr. Mike Fromm**, CEO, Mendel Biotechnology, 21375 Cabot Blvd., Hayward, CA 94545 or e-mailed to **mfromm@mendelbio.com**. For additional information on Mendel visit our website at **www.mendelbio.com**.



MAYO FOUNDATION FOR EDUCATION AND RESEARCH ROCHESTER, MINNESOTA **Director, Molecular Biology Core Facility**

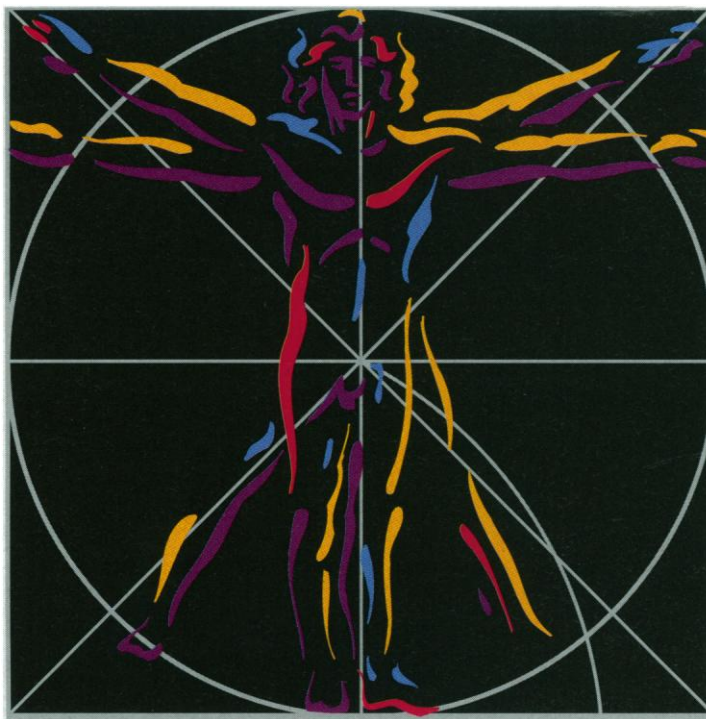
The Mayo Clinic invites applications and nominations for the position of Director of the Molecular Biology Core Facility. This facility is one of twelve specialized service facilities under the cognizance of the Research Resource Facility Subcommittee of the Mayo Rochester Research Committee. These Core Facilities are specialized service facilities that have been established at Mayo Clinic to develop and sustain state-of-the-art research facilities in support of Mayo investigators for the express purpose of maintaining quality and competitiveness of research at Mayo Clinic. They are available to all Mayo investigators engaged in clinical or basic research with approved, peer-reviewed protocols or established research programs.

The Molecular Biology Core at the Mayo Clinic provides custom synthesis of synthetic oligonucleotides, semi-automated DNA sequencing, a six-week, basic laboratory course in molecular biology, and consultation/collaboration on a wide spectrum of research projects associated with nucleic acid detection, identification, and analysis.

The Director of the Molecular Biology Core Facility should have an advanced degree, a Ph.D., or equivalent, in a relevant field of study and a history of publication in Molecular Biology. The Director should also have experience in the management of technical personnel and in dealing with a wide spectrum of people. Familiarity with or experience in business principles such as might have been gained from managing or dealing with a similar facility would be important to the successful operation of this core facility. Candidates should submit their curriculum vitae, three letters of reference, and other relevant material no later than **November 30, 1998**, to:

Norman Meeks, Secretary
Research Resource Facility
Subcommittee
Research Services, Siebens 613
Mayo Clinic
200 First Street S.W.
Rochester, MN 55905

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



A UNIQUE OPPORTUNITY TO MAKE AN IMPACT, A DIFFERENCE... AND HISTORY.

Celera Genomics was formed through an alliance between Perkin-Elmer, and Dr. Craig Venter, formerly president of The Institute for Genomic Research (TIGR). Its mission is to become the definitive source for genomic and related biomedical information. Celera's plans include: sequencing of the complete human genome during the next three years; discovering new genes and regulatory sequences that could comprise new drug targets; and elucidating human genetic variation and its association with disease susceptibility and treatment response.

Quite simply, we are out to make history. That's why we continue to seek out the best professionals in a wide range of technology and scientific areas. In return, we offer the opportunity to work on perhaps the most important initiative of modern times... and to build the platform on which all future biomedical research will be based.

Human Variation

Selected candidates will establish the scientific and technical framework for using the natural variation in the human population to better understand disease, therapy, and environmental interactions. Seeking geneticists, genetics statisticians, molecular biologists interested in developing the next generation of assay systems and applications for polymorphic analysis. **Job Code: HVS**

Information Technology

Software engineers, algorithm developers, database specialists, network architects, and system administrators will work in close collaboration with Celera scientists and research partners to develop databases, analysis tools, and visualization workbenches on a state-of-the-art computing infrastructure. **Job Code: ITS**

Gene Discovery

Selected candidates will perform rapid analysis of the emerging genome sequence. Seeking bioinformatics professionals with experience in protein and nucleotide sequence analysis and versatile molecular biologists. **Job Code: GCS**

Production Sequencing

The world's largest DNA sequencing facility will be generating the complete human genome sequence over the next three years. We're seeking energetic, experienced managers, a quality control/quality assurance director, instrumentation and automation experts, and team leaders. **Job Code: PSS**

Chromosome Teams

Selected candidates will build the definitive information resources for each human chromosome, including annotation, validation of assembly, and integrated maps. Seeking bioinformatics professionals with an interest in genome content, structure and function. **Job Code: CTS**

Sr. Level Statistical Genetics

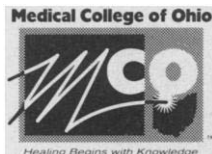
We're seeking a senior level statistician with extensive experience in genetics and population-based analyses. Must be very familiar with current concepts in DNA sequence diversity, especially the potential role of single nucleotide polymorphisms (SNP's). A Ph.D. or its equivalent in statistics or an appropriate mathematical discipline is required. **Job Code: SSG**

If you want be a part of history, send us a letter describing your background and interests and a copy of your CV to: Celera Genomics Corp., Human Resources, Job Code _____, 45 West Gude Drive, Rockville, MD 20850; Fax: 240-453-3755. An equal opportunity employer.

www.celera.com



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Postdoctoral Positions For Newly Expanded Program in Cellular Immunology

Three (3) NIH-funded Postdoctoral positions are available immediately for studies in Cellular Immunology at the Medical College of Ohio. The projects involve 1) exploiting cytokines to enhance the protective properties of mucosal, viral, and T-independent vaccines and 2) manipulating Th1/Th2 cell expression for accommodation of xenotransplants. Applicants should have a Ph.D. in Immunology, Microbiology, Cell Biology, or a related field, and have no more than five years of relevant postdoctoral experience. The positions include competitive salaries and full benefits. To apply, please send a curriculum vitae, a brief letter outlining research experience, and the names and addresses of three references to:

Dennis W. Metzger, Ph.D.
Professor
Department of Microbiology and Immunology
Medical College of Ohio
3055 Arlington Avenue
Toledo, OH 43614-5806
<http://www.mco.edu/micro>

ANNOUNCEMENT

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MOLECULAR BIOLOGIST/ASSAY DEVELOPMENT

Qualified candidates should possess the following:

- B.S. to Ph.D. in molecular biology, microbiology, or biochemistry
- Up to 10 years experience developing DNA/RNA probe assays for the detection of genetic mutations, SNPs, and gene expressions in the areas of infectious diseases, genetic disorders, and agriculture
- Demonstrated knowledge of all aspects of sample preparation or nucleic acid hybridization and amplification technologies

GRANT AND CONTRACT MANAGER

Qualified candidates should possess the following:

- Ph.D. in molecular biology or biochemistry
- Previous experience writing SBIR and/or other Federal grants
- Successful funding of grant applications
- Experience writing RO1 grants a plus

Join the cutting edge of biotechnology in Madison, Wisconsin - America's #1 rated city. Third Wave offers an attractive benefits package including relocation assistance and stock options. Send your resume and salary expectations to: **Third Wave Technologies, Attn: HRSC2, 502 South Rosa Road, Madison, WI 53719-1256; Fax: 608-663-7045.** Visit our website at www.twt.com. Equal Opportunity Employer.



Neuroscience and Cell Biology

Tenure-track positions are available in neuroscience and cell biology at the University of Medicine and Dentistry of New Jersey (UMDNJ) - Robert Wood Johnson Medical School. Successful candidates will hold appointments in both the Center for Advanced Biotechnology and Medicine (CABM) and the Center for Neuroscience (CNS). Investigators with interests in molecular neurobiology, cellular neurobiology, and the relationship of biology to behavior are encouraged to apply. Research topics of particular interest include vertebrate neural development, transgenic models of regeneration and apoptosis, and growth factors and cell signalling.

Please submit curriculum vitae, summary of scientific interests and goals, and three letters of reference to:

Search Committee,
c/o Ira Black, M.D., Professor and Chair,
Dept., of Neuroscience and Cell Biology,
675 Hoes Lane, Piscataway, NJ 08854-5635.



CENTER FOR ADVANCED BIOTECHNOLOGY AND MEDICINE



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and a member of the University Health System of New Jersey.

Pasteur Mérieux Connaught is committed to making the world a healthier place. As a leader in the research, development and distribution of human vaccines and biologicals we are proud of the impact we've had in the battle against pediatric and adult diseases. As we carry this fight into the next millennium we seek professionals with the dedication and inventiveness to help us create the "breakthrough" vaccines of tomorrow.

Opportunities are available in Research & Development and Biological Regulatory Affairs for candidates with strong scientific backgrounds within the following positions:



R&D

Platform Manager (4) Biochemistry, Immunology, Molecular Biology & Microbiology, Upstream/Fermentation

Platform Managers provide intelligence on technology, external collaborations and licensing opportunities; they support projects on project plan definition and scientific issues; appraise the performance of their reports and develop / maintain platform competencies through networking, collaborations and sub-contracting. Experience in presentation of results at both scientific meetings and in recognized publications is required. Requires a Ph.D. with significant research experience (both industrial and academic) that includes 5 years industrial experience in product research and development, technology transfer and scale up, purification technology, experimental design and data interpretation. Strong interpersonal and multi-task managerial / scientific skills are pluses. (Please specify above technical specialty and reference Job Code: JP/PLM)

Research Scientists (2) Biochemistry, Immunology

Will design and develop potential vaccines and other biologicals and serve as scientific leaders for vaccine project(s). Will formulate long-range strategies for implementing plans to meet milestones / objectives and design projects that elucidate the principles involved in producing antigens in their most immunogenic and safest form. Will serve as a scientific resource to the Company. Requires a Ph.D. or equivalent industrial experience with demonstrated capabilities in a specialized field in combination with the formal degree. A Ph.D. with post-doctoral training and vaccine pre-clinical / research experience is a plus. (Please specify above technical specialty and reference Job Code: JP/RS).

Senior Research Asst.

Requires an M.S. degree in immunology or biochemistry, or a B.S. degree in immunology or biochemistry with 2-5 years experience in the field. Will test vaccine formulations and antigen preparations for immunological potency and the development, documentation and qualification of immunochemical analyses. Responsible for designing and conducting scientific experiments on an independent basis for the development of new or improved vaccines. Experience in immunochemistry and animal models with a well rounded background in biology, chemistry, biochemistry, mathematics, cGMP, design of experiments, validation and analytical and aseptic techniques preferred. Cellular/tissue culture experience is a plus. (Job Code: DP/SRA)

Manager - Clinical Serology

Will manage the clinical serology laboratory including routine tests, analysis of results and release of results to Biometry groups in medical affairs. Responsible for the development of new assay methods, assay validation and concordance studies with outside investigators and regulatory agencies. Will define and develop reagents for new or improved test methods. Will manage the departmental budget, capital expenditures and facilities/testing in cGCP/cGMP compliance and have direct supervisory responsibility for all non-exempt laboratory personnel. A Ph.D. or MS with equivalent scientific expertise in Biological Sciences, Immunology or infectious diseases is required with 2-5 years experience in clinical serology, in a hospital or infectious disease laboratory and direct experience in the development and validation of biological assays with 5 - 8 years managerial experience. Experience in database management, LIMS or SAS are pluses. (Job Code: GS/MCS)

Research Scientist - Clinical Serology

Will develop clinical serology test methods to support PMC projects. This includes total antibody and functional antibody assays. Maintains collaborations with outside experts (i.e. CDC, FDA, Vaccine centers, etc.) to establish assay concordance & validity. Requires a Ph.D. with a postdoctoral or MS with 4-6 years direct work experience in Biology, Biochemistry or immunology and 1-2 years clinical serology or infectious disease laboratory work. cGMP training with experience in a GMP environment is preferable as is training in assay validation with biostatistical analysis. Experience in database management and SAS are pluses. (Job Code: GS/RSCS)

Manager - Test Validation

Will function as an authority on matters related to test qualification, validation and transfer from R&D to Quality Control and the release / stability testing of clinical vaccines. Requires a Ph.D. or M.S. in life sciences and relevant pharmaceutical research expertise with 2-5 years experience in a diagnostic or test development laboratory. Direct experience in the development and validation of biological assays and 2-5 years management experience. Excellent organizational, planning and communication abilities are required. Required also are: prior experience in presentation of results at both scientific meetings and in recognized publications; experience with GMPs, validation, modeling and statistics. Experience pluses will include cGMP/GLP training with experience in a GMP environment; biochemical and immunochemical analyses, biostatistics, matrix management, database management, LIMS or SAS. (Job Code: GS/MTV)

Project Manager

The incumbent will interface with project leaders to achieve both local and global project. Occasional international travel will be required. This position will work directly with team leaders, members and functional departments to obtain detailed project plans. A BS or MS in the Sciences is required with 7-10 years experience in the pharmaceutical industry. Must have tangible evidence of project management success with a background in Research to License processes and be team oriented. Must also be Computer proficient and be an expert in using project Management software. Highly desired is PMP certification or significant work towards certification. SAP experience preferred. (Job Code: GS/PM)

Biological Regulatory Affairs

Manager - Licensed Products

Will manage the functions of regulatory Affairs-Licensed products: Responsibilities include the registration and license maintenance of U.S. manufactured products in international markets. Requires a BS degree in science / biology or the life sciences (an advanced degree is preferable) with at least six years experience in the pharmaceutical or biological industry with prior regulatory affairs experience. An advanced degree is preferable. (Job Code: GS/BLP)

Manager - New Products

Will provide regulatory guidance to local and global project teams and will serve on (or may lead) project teams / subgroups. Will coordinate regulatory activities and regulatory submissions with project teams in the research to license process and be responsible for the preparation and submittal of appropriate application and licensing documents through the Center for Biologics Evaluation and Research (CBER). Requires an M.S. degree (preferably in life sciences) and 2-4 years hands-on Regulatory Affairs managerial experience in biologics, drugs or devices. A relevant Ph.D. with prior direct FDA contact experience and familiarity with clinical trials, biotechnology and matrix project management and project team participation are pluses. (Job Code: GS/BNP)

For consideration, forward/fax your resume and cover letter. Please indicate specialty area in response and reference the respective Job Code with compensation history/requirements in confidence to: Human Resources, Pasteur Mérieux Connaught, P.O. Box 187, Route 611, Swiftwater, PA 18370 Fax 717-839-0561. Visit our web site www.us.pmc-vacc.com

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Four Tenure-Track Faculty Positions Program in Medical Sciences The Florida State University

The Program in Medical Sciences at The Florida State University, Tallahassee, Florida, invites applications for four tenure-track faculty positions in the Department of Biological Science. Outstanding candidates working within the broad disciplines of biological science and cellular and molecular biology are encouraged to apply. We hope to recruit candidates whose research enhances the existing research strengths of the department, which include gene expression, neuroscience, population ecology and evolutionary biology, as well as, cell motility and the cytoskeleton. Development of a vigorous, independent and innovative research program is expected. Competitive start-up funds, state-funded salaries and research laboratories will be provided. The department also offers research support through a variety of fully-staffed core facilities including analytical biochemistry, DNA sequencing, molecular cloning, computing and three-dimensional imaging. Although we anticipate applications at the assistant professor level, we encourage exceptionally well-qualified candidates at all levels to apply. A Ph.D. (or equivalent) degree, postdoctoral experience and an outstanding record of research accomplishments are required. Successful candidates must have experience appropriate for teaching first-year medical students in one of the following areas: human gross anatomy, embryology and microscopic anatomy. Interested individuals should send a curriculum vitae, summary of past experience, the names and addresses of three referees (including FAX and e-mail contact information) and statement of research plans to: **Dr. Myra M. Hurt, Search Committee Chair, PIMS Faculty Search, Program in Medical Sciences, 104 SCN, The Florida State University, Tallahassee, FL 32306-4300.**

Applications should be received by December 21, 1998. Additional information may be found by visiting our faculty search website at <http://www.fsu.edu/~pims/search.html>.

The Florida State University subscribes to Equal Opportunity and pluralism and complies with the Americans with Disabilities Act. The Florida State University is a public records agency pursuant to Chapter 119, Florida Statutes.

Five Faculty Positions Department of Biochemistry and Biophysics University of Rochester Medical Center

We invite applications for 5 tenure track positions at the **Assistant Professor** level, although appointments at the **Associate** or **Full Professor** level may be considered. These positions are part of a substantial expansion of basic research at the Medical Center that includes the addition of 50 new faculty members over the next several years. Candidates interested in any area of biochemistry or biophysics may apply. Special areas of interest include:

- Structural biology
- RNA processing and metabolism
- Eukaryotic gene expression
- Chromatin structure and function
- Signal transduction
- Membrane protein biochemistry
- Molecular genetics
- Enzyme mechanisms

Successful candidates are expected to establish an externally funded research program and participate in departmental teaching responsibilities. A competitive start-up package is available and the candidate will have access to a large pool of graduate students.

For more information see www.urmc.rochester.edu/smd/bcbp. Candidates should submit a curriculum vitae, selected reprints, a description of research interests and goals, and three letters of reference to: **Dr. Robert Bambara, Chair, Department of Biochemistry and Biophysics, Box 712, 601 Elmwood Ave., University of Rochester Medical Center, Rochester NY, 14642.** Review of applications will begin immediately.

The University of Rochester is an Equal Opportunity Employer.

FACULTY POSITION Department of Botany The University of British Columbia

The Department of Botany invites applications for an Assistant Professor tenure track position in the area of molecular evolution, with a suggested starting date of July 1, 1999. Applicants should have strong research interests and internationally recognized achievements in early eukaryotic evolution. Priority will be given to those using DNA sequences and/or genomics to clarify the origins and early evolution of eukaryotes. The successful candidate will be expected to have strong interest in organisms and to participate in the teaching of undergraduate (second year) cell biology (cell structure and function) or cell biochemistry.

The appointee will also fulfil the requirements for appointment as a Scholar of the Canadian Institute for Advanced Research (CIAR) Programme in Evolutionary Biology, which supports nodes at the University of British Columbia and nine other Canadian universities; with the additional involvement of distinguished associates worldwide.

The department currently has strength in functional, ecological, and systematic and evolutionary botany. Other facilities include a large herbarium, a protistan culture collection, and a modern imaging facility. For further information on the Department of Botany, please see <http://www.botany.ubc.ca/>

UBC hires on the basis of merit and is committed to employment equity. The University encourages all qualified persons to apply. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents. Applicants should submit a curriculum vitae and a statement of current research interests and future plans. They should arrange to have three letters of reference sent directly to: **Dr. I.E.P Taylor, Head, Department of Botany, University of British Columbia, 3529-6270 University Boulevard, Vancouver, BC V6T 1Z4, Canada**



The position is dependent on final financial approval by both the University and by CIAR. The deadline for applications is December 1, 1998.

POSTDOCTORAL POSITIONS IN BIOLOGY & BIOTECHNOLOGY

The Biology and Biotechnology Research Program at Lawrence Livermore National Laboratory is an interactive program investigating the molecular, cellular and biochemical mechanisms of DNA repair. We are expanding this effort and are seeking to fill the following post-doctoral positions:

Yeast Geneticist

Focus will be to express newly identified DNA repair cDNAs in genetically engineered mutants of yeast and/or bacteria, and to assess functional cross-complementation using various biological endpoints. Expression vector construction and site-directed mutagenesis will be performed for correlating functional elements with cellular repair capacity. **E-mail resume to: David M. Wilson, III at wilson61@llnl.gov; or Michael Thelen at thelen1@llnl.gov.**

Biochemist/Cell Biologist

Responsibilities include screening for genetic variation in a select group of human DNA repair genes and characterizing the encoded variant proteins in vitro using targeted and reconstituted enzymatic assays. Additional focus may include to generate mutant mammalian cell lines to determine the biological function of proteins presumed to be involved in radiation-damage repair and to test functional capacity of variants in vivo. **E-mail resume to: David M. Wilson, III at wilson61@llnl.gov.**

Molecular Biologist/ Protein Biochemist

Focus is on identification and functional characterization of polymorphisms in genes of DNA repair in humans and mice that may be associated with increased cancer risk (Cancer Research 58: 604, 1998), characterization of the molecular basis for genetic differences in DNA repair capacity that result in increased cancer susceptibility, and identification and characterization of new genes involved in the cellular response to and repair of DNA damage. **E-mail resume to: Harvey Mohrenweiser at mohrenweiser1@llnl.gov.**

Quantum Chemist or Molecular Dynamicist

Quantum Chemist or Molecular Dynamicist with a strong interest in biomedical applications. Focus will be on crosslinked, adducted, damaged, or otherwise exotic nucleic acids, using both MD and ab initio QC modeling. This position will involve extensive interaction with the experimental biochemists and therefore would be best-suited for candidates whose primary interests are in applying methods to novel problems, rather than exclusively in methods development. **E-mail resume to: Mike Colvin at colvin2@llnl.gov.**

Protein Structure Modeler

The focus of this assignment will be on identification of homology and comparative modeling of proteins involved in mammalian DNA repair. Sequence comparison, fold recognition, and comparative modeling techniques will be

used to identify homology and where possible model the structure of proteins implicated in DNA repair. This position is in a molecular modeling group strongly involved in the assessment of protein structure prediction (the CASP process). **E-mail resume to: Krzysztof Fidelis at fidelis@llnl.gov or Michael Thelen at thelen1@llnl.gov.**

Cytogeneticist/ Developmental Biologist

Research will utilize the mouse model to investigate effects of paternally transmitted chromosomal aberrations on early development and health of the offspring. Paternal mutagens will include tobacco smoke and cancer chemotherapies. Project is multidisciplinary with germ-cell toxicology, FISH cytogenetics, breeding genetics, and developmental toxicology. **E-mail resume to: Andy Wyrobek at wyrobek1@llnl.gov.**

Molecular Cell Biologist/ Radiation Biologist

Focus will be on early molecular events within cells exposed to low doses of ionizing radiation to identify disease susceptibility genes. Research will elucidate variations in the mammalian damage-response pathways in cell cultures and animals using expression microarrays and other genome-scaling biotechnologies. **E-mail resume to: Andy Wyrobek at wyrobek1@llnl.gov.**

Developmental Molecular Biologist/Biochemist

Research will utilize the mouse model to investigate DNA repair functions in zygotes and pre-implantation embryos to identify susceptibility genes for paternally transmitted developmental defects. Emphasis will be to characterize temporal and genetic variations in maternal and zygotic gene expression (RNA and protein) of DNA repair and damage processing genes. **E-mail resume to: Andy Wyrobek at wyrobek1@llnl.gov.**

Candidates should have a recent Ph.D. in their respective field and a publication record.

LLNL offers a challenging work environment and a competitive salary/benefits package. Interested candidates are invited to send a resume to: **University of California, Lawrence Livermore National Laboratory, Attn: Christine Skillern, L-452, Dept. AJSCAN8BS, P.O. Box 808, Livermore, CA 94551-0808; or FAX: 925-422-2282.**

LLNL is an Equal Opportunity Employer.

Visit our website at www.llnl.gov/jobs for a complete job description and a listing of additional employment opportunities at LLNL.

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**BIOMEDICAL FUNDING
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AWARDS IN MOLECULAR PARASITOLOGY

Awards support scientists who will move modern molecular techniques into the study of parasites and whose work will extend parasitology research in new directions. Scholar Awards provide \$425,000 over five years and New Investigator Awards provide \$210,000 over three years. Candidates must have an M.D. or Ph.D. and hold a tenure-track faculty appointment or its equivalent.

AWARDS IN MALARIA RESEARCH

BWF offers two types of awards in its New Initiatives in Malaria Research program. One type, which provides up to \$400,000 over four years, is intended to support studies, including field work, that bring new ways of thinking and new experimental approaches to malaria research. The second type, which provides \$100,000 over two years, is intended to support feasibility studies and pilot work that will underpin higher-risk research projects, or to support investigators from other fields who are reorienting their research to malaria. Candidates must have an M.D. or Ph.D. and hold a tenure-track faculty appointment or its equivalent.

AWARDS IN MOLECULAR PATHOGENIC MYCOLOGY

Awards support scientists who will bring new ways of thinking and new experimental approaches to the study of virulent fungal pathogens. Scholar Awards provide \$425,000 over five years and New Investigator Awards provide \$210,000 over three years. Awards are open to scientists already working in mycology as well as those from other fields. Candidates must have an M.D. or Ph.D. and hold a tenure-track faculty appointment or its equivalent.

Program information is available on BWF's website at <http://www.bwfund.org>

ST. LAWRENCE UNIVERSITY

Biology Department

St. Lawrence University invites applications and nominations for two tenure-track positions at the assistant professor level to begin the fall of 1999.

Vertebrate Biology—A Ph.D. in Vertebrate Biology, Zoology, or a related subdiscipline is required. The successful candidate will be expected to teach a course related to conservation biology, participate in the department's introductory courses, and develop courses according to his/her expertise. Possible offerings could include Tropical Biology, Mammalogy, Vertebrate Natural History, Herpetology, Ornithology, Animal Behavior, and Environmental Physiology. We are particularly interested in courses that would support our Environmental Studies-Biology combined major and our international programs.

Anatomy-Animal Physiology—A Ph.D. in Anatomy with emphasis in physiology/endocrinology or a related subdiscipline is required. The successful candidate will be expected to participate in the department's introductory courses and to develop other courses according to his/her expertise. Possible offerings could include Environmental or Comparative Physiology, Neurobiology, Comparative Vertebrate Morphology, Human Anatomy, Applied Physiology, Men's and Women's Health, or other related courses.

Demonstrated expertise in the use of computers and instructional technologies is preferred. The development of a research program that involves undergraduate student majors will also be expected. As part of the general education curriculum at St. Lawrence, all first-year students enroll in a team-taught course that seeks to develop skills in critical thinking, writing, and research. The successful candidate will have the opportunity to participate in this program.

Interested candidates should submit a letter of application clearly indicating which position is being applied for, a curriculum vitae, a statement of teaching experience and philosophy that reflects innovative and progressive pedagogies as well as possible elective courses that could be offered, a statement of research interest, and have three letters of recommendation forwarded to **Dr. T. Budd, Biology Department, St. Lawrence University, Canton, NY 13617**. The search committee will begin reviewing applications on October 30, 1998, and will continue until both positions are filled.

St. Lawrence University, chartered in 1856, is an independent, private, coeducational institution of higher learning in New York State. For more information please visit SLU's homepage at: <http://www.stlawu.edu> and the biology homepage is at: <http://it.stlawu.edu/~biology>. St. Lawrence University is an Affirmative Action/ Equal Employment Opportunity Employer. Women, minorities, veterans, and persons with disability are encouraged to apply.

MIT

ASSISTANT PROFESSOR OF COMPUTATIONAL NEUROSCIENCE

The MIT Department of Brain & Cognitive Sciences anticipates making another tenure-track appointment in computational brain and cognitive science at the Assistant Professor level. Candidates should have a strong mathematical background and an active research interest in the mathematical modeling of specific biophysical, neural or cognitive phenomena. Individuals whose research focuses on learning and memory at the level of neurons and networks of neurons are especially encouraged to apply. Responsibilities include graduate and undergraduate teaching and research supervision. Applications should include a brief cover letter stating the candidate's research and teaching interests, a vita, three letters of recommendation and representative reprints.

Qualified individuals should send their dossiers by **NOVEMBER 21, 1998** to: **Chair, Faculty Search Committee/Computational Neuroscience, Department of Brain & Cognitive Sciences, E25-406, MIT, 77 Massachusetts Avenue, Cambridge, MA 02139-4307**. MIT is an Affirmative Action/Equal Opportunity Employer. Qualified women and minority candidates are encouraged to apply.



**MASSACHUSETTS INSTITUTE
OF TECHNOLOGY**

Fellowships for Biological and Biomedical Sciences

The Howard Hughes Medical Institute announces the 1999 competitions for fellowship programs that support training in fundamental biological and biomedical research. Awards, based on international competitions, focus on research directed to understanding basic biological processes or disease mechanisms. Fellowships may be held at academic or nonprofit research institutions.

Predoctoral Fellowships in Biological Sciences

Up to five years of support for full-time graduate study toward a Ph.D. degree in cell or developmental biology, genetics or molecular biology, immunology or microbiology, mathematical biology or epidemiology, neuroscience or physiology, structural biology or biochemistry, or related fields. Applicants must not have completed the first year of postbaccalaureate graduate study in biology. *Application deadline: mid-November.*

Postdoctoral Research Fellowships for Physicians

Three years of support for training in fundamental research subsequent to at least two years of postgraduate clinical training and no more than two years of postdoctoral research training. *Application deadline: early December.*

Research Training Fellowships for Medical Students

An opportunity for medical students in the United States to explore a burgeoning interest in fundamental research. Support is awarded for one year of full-time fundamental research in a laboratory at the student's medical school or another institution (except NIH in Bethesda, Maryland). *Application deadline: early December.*

Research Scholars at the National Institutes of Health

Under this joint HHMI-NIH program, medical students in the United States spend an intensive year in research in the intramural program at NIH in Bethesda, Maryland. Residence is provided at the Cloister on the NIH campus. *Application deadline: early January.*

1999 Program Announcements and Applications

For Predoctoral Fellowships:

Hughes Fellowship Program
Fellowship Programs Unit
National Research Council
2101 Constitution Avenue
Washington, DC 20418
United States of America
Telephone (202) 334-2872
Fax (202) 334-3419
E-mail infofell@nas.edu
<http://fellowships.nas.edu>

For Other Programs:

Howard Hughes Medical Institute
Office of Grants and Special Programs
Department AO99
4000 Jones Bridge Road
Chevy Chase MD 20815-6789
United States of America
Telephone (301) 215-8889
Fax (301) 215-8888
E-mail fellows@hhmi.org
www.hhmi.org/fellowships

The Howard Hughes Medical Institute, an Equal Opportunity Employer, welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

Basic Stroke Research

The University of Calgary Department of Clinical Neurosciences invites applications for a basic scientist with a research focus on the molecular and/or cellular mechanisms involved in cerebral ischemia. This position offers an excellent opportunity to develop an independent research program in stroke research within a multidisciplinary research environment of Stroke researchers (Drs. Roland Auer, Alastair Buchan, and Garnette Sutherland) located in the Neuroscience Research Group, which comprises 22 additional laboratory-based neuroscientists. While duties also include teaching and graduate student supervision, 75% of time will be protected for research. Calgary is a vibrant, multicultural city (pop. 800,000) located close to Banff National Park and the Rocky Mountains.

Qualifications include a PhD, MD or equivalent, and an established record of publications and demonstrated expertise in molecular biology, signal transduction or other fundamental processes underlying stroke. Salary support and start-up funds are available initially. Through successful application to the Alberta Heritage Foundation for Medical Research and/or the Medical Research Council of Canada, appropriate additional start-up funding and continuing salary support will be provided.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary respects, appreciates and encourages diversity.

We seek applications from all interested persons. Please submit a curriculum vitae and a statement of research interests, and arrange to have three letters of reference sent directly, by December 15, 1998, to: Dr. Thomas E. Feasby, Head, Department of Clinical Neurosciences, Faculty of Medicine, Foothills Hospital, 1403-29th Street N.W., Calgary, Alberta, Canada T2N 2T9



UNIVERSITY OF
CALGARY

www.ucalgary.ca

ANNOUNCEMENT

AMERICAN MUSEUM OF NATURAL HISTORY FELLOWSHIPS AND GRANTS

FELLOWSHIPS—Research Fellowships are available to postdoctoral researchers and established scholars starting in summer and fall 1999. The fellowships support independent research in association with the resident staff. Areas include vertebrate and invertebrate zoology, paleozoology, anthropology, earth and planetary sciences. All fellowships applications, including Chapman (Ornithology), should be postmarked by **January 15, 1999**.

GRANTS—Research grants are available to advanced predoctoral candidates and recent postdoctoral researchers in the fields of zoology and paleontology. Awards average \$1,000.

Postmark dates vary for each grant program:

- Frank M. Chapman (Ornithology)—January 15, 1999
- Theodore Roosevelt (North American Fauna)—February 15, 1999
- Lerner-Gray (Marine Zoology)—March 15, 1999

Request information and application forms from: **The Office of Grants and Fellowships, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024. E-mail: grants-and-fellowships@amnh.org.**

Laboratory Chief, NIAID, NIH

The National Institute of Allergy and Infectious Diseases (NIAID), NIH, seeks an individual to head the Laboratory of Immunogenetics, which is located at the Twinbrook Facility in Rockville, Maryland and is a component of the NIAID Division of Intramural Research. This position requires an M.D., Ph.D., or equivalent with proven leadership abilities and a strong independent research program. Preference will be given to candidates with research interest in immunology, immunogenetics or infectious diseases and those whose program complements other research programs currently in the laboratory. The Laboratory Chief will have independent resources to conduct their research and will supervise other Principal Investigators with independent research programs. A Laboratory Chief in the Division of Intramural Research is equivalent to a Department Head in a University or Medical School. *Applicants must be U.S. citizens or permanent residents.* Salary depends on degree and qualifications and ranges up to \$151,800.

Interested persons may contact **Dr. Karyl Barron**, Deputy Director, DIR, NIAID at (301) 402-2208 or [kbarron@nih.gov] for additional information about the position. A curriculum vitae, bibliography, three letters of reference, a detailed statement of research interests and selected publications must be submitted by December 31, 1998, to: **Ms. Melissa Keller, Office of Human Resources Management, NIAID, Building 31, Room 7A20; 31 Center Drive, MSC 2520, Bethesda, MD 20892-2520.** Please reference vacancy announcement number AI-98-110.

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For immediate consideration, please send your skills-based, scannable resume, (which must reference the appropriate Job # for the position you are interested in), to: **Medtronic, Inc., MEC, Job #13439.1, P.O. Box 976, Minneapolis, MN 55440-0976. Job Hotline: (612) 514-7724. Email: employment@medtronic.com** Visit our web site and apply online at **www.medtronic.com** Medtronic, Inc. is an equal opportunity employer committed to cultural diversity in the workplace.

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ANNOUNCEMENT

International Graduate Student Fellowships in Biodiversity and Conservation at the American Museum of Natural History

AMNH invites applications from *non-U.S. citizens* to enter a new doctoral program under the auspices of the Museum's Center for Biodiversity and Conservation. Students will study a diversified curriculum in systematics, biodiversity, conservation, and public policy. Through their training graduates of the program will advance environmental research and conservation programs in their countries.

Students should have a Bachelor's degree, and must fulfill university admission requirements, which may include TOEFL. Students will receive full fellowship support for 12 months, and tuition will be fully paid; support is guaranteed for 4 years if the student remains in good standing. The student will be under the direction of a museum curator, and attend classes and seminars at both the Museum and the university.

Application Procedure: Students must simultaneously apply to the Museum AND to one of 4 cooperating universities depending on field of study.

1. **Application to the Museum** is on prescribed forms and will include a résumé of the student's academic background, work experience, research interests, statement of purpose, and the names of two referees familiar with the student's work. Application deadline is January 10, 1999.

2. **Application to one of the universities** listed below should be made based on field of interest and submitted by the university's deadline date. Students should contact the university for application forms.

Evolutionary Biology: Office of Admissions, The Graduate Center of the City University of New York, 33 West 42 Street, New York, NY 10036-8099. E-mail: jreid1@email.gc.cuny.edu. Applications must be received by April 15, 1999.

Evolutionary Biology: Office of Student Affairs, The Graduate School of Arts and Sciences, Columbia University, Center for Environmental Research and Conservation, 10th Floor, Schermer Horn Extension, Mail Code 5557, 1200 Amsterdam Avenue, New York, NY 10027-6902. E-mail: ref8@columbia.edu. Applications must be received by January 3, 1999.

Molecular Biology/Systematics: Graduate Admissions, Yale University, P.O. Box 208323, New Haven, CT 06520-8323. E-mail: graduate.admissions@yale.edu. Applications must be received by January 4, 1999.

Entomology: Office of Admissions, The Graduate School, Cornell University, Sage Graduate Center, Ithaca, NY 14853-6201. Applications must be received by January 31, 1999.

Request Museum application forms and further information from:

Office of Grants and Fellowships, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024. Telephone: 212-769-5017; Fax: 212-769-5495; E-mail: grants-and-fellowships@amnh.org.

Bringing the Art of Science to Life



Novartis Pharmaceuticals Corporation, a global leader in exploring new frontiers in Life Science, innovating research techniques and facilitating shorter pipelines through the Novartis Institute for Biomedical Research, is launching a new Functional Genomics Department to research gene function and define molecular pathways to human disease. As a result, we have several key opportunities available for the following Scientists to join our advanced team:

Drosophila Scientists

You will work closely with external Novartis partners, academic institutions, and internal therapeutic research areas. According to your qualifications, you will either lead or be a member of a functional genomics laboratory that uses *Drosophila melanogaster* to define pathways and networks related to human disease. Results will ultimately be used in the development of new drug targets. Senior candidates will possess a Ph.D. with at least two years of postdoctoral experience. Several years' experience working with *Drosophila melanogaster* and familiarity with both genetic and molecular biological techniques associated with the system is required. The ability to work independently, design appropriate experiments, and to clearly convey data and interpretations to other team members is important. Staff-level candidates will have a BS/MS degree supported by 2-3 years of laboratory experience demonstrating a thorough knowledge of molecular and/or genetic techniques. Job Code: JN5741

Molecular Biologists

We are seeking Ph.D. and BS/MS level scientists who will use molecular biology to determine the roles of novel genes in disease development and validate gene products as potential drug discovery targets. In the process, you will apply extensive techniques including DNA chip arrays, northern blotting, RT-PCR, protein analysis, cell biology and yeast molecular genetics to identify new genes that are differentially expressed during disease. Overall, you will carry out these experiments independently within a highly collaborative setting. Your BS/MS degree must be in a natural science with 5+ years' demonstrated experience in molecular biology and tissue culture techniques. Experience in the expression and purification of recombinant proteins useful; experience in in situ hybridization or immunohistochemistry or production of transgenic and gene-targeted mice also being sought. We are also looking for independent Ph.D.s with 3+ years' postdoctoral experience in yeast molecular biology and protein biochemistry. Job Code: VW5787

All positions call for strong communication skills and the ability to work effectively within a team environment.

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MANAGER INFORMATION TECHNOLOGY DIVISION

Brookhaven National Laboratory (BNL) is seeking a Manager for our Information Technology Division. The Manager reports to the Associate Laboratory Director for Applied Science and Technology (AS&T) and is a member of both the Science and Operations Councils of the Laboratory. BNL is a multidisciplinary laboratory engaged in basic and applied research and is managed by Brookhaven Science Associates under contract with the Department of Energy.

The IT Division is dedicated to providing the most advanced computing tools and technologies, the very best high-performance communications infrastructure and customer support essential to the operations of BNL and critical to the advancement of research conducted at BNL.

The Division is responsible for the entire BNL network; the BNL Computing Facility with requirements that range from computer design and construction to software development; and facilities such as the Visualization Laboratory and videoconferencing, as well as other accountabilities in the areas of computer training, research operations and diagnostics, maintenance and repairs. The Manager is responsible for planning, coordination, direction, and safety of the Division and the development and administration of policies, procedures and practices to achieve the assigned goals consistent with BNL's IT strategic vision.

Requirements for the position include an advanced degree in a scientific discipline, preferably computer science, applied mathematics or physics, extensive technical knowledge and experience directing a staff in support of scientific research at a large technical facility. May be required to obtain and maintain a security clearance.

BNL is situated on 5000 acres on eastern Long Island, a region with a strong base of academic and industrial research. Resumes should be sent to Dr. Adrian Roberts, Associate Laboratory Director AS&T, Brookhaven National Laboratory, Building 460, PO Box 5000, Upton, NY 11973-5000. BNL welcomes diversity and encourages applications from all qualified individuals.

**BROOKHAVEN
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DIRECTOR OF UCLA TISSUE TYPING LABORATORY

The Department of Pathology and Laboratory Medicine at the UCLA School of Medicine is seeking a director of its large and active Tissue Typing Laboratory within the Clinical Laboratories of the UCLA Medical Center. This preeminent laboratory, founded in 1964 by Dr. Paul Terasaki, handles over 100,000 cases per year, including HLA typing by both serologic and molecular methods, maintaining a worldwide transplant registry and cell exchange program, and coordinating large-scale unrelated bone marrow donor drives. The laboratory is an integral part of UCLA's large organ donor and bone marrow transplant programs, and interacts closely with clinical services in hematology, transplant surgery, immunology, nephrology, genetics, and pathology. A major focus is the advancement of new immunogenetic technologies, and it is expected that the director continue to maintain a state-of-the-art laboratory of international stature. The academic environment will provide ample opportunities for innovation and collaborative research efforts.

Qualified applicants must possess a doctoral degree with at least two years of postdoctoral experience and be certified by the American Board of Histocompatibility and Immunogenetics. M.D. applicants must have or be able to obtain a California medical license. Broad experience in all aspects of HLA typing, including DNA technology, is essential, and evidence of scholarly productivity is preferred. The rank and series of academic appointment will be commensurate with prior experience, accomplishments, and career goals.

Interested applicants should send a letter of intent, curriculum vitae, and names, addresses, and telephone numbers of three references to: **Wayne W. Grody, M.D., Ph.D., Chair, TTL Search Committee, Department of Pathology & Laboratory Medicine, UCLA School of Medicine, Los Angeles, CA 90095-1732.**

UCLA is an Equal Opportunity Employer.

The University of Illinois at Urbana-Champaign School of Molecular & Cellular Biology Faculty Position, Rank Open, in Cellular Neurobiology

The School of Molecular and Cellular Biology at the University of Illinois at Urbana-Champaign invites applications for a full-time, tenure-track faculty position in Cellular Neurobiology at the Assistant, Associate, or Full Professor level. The starting date for the position is August 1999. Appointment at the Assistant Professor level requires a doctoral degree, postdoctoral experience, and evidence of outstanding research potential. Appointees at this level will be expected to develop a vigorous, independently funded research program. Appointment at higher levels requires evidence of outstanding research accomplishments including extramural funding and national recognition. Appointees at all levels will be expected to contribute effectively to undergraduate/graduate teaching. Laboratory facilities, substantial start-up funds, and a salary commensurate with experience will be provided. The University of Illinois at Urbana-Champaign offers a highly interactive, interdisciplinary research environment, which includes a dynamic campus-wide Neuroscience Program, as well as the Beckman Institute and other state-of-the-art research support facilities. This search is part of a multi-year commitment by the University for significant growth in the biological sciences. Urbana-Champaign offers the residential advantages of a medium-sized university city, excellent cultural opportunities, and easy access to Chicago and St. Louis. Information concerning the University can be found at <http://www.uiuc.edu/>. Applicants should submit a curriculum vitae with a complete list of publications and a summary of research interests and future plans, and should arrange to have at least 3 letters of reference sent to: **Neurobiology Search, School of Molecular and Cellular Biology, University of Illinois at Urbana-Champaign, 393 Morrill Hall, 505 S. Goodwin Ave., Urbana, IL 61801.**

To ensure full considerations, applications should be received by December 15, 1998. Interviews may be conducted before the closing date but no final decisions will be made before that time.

The University of Illinois at Urbana-Champaign is an Affirmative Action, Equal Opportunity Employer.

The University of Illinois at Urbana-Champaign School of Molecular & Cellular Biology Two Faculty Positions, Rank Open Structural Biology

The School of Molecular and Cellular Biology at the University of Illinois at Urbana-Champaign invites structural biologists to apply for two faculty positions in the School that will be available August 1999. Preference will be given to scientists working in areas at the frontier of structural biology and research problems of deep biological significance. Applicants with experience in all structural biology approaches, including X-ray crystallography, NMR spectroscopy, electron microscopy, scanning probe microscopy, and novel light microscopies are encouraged to apply. The positions are full-time and, depending on qualifications, may involve an appointment at the Assistant, Associate, or Full Professor level. Appointment at the Assistant Professor level requires a doctoral degree, postdoctoral experience, and evidence of outstanding research potential. Appointees at this level will be expected to develop a vigorous, independently funded research program. Appointment at higher levels requires evidence of outstanding research accomplishments including extramural funding and national recognition. Laboratory facilities, substantial start-up funds, and a salary commensurate with experience will be provided. The University of Illinois at Urbana-Champaign offers a highly interactive and interdisciplinary research environment plus world-renowned state-of-the-art research support facilities and proximity to the Advanced Photon Source. The University is committed to significant future growth in the biological sciences. Urbana-Champaign offers the residential advantages of a medium-sized university city, excellent cultural opportunities. Information concerning the University can be found at <http://www.uiuc.edu/>. Applicants should submit curriculum vitae with a complete list of publications, summary of research interests and future plans, and arrange to have four letters of reference sent to: **Structural Biology Search, School of Molecular and Cellular Biology, University of Illinois at Urbana-Champaign, 393 Morrill Hall, 505 S. Goodwin Ave., Urbana, IL 61801.**

To ensure full consideration, applications should be received by Dec. 15, 1998. Interviews may be conducted before the closing date but no final decisions will be made before that time.

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- 12 Fellowships Annually
- Fellowship Stipends up to \$30,000
- Department Grants of \$10,000
- Support for 12-24 months

An applicant must:

- Be enrolled full-time in a Ph.D. or equivalent doctoral program in a biomedical life or physical science
- Be within 2 years of completing dissertation research

POSTDOCTORAL

SCIENCE RESEARCH
FELLOWSHIPS

- 10 Fellowships Annually
- Fellowship Stipends up to \$40,000
- Department Grants of \$15,000
- Support for 12-24 months

An applicant must:

- Hold a Ph.D. or equivalent degree in a biomedical life or physical science
- Be appointed as a postdoctoral fellow during the 1999 calendar year at an academic or non-academic research institution (private industrial laboratories are excluded)

Applicants must be African American (Black, non-Hispanic), U.S. citizens or permanent residents and at an institution in the U.S.A. Applications must be postmarked by January 15, 1999

For application forms and more information, please contact your department chairperson or Jerry L. Bryant, Ph.D., by mail at *The College Fund/UNCF*, 8260 Willow Oaks Corporate Drive, P.O. Box 10444, Fairfax, VA 22031-4511, by fax (703) 205-3574, or by E-mail: uncfmerck@uncf.org

Visit our web site: www.uncf.org

The Neuroscience Research Institute of the University of Ottawa and the Ottawa Hospital seeks applications from basic researchers for two tenure-track equivalent appointments. These positions will be funded through the Institute, with generous start-up and equipment packages to be offered. The successful applicant will possess a strong background in molecular neurosciences applied to areas of particular research interest, which include neurotrophins and neuronal survival, mechanisms of sprouting and synaptic plasticity, receptor-mediated signal transduction mechanisms, regulation of apoptosis/proliferation/differentiation in brain, transgenic approaches to understanding brain function, and regulation of gene transcription in the brain.

These areas of research should broadly relate to conditions such as stroke, neurodevelopmental or neurodegenerative disease, or mental illness.

The NRI is a recently established institute focusing on developing innovative approaches to address mechanistic aspects of neuronal function. It is located on a thriving campus that includes the University of Ottawa basic medical science departments, several Research Institutes, and two tertiary care hospitals.

Please direct your application, including curriculum vitae, names of three references, and summary of proposed research, to:

Paul R. Albert, Ph.D.
Neuroscience Research Institute
University of Ottawa
451 Smyth Road
Ottawa, Ontario K1H 8M5 Canada

According to Canadian Immigration requirements, this ad is primarily addressed to Canadian citizens and landed residents of Canada. Applications will be received until September 30, 1998.

National
Human
Genome
Research
Institute



at the
National
Institutes
of Health

Tenure-Track Position in Genome Analysis

National Human Genome Research Institute (NHGRI)
National Institutes of Health (NIH)

The intramural program of the National Human Genome Research Institute (NHGRI), the National Institutes of Health (NIH) in Bethesda Maryland, is looking to recruit a tenure-track scientist to direct an independent research program in genome analysis. The successful applicant will become a member of the Genome Technology Branch and will be provided space and resources needed to pursue a vigorous research program in genome mapping and sequencing and/or the development and application of genomic technologies to investigate biological problems.

Candidates must have a Ph.D. and/or M.D. as well as advanced training in genome science, with demonstrable expertise in the areas of bioinformatics, production mapping and sequencing, positional cloning, and/or the analysis of gene function. We are particularly interested in individuals who have expertise in several of these areas and can develop a research program that takes advantage of interactions with the Genome Technology Branch, the various genomics studies within the NIH intramural program, and the recently created NIH Intramural Sequencing Center.

Competitive salary and benefit packages are available. Please forward curriculum vitae and three references to:

Eric D. Green, M.D., Ph.D.
Chief, Genome Technology Branch
NIH/NHGRI
Building 49 Room 2A08
49 Convent Drive
Bethesda, MD 20892-4431
egreen@nhgri.nih.gov

Closing Date: December 1, 1998

-NIH is an equal opportunity employer-



For more information see: <http://www.nhgri.nih.gov/DIR/GTB>



Assistant Professor Developmental Biology

Tenure track opening for Developmental Biologist in the Dept. of Biological Sciences at DePaul University starting September 1999. Successful candidate broadly trained in developmental biology with a strong commitment to undergraduate education. All sub-disciplines and approaches using an animal model system will be considered, including molecular, cellular, genetic, and morphological. Ph.D. required; post-doctoral experience and previous teaching experience preferred. Teaching responsibilities to include some combination of: biology courses with lab for non-majors; co-teaching introductory biology sequence for majors; intermediate-level undergraduate course(s) in developmental biology; and graduate/advanced undergraduate course in candidate's area of expertise. Modest research support and start-up funds available. The Department is housed in a new Biology and Environmental Sciences building that includes ample animal care facilities. Review of applications will begin December 1 and will continue until position is filled. Please send: vitae; three letters of reference; statement of teaching and research interests; statement of your educational philosophy; and list of equipment and supply needs with cost estimates to: Developmental Biology Search Committee, Department of Biological Sciences, DePaul University, 2325 N. Clifton Avenue, Chicago, IL 60614. Or, FAX: 773/325-7596. E-mail: msillike@wppost.depaul.edu.

The Department of Biological Sciences seeks diversity in its faculty. We encourage applications from women, people of color, and the members of other historically under-represented groups. DePaul University is committed to diversity and equality in education and employment.

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

Vice President Business Development-Genomics Division

The successful candidate will be responsible for developing new division business area utilizing parent company technology platform. Seven to ten years of business development experience, which includes negotiating large multimillion contracts, joint ventures, or partnerships with large pharmaceutical companies. Must have managerial experience, both scientific and personnel. Experience in developing financial considerations and business terms for licensing and negotiating agreements. M.B.A. and degree in Molecular Biology or related field of life science.

Aggressive benefits package and rewarding professional environment. Please submit your résumé via our website, fax, or mail. *EOE*. No phone calls please.



1600 Faraday Avenue, Carlsbad, CA 92008
(760) 603-7207 Fax • www.invitrogen.com

COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES University of California, Davis

Inquiries are invited from qualified applicants for faculty positions currently available. Positions are 9-month tenure-track appointments. Eleven-month term employment will be offered and continued based upon academic personnel review.

Assistant/Associate Professor Chemical Ecologist in Entomology. Teach and conduct research in the area(s) of plant-insect interactions, chemical ecology, and insect physiology. Apply to: **Richard Karban, Search Committee Chair, Dept. of Entomology**, e-mail rkarban@ucdavis.edu. Position open until filled: to ensure consideration, applications should be received by December 1, 1998.

Assistant Professor Agricultural & Resource Economics and Environmental Science & Policy (Joint Appointment). Teach and conduct research in the area of environmental and/or resource economics. Apply to: **Dr. Douglas Larson, Search Committee Chair, Dept. of Agricultural & Resource Economics**, e-mail, larson@primal.ucdavis.edu. Position open until filled: to ensure consideration, applications should be received by December 10, 1998.

Assistant/Associate Professor of Cross-Cultural Cognitive Development. Teach and develop research on cultural and other contextual determinants of variations in human cognitive development. Apply to: **Carolyn Aldwin, Search Committee Chair, Human and Community Development**, e-mail cmaldwin@ucdavis.edu. Position open until filled: to ensure consideration, applications should be received by November 16, 1998.

Assistant/Associate Professor in Food Safety Microbiology. Teach core undergraduate and portion of core graduate course in food microbiology and conduct applied and fundamental research on microorganisms or microbiological problems of importance to food safety. Apply to: **David Ogrzydzak, Dept. of Food Science and Technology**, e-mail dmogrydzak@ucdavis.edu. Position open until filled: to ensure consideration, applications should be received by January 4, 1999.

Assistant Professor of Biomechanical Engineering. Teach and conduct research in the area of biomechanics and ergonomics. For information, contact: **John Miles, Dept. of Biological and Agricultural Engineering**, e-mail jamilles@ucdavis.edu. Position open until filled.

Professorial positions have responsibilities for teaching, advising, and research (in the Agricultural Experiment Station). Candidates must have a Ph.D. in an appropriate field. Applicants should submit résumé, transcripts (if within five years of graduation), statement of research and teaching experience, list and reprints of publications, and the names and addresses of at least three persons familiar with the applicant's qualifications, to individual and department as noted for position (department name), **University of California, Davis, CA 95616**. Please indicate the position(s) in which you are interested.

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

Postdoctoral Research at The Wistar Institute

The Wistar Institute, an independent research organization located on the University of Pennsylvania campus, currently seeks postdoctoral applicants:

Postdoctoral Researcher - Structural studies on viruses and on enzymes responsible for human genetic disease. EM and theoretical methods are being used with crystallography to tackle large assemblies such as human adenovirus. Training in protein crystallography is highly desirable. **Reply to Dr. Roger M. Burnett.**

Postdoctoral Researcher - Position available for postdoctoral fellow with experience in molecular biology to clone cancer T- and B-cell antigens. Experience in constructing mammalian libraries required. **Reply to Dr. Dorothee Herlyn.**

Postdoctoral Researcher - 1) Mechanisms of eukaryotic transcriptional activation using viral and yeast model systems. 2) Role of EBNA1 in determining the cell cycle dependent DNA replication of latent Epstein-Barr virus. Individuals with backgrounds in biochemistry, molecular biology or yeast genetics are encouraged to apply. **Reply to Dr. Paul Lieberman**

Postdoctoral Researcher - Early interaction of DNA viruses with nuclear structures to identify sites of interference. Characterization of newly identified nuclear deposition sites for viruses. (*BioEssays* 20:660-667, 1998.) Strong molecular-biological background and cell biological interest. **Reply to Dr. Gerd Maul.**

Postdoctoral Researcher - Fellowship in cellular immunology and molecular virology studies of HIV-1 infection. Research areas include AIDS immunopathogenesis, cytokine biology, and early steps of macrophage and T-cell infection. **Reply to Dr. Luis J. Montaner.**

Postdoctoral Researcher - Several positions are available immediately for individuals interested in transcription regulation mediated by oncogenes/tumor suppressor gene products. Specific projects include: 1) Molecular analysis of a newly cloned novel co-repressor for the KRAB domain, KAP-1, (*Genes Dev.* 10:2067-2078, 1996); 2) Engineering transcriptional repressors utilizing PAX, ETS, and zinc-finger type DNA binding domains which inhibit malignant conversion and growth; 3) Studies on BAP1, a novel tumor suppressor BRCA-1 which binds to the BRCA1 protein, (*Oncogene* 16:1097-1112, 1998). The experimental approaches are comprehensive and multidisciplinary. Highly motivated individuals possessing a Ph.D. and/or M.D. with a molecular biology/biochemistry background having experience in reconstituted in vitro transcription, chromatin assembly, analysis of DNA binding protein function, yeast two-hybrid assays, etc. are desired, but all strong candidates will be considered. **Reply to Dr. Frank J. Rauscher, III, Professor and Chairman, Molecular Genetics Program.**

Postdoctoral Researcher - Biochemical and molecular characterization of the RNA polymerase II complexes in human cells using a fully defined in vitro transcription system. We are also characterizing the connection of the transcription machinery to that of DNA repair, with specific emphasis on the BRCA1 and BRCA2 proteins (*Nature* 374:283, 1995; and *Nature* 381:86, 1996). Motivated scientists with Ph.D. in any discipline of biological sciences, with experience in molecular biological techniques and protein purification preferred. **Reply to Dr. Ramin Shiekhattar.**

Postdoctoral Researcher - Two postdoctoral positions are available immediately: 1) Structure-function studies of colon carcinoma associated cell-cell adhesion proteins using mutagenesis, biochemical, and cell transfection analyses. 2) Biophysical studies of protein-protein interactions of recombinant cytoskeletal and cell adhesion proteins using analytical ultracentrifugation and calorimetry methods. Experience with protein expression and purification preferred. **Reply to Dr. David W. Speicher.**

Interested applicants are requested to send a C.V. and three letters of reference to the **Human Resources Dept., Attn: (appropriate faculty member), THE WISTAR INSTITUTE, 3601 Spruce Street, Philadelphia, PA 19104.** EOE/AA/M/F/D/V.



National Cancer Institute
National Institutes of Health

ASSISTANT DIRECTOR FOR INDUSTRIAL RELATIONS

CA-98-1986

Opening Date: September 28, 1998

Closing Date: November 6, 1998

The National Cancer Institute (NCI) seeks an Assistant Director for Industrial Relations in the Office of Technology and Industrial Relations within the Office of the Deputy Director for Extramural Science. The National Cancer Institute is the foundation of the nation's investment in cancer research, supporting research into the biology of cancer, factors in cancer risk, prevention strategies, new approaches to detection and diagnosis, novel therapeutics, and rehabilitation.

The Assistant Director will play a critical role in coordinating new approaches and enhancing opportunities for industry to interact with the extramural scientific programs of the NCI. The Assistant Director will acquire expertise related to areas of science and opportunities for industrial interactions that span the Institute's mission. In addition, the Assistant Director will target unmet information needs of industry with respect to cancer, cancer research and the NCI; create a "user friendly" interface for information related to opportunities for industry to interact with NCI extramural programs; and, work closely with existing NCI programs and the Technology Development and Commercialization Branch in establishing industrial relations that can forward NCI's missions. The Assistant Director will hold significant responsibility in representing scientific priorities for industrial relations and programs of the NCI to the industrial community. Activities are intended to enhance scientific interchange and collaboration between the NCI extramural programs and industry and are distinct, yet complementary, to the technology transfer activities of the Technology Development and Commercialization Branch of the NCI. This position requires outstanding communication and leadership skills, as well as creative ideas related to information exchange and scientific partnering.

SALARY RANGE AND BENEFITS: Salary ranges from \$77,798 - \$101,142 per annum. Benefits include health and life insurance, retirement, paid holidays, vacation and sick leave. Salary quoted includes locality pay.

APPLICATION PROCEDURES: The NCI recruitment bulletin for this position contains complete application procedures and lists all mandatory information which you must submit with your application. To obtain the recruiting bulletin, call 1-800-728-JOBS (for local calls, 301-594-2953). When prompted, enter the "Fax ID Number" 1883. You will be prompted for your fax machine number. If you have any questions on qualification requirements or application procedures, or if you wish to obtain a position description or other information, please call (301) 402-2812.

Please submit your resume, SF-171, Application for Federal Employment or OF-612, Optional Application Form by the closing date to:

National Institutes of Health
National Cancer Institute
Human Resource and Consulting Branch
6120 Executive Boulevard, MSC 7211
Executive Plaza south, Suite 550
Rockville, Maryland 20852-7211

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Extraordinary People. Extraordinary Science.

Since 1990, the Whitehead Institute for Biomedical Research has ranked among the top three research institutions in the world in genetics and molecular biology. Our Center for Genome Research has become a top leader in functional genomics, genome mapping, sequencing, and informatics. As an integral part of the MIT teaching community, we attract the brightest scientists with promising research agendas, and then give them the freedom to pursue their own dreams. The results are nothing short of extraordinary. Join us.

SCIENTIFIC MANAGER

Will manage the Genome Center's high throughput genotyping facility. The Genome Center is expanding its activities in the genetics of human diseases, including research projects in coronary artery disease, hypertension, asthma and inflammatory bowel disease. Will use fluorescent microsatellite genotyping on ABI377 sequences and draw upon the unique strengths of the Genome Center in technology development and bioinformatics to establish a high throughput genotyping system on DNA microchips. Requires a Ph.D. in molecular biology or genetics and/or substantial experience in leading a genotyping group.

SR. SOFTWARE ENGINEER

Will design, implement, and maintain tools & software systems in Perl, C, C++, Java, and other languages, in a UNIX, Windows NT, and Web-based environment. Must be technically flexible and comfortable with rapid prototyping and frequent user interaction in small research teams. Requires BA/BS in computer science or related field including significant programming experience, demonstrated coding and system building skills and experience in Unix or Windows NT, writing software in Perl, C, C++, Java, or other languages. Ph.D. preferred.

SOFTWARE ENGINEER/DATABASE APPLICATION DESIGNER

Responsible for shaping the systems that manage the very latest high-throughput laboratory genomics and DNA sequencing environments and translating requirements into robust, high-performing application and database designs at Genome Center. Requires a BA/BS/MS in Biology/Computer Science or related, at least 2 year's professional software development experience including experience with a commercial relational DBMS, and ability to lead complex application and database design efforts. Sybase or Oracle is preferred. Must have some knowledge of intranet/internet development tools, for example Perl, CGI, HTML, Java, JavaScript.

RESEARCH TECHNICIANS

To work on the Genome Center's development team optimizing protocol and troubleshooting problems. Requires BS & molecular biology experience with emphasis on DNA sequencing and ability to work independently performing and evaluating experiments. Experience with DNA purifications, ligations, transformations, and PCR is preferred.

We offer excellent salaries, generous benefits (including tuition reimbursement), interaction with MIT community, opportunity to attend scientific lectures, state-of-the-art research facilities, and a convenient location.

Please send resumes to: Whitehead Institute for Biomedical Research, Human Resources Dept. Ref. SCI:1023, Nine Cambridge Center, Cambridge, MA 02142.

We have many other **Bioinformatics** and **Research** positions available.

Visit our web site at: <http://www.wi.mit.edu>.

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**WHITEHEAD
INSTITUTE**



Support for Research in Functional Genomics

The Merck Genome Research Institute is a not-for-profit organization which has been funding projects since 1996. The MGRI was established to support the development of sequence to function research technology. The focus of the Institute is to encourage and, where appropriate, sponsor projects which enable scientists to develop assays and methodologies which can be applied broadly across genomics research with the objective of improving the accuracy and speed in which functional associations can be made with sequences of genetic information. The development of methods which tend to accelerate predictions of gene function independent of linkage is a high priority. A variety of model systems (i.e., bacteria, yeast, mice, and *Drosophila*) analytic methods may be employed.

To accomplish this mission MGRI seeks to support research in the areas of: Bioinformatics; Development of Disease Models and Gene Expression/Function Assays; Merck Gene Index Accelerated Gene Identification; Full Mammalian cDNA Cloning/Sequencing Technology and Human Genetics.

In general, proposed research projects should be of one to two years duration (renewals possible) with direct costs requests ranging from \$100,000 to \$150,000 per project year. Smaller pilot and larger research projects may be considered as well as other initiatives consistent with the MGRI mission.

For complete program information and proposal guidelines contact:

Dr. Finley Austin
Administrative Director
Merck Genome Research Institute
Sumneytown Pike, P.O. Box 4
WP44L-206
West Point, PA 19486

www.mgri.org
or
email at mgri@merck.com



NIH Grants for International Biomedical and Behavioral Research

The Fogarty International Research Collaborative Award (FIRCA)

The Fogarty International Center (FIC) of the National Institutes of Health (NIH) announces enhancements to the existing FIRCA and AIDS-FIRCA programs.

These changes include increased funding levels and more flexible eligibility guidelines. They become effective when officially published in the NIH Guide. Advance notice of the changes may be obtained using the contact information below.

The Fogarty International Research Collaboration Award (FIRCA) facilitates collaborative research between U.S. biomedical scientists, supported by the National Institutes of Health (NIH), and investigators in eligible countries.

Application postmark deadlines:

Regular FIRCA: November 25, March 25, and July 25.

AIDS FIRCA: January 2, May 1, and September 1.

Application information and guidelines for the FIRCA and other FIC programs may be obtained from the FIC website at: <http://www.nih.gov/fic/> under Research and Training Opportunities.

Or e-mail Dr. Kathleen Michels, the FIRCA Program Officer, at firca@nih.gov.

FIRCA Program
Division International Training
and Research
Fogarty International Center
National Institutes of Health
Building 31, Room B2C39
31 Center Drive, MSC 2220
Bethesda, MD 20892-2220
Tel: 301-496-1653
FAX: 301-402-0772
firca@nih.gov



National Institutes of Health National Center For Research Resources

Associate Director For Research Infrastructure

The National Center for Research Resources invites applications for the position of Associate Director for Research Infrastructure (ADRI), NCRR, NIH. The ADRI is responsible for: (1) directing the Research Infrastructure area and developing and implementing plans to enable NCRR to enhance the effectiveness of the RI programs, while providing scientific leadership in the planning, formulation, program review, development and evaluation of all activities that are encompassed by this area, all of which impact the conduct of biomedical research at the National level; (2) managing programs that address biomedical research faculty and facility-development at a wide range of institutions, including minority institutions; programs designed to improve biomedical research facilities through matching grants for construction and renovation; and programs that enhance science education and skills for K-12 students, their teachers and the lay public. The ADRI integrates these programs into the NIH agenda and establishes priorities for using these programs to achieve NIH's and NCRR's long-range objectives. The Research Infrastructure area currently include the following programs: Research Centers in Minority Institutions, RCMi Clinical Research Infrastructure Initiative, Research Infrastructure in Minority Institutions, Research Facilities Improvement, Animal Facilities Improvement, the Institutional Development Award, and the Science Education Partnership Award.

Applications must have a Doctor of Medicine or a Ph.D. in one of the health sciences (or equivalent combination of experience and training) plus senior level medical/biomedical research experience that demonstrates the following mandatory qualifications: (1) Research-related managerial and research experience which provide the ability to develop, implement, and administer extramural research programs involving shared research resources, institutional and faculty development, as well as research facility development; and (2) extensive knowledge of biomedical research, including current research techniques, kinds of equipment used in biomedical research, and facilities needs for the conduct of state-of-the-art biomedical research in the rapidly changing extramural research community. This is a permanent full-time position with a salary range of \$106,412 to \$125,900 per annum commensurate with qualifications. Physicians may be eligible for a Physician Compatibility Allowance ranging from \$5,000 to \$20,000 per year. A recruitment bonus of up to 25% of base pay may be available to a non-federal selectee for this position. A relocation bonus of up to 25% of base pay (subject to approval) may be available to a permanent Federal employee who must relocate to accept this position. A one year probationary period must be served by the individual selected if not currently or previously in the Senior Executive Service.

Send applications to Ms. Pathenia Wiggins, National Institutes of Health, National Center for Research Resources (NCRR), 9000 Rockville Pike, Building 31, Room 3B43, Bethesda MD 20892. For application forms and a copy of the requirements contact Ms. Wiggins at NCRR on (301) 496-1524. Deadline for applications is November 2.

Public Health Service Commissioned Officers interested in performing the duties of the position within the Commissioned Corps may submit a resume to the above address.

- Applicants with internet access may browse the NIH Home Page to view the full text vacancy announcement at <http://helix.nih.gov:8001/jobs/>
- OPM now requires five executive core qualifications be met by individuals being recommended for appointment to the SES. Information about these qualifications can be requested from the NCRR Personnel Office or found on the Web at <http://www.opm.gov/ses/html.ecq4.htm>
- Applicants may browse the NCRR Home Page at <http://www.ncrr.nih.gov>
- Applicants may e-mail materials to patw@nih.gov

NIH is an Equal Opportunity Employer

COLD SPRING HARBOR LABORATORY



Cold Spring Harbor Laboratory, a world renowned genetics research facility, is seeking the following individuals to join our elite team of scientists and professionals. The Cold Spring Harbor Genome Center is dedicated to determining the structure of complex eukaryotic genomes. We are currently sequencing regions of the human and *Arabidopsis thaliana* genomes. We are seeking exceptional candidates for the following positions within the Genome Center.

RESEARCH INVESTIGATOR/ASSISTANT PROFESSOR

We are seeking a highly motivated individual for the role of assistant director of the Cold Spring Harbor Genome Center. The successful candidate will be expected to assist the director of the center in its scientific and administrative management. A Ph.D. and background in genome mapping or sequencing is desired, however, candidates with other relevant backgrounds such as bioinformatics, biochemistry, genetics, molecular biology or microbiology will be considered. Appointment will be at the research investigator level. However, an exceptional candidate may be appointed at the faculty level (Assistant Professor). Cold Spring Harbor provides an exciting scientific environment with outstanding opportunities for research and interactions with the rest of the scientific community. The recent establishment of a graduate school at Cold Spring Harbor will add to the intellectual environment and growth potential for the incumbent.



POSTDOCTORAL RESEARCH CANDIDATE

The Genome Sequencing Center is seeking an independent, highly motivated individual for a newly available postdoctoral research position to perform sequence analysis. The ideal candidate possesses a Ph.D. in molecular biology or biochemistry with 0-3 years of post-graduate experience and possesses the skills to use GCG and ACeDB as well as the outputs from BLAST searches and gene modeling algorithms. A working knowledge of UNIX is necessary and programming experience in perl is desirable. The primary responsibility of this position will involve the analysis of human and *Arabidopsis* genome sequence data. These analyses will be used to describe the features (genes, transposon, repeat elements, etc) of the sequence in comprehensive reports submitted to both GenBank and the WWW.

Cold Spring Harbor Lab provides a picturesque and intellectually stimulating environment on the beautiful North Shore of Long Island. For immediate confidential consideration, please send your resume or curriculum vitae, *indicating position of interest on envelope*, to Dr. W. Richard McCombie, Cold Spring Harbor Laboratory, 1 Bungtown Road, Cold Spring Harbor, NY 11724.

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I M A G I N E

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We are among the world's largest pharmaceutical companies, employing over 30,000 professionals around the globe. At our Kalamazoo, Michigan research facility we are discovering innovative therapeutic agents to treat Central Nervous System and Infectious diseases. In all of these areas, our objective is to help people live longer and fuller lives.

NeuroScientist

We are seeking a scientist with a good knowledge of neural circuits and pharmacotherapy of psychiatric diseases. Candidates should have a strong desire and ability to apply creative, multidisciplinary approaches and cutting-edge technologies to discover therapeutic agents that modulate the pathophysiology of psychiatric diseases.

Candidates should have completed at least 3 years of postdoctoral training, preferably with a Ph.D. in the neurosciences. Demonstrated expertise in the understanding of neurotransmitter interactions within functionally defined circuits is a requirement, as is a record of publication and individual accomplishment. We work in a multidisciplinary team environment, so the ability to work successfully with a group is a desired quality.

At Pharmacia & Upjohn you can make a difference. Not only for the sake of your career, but also for the millions of people around the world whose lives will be enhanced by the solutions you help provide. For confidential consideration, please send your resume to: **Pharmacia & Upjohn, Ad#980219, Recruiting, 5045-88-81, 7000 Portage Rd. Kalamazoo, MI 49001.**

Or you may e-mail your resume (no attachments, please) to: recruit@am.pnu.com.

We are an equal opportunity employer with a commitment to workplace diversity.



Pharmacia & Upjohn



**UNIVERSITY OF
FLORIDA**

Vice President for Research and Dean of the Graduate School

Applications and nominations are invited for the position of vice president for research and dean of the graduate school for the University of Florida. The vice president for research reports to the president of the university and is the director of the university's Office of Research, Technology, and Graduate Education (ORTGE). The vice president for research, as the director of ORTGE, is responsible for facilitating research and transfer of technology at the University of Florida. The vice president carries out the responsibilities of the Division of Sponsored Research. The vice president for research is also the president of the University of Florida Research Foundation, Inc. (UFRF), a nonprofit direct support organization of the university to support and assist technology transfer at the university. The vice president for research and dean of the graduate school is also the chief administrative officer of the Graduate School, and in that capacity reports to the provost and works closely with college deans to promote and support graduate education at the University of Florida. The Graduate School coordinates more than 200 graduate programs throughout the university's colleges and schools at the master's and doctoral levels. Emphasis on research is indicated by more than \$190 Million of sponsored research expenditures in 1996. There are more than 100 interdisciplinary research and teaching centers at the university. Desired qualifications include the doctoral degree in an appropriate area of specialization. The Vice President should have the qualifications necessary to hold a tenured position with the academic rank of professor in an appropriate academic department. Deadline for nominations is Nov. 13, 1998. Deadline for applications is Dec. 1, 1998. Applications providing a letter expressing interest, a curriculum vitae, and names of three references should be sent to:

**Dr. Kenneth I. Berns
Chair Search Committee
c/o Office of the President
P.O., Box 113155
Gainesville, FL 32611-3155**

The University of Florida is an Equal Opportunity, Affirmative Action Employer. Women and minorities are encouraged to apply. The "government in the sunshine" laws of Florida require that all documents relating to the search process, including letters of application/nomination and reference, be available for public inspection.

Phased Innovation Awards for Technology Development

Applications are solicited for the development of:

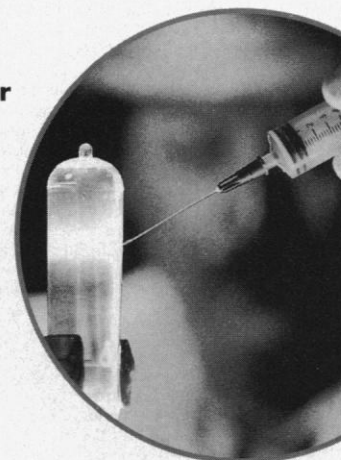
Innovative Technologies for the Molecular Analysis of Cancer

The program features:

- Rapid review of applications
- Expedited transition of successful technology research to an expanded development phase
- Flexible budget levels

Technologies of interest include those that are suitable for *in vitro*, *in situ*, or *in vivo* (e.g. imaging) analysis of:

- Alterations and instabilities in genomic DNA
- Expression of genes and gene products
- Cellular localization, post-translational modification, and function of proteins
- Major signal transduction networks involved in cancer



For complete information on this new program: Visit our Web site or call us at 301/496-1550

www.nih.gov/grants/guide/pa-files/PA-98-067.html

Small businesses are encouraged to consider a parallel announcement at: www.nih.gov/grants/guide/pa-files/PA-98-066.html

THE UNIVERSITY OF GEORGIA

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ACADEMIC-COMMERCIAL PARTNERSHIPS

Further information:

The Plant Center, Lee Pratt
leepratt@uga.edu; www.plantcenter.uga.edu

AGTEC Plant Division, John Ingle
ji@ovpr.uga.edu

Genomics Initiative, c/o Carla Ingram
carla@dogwood.botany.uga.edu

GRA/Georgia Biotech. Center, Kitty Vogt
kfv@uga.edu; www.uga.edu/gbc

in collaboration with the

Georgia Biotechnology Center of the Georgia Research Alliance

The Georgia Research Alliance (GRA) has invested in these initiatives as part of an overall strategy to create an environment that advances research and development into economic development for the State of Georgia.

The Plant Center

Founded in 1983 to nurture interaction among scientists with interests in basic plant genome organization and function, in the application of modern tools for plant improvement, and in the study of organisms that interact with plants

More than 50 faculty from 11 departments

AGTEC Plant Division

A total investment of \$28M fostering industry-academic and technology development partnerships

60,000 sq. ft. building, with 20,000 sq. ft. for commercial partners offering access to university facilities/expertise

State-of-the-Art Genomic Instrumentation Resource

Plant Genome Programs

Participation in four new NSF plant genome programs

Molecular mechanisms of plant genome evolution

Trait mapping and marker-assisted breeding

Transformation of recalcitrant crops and trees

Genomics Initiative

Several new faculty positions

Substantial emphasis on bioinformatics

New opportunities for post-doctoral, graduate, and undergraduate training

The University of Georgia is an Equal Opportunity/Affirmative Action Institution



POSITIONS OPEN

TENURE-TRACK FACULTY POSITION FAIRMONT STATE COLLEGE BIOLOGY DEPARTMENT

The Biology Department of Fairmont State College invites applications for a tenure-track faculty position at the rank of **ASSISTANT PROFESSOR**. The position is a nine-month appointment beginning August 16, 1999, and requires a Ph.D. or evidence that the degree will be completed by July 1, 1999. Teaching responsibilities include introductory biology for non-majors, invertebrate biology for majors, aquatic biology, and other appropriate upper-level courses. We seek candidates with a strong commitment to excellence in undergraduate teaching, including innovative applications of varied instructional methodologies. Preference will be given to applicants with significant field experience in invertebrate biology, postdoctoral and teaching experience, and knowledge of computer applications. Review of applications will begin November 23, 1998, and continue until the position is filled. Send a letter of application, curriculum vitae, a statement of teaching philosophy and research interests, undergraduate and graduate transcripts, and three letters of recommendation to:

Dr. Phillip Mason, Chair
School of Science and Mathematics
Fairmont State College
1201 Locust Avenue
Fairmont, WV 26554-2470

FACULTY POSITION PATHOGENESIS OF BACTERIAL AND FUNGAL INFECTIONS

The Department of Microbiology and Immunology at the University of Arkansas for Medical Sciences seeks to fill a 12-month, tenure-track, state-supported faculty position at the **ASSISTANT PROFESSOR** level. Research interests should emphasize molecular approaches to the study of the pathogenesis and/or cell biology of bacterial or fungal organisms. Increased consideration will be given to individuals studying organisms responsible for opportunistic infections. The applicant must have a Ph.D., M.D., D.V.M., or equivalent with postdoctoral experience. The individual will be expected to develop an independent research program and participate in teaching activities within the department's graduate and medical student programs. Generous start-up funds and laboratory space will be provided. Address inquiries, along with curriculum vitae, statement of present and future research interests, and the names of three references to: **Roger G. Rank, Ph.D., Department of Microbiology and Immunology, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, AR 72205.** The University of Arkansas for Medical Sciences is an Equal Opportunity Employer.

FACULTY POSITION IN CELL AND NEUROBIOLOGY

ASSISTANT/ASSOCIATE PROFESSOR position in cell and neurobiology is available. Department of Cell Biology and Anatomy, Louisiana State University Medical Center, New Orleans. A Ph.D. and two to three years of postdoctoral experience required. Applicants must have a solid funding record/potential. Applicants studying genetic and molecular aspects of development are encouraged to apply. Joint appointments in the Neuroscience Center are encouraged. Send curriculum vitae, research interests, and names of three references to: **Dr. R. Ranney Mize, Department of Cell Biology and Anatomy, Louisiana State University Medical Center, 1901 Perdido Street, New Orleans, LA 70112-1393.** LSUMC is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN CONSERVATION BIOLOGY BOTANY/ZOOLOGY

The Department of Biology, Middle Tennessee State University invites applications for a tenure-track position (Number 103150). **ASSISTANT/ASSOCIATE PROFESSOR**. Ph.D. required by August 1999 starting date. Research/public service is expected, as is the teaching of lecture/laboratory in the above area and in a non-majors course. Application reviews begin November 16, 1998. Send application referencing position number, proof of employment eligibility, transcripts, and three letters of reference to: **Dr. Kurt Blum, Committee Chair, Box 60, Middle Tennessee State University, Murfreesboro, TN 37132.** E-mail: febailey@frank.mtsu.edu. Equal Opportunity/Affirmative Action/ADA Employer.

POSITIONS OPEN



FACULTY POSITION IN RENAL CELL BIOLOGY OR PHYSIOLOGY RESEARCH The Lerner Research Institute Cleveland Clinic

We are seeking an individual at the level of **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** to establish a basic laboratory research program in renal cell biology or physiology. The position is jointly sponsored by the Research Institute and the Department of Urology—a partnership that has previously established research programs in renal cell carcinoma and transplantation. The successful candidate (Ph.D. or M.D.) will possess, or exhibit the potential to develop, an outstanding national reputation as a basic scientist using state-of-the-art cellular/molecular approaches in the study of kidney cells or renal diseases. Generous start-up support and a highly competitive salary and fringe benefits will be provided. The Cleveland Clinic Research Institute, composed of over 90 independent Investigators and over 600 employees, has a long-standing commitment to excellence in basic and applied biomedical research with an annual budget in excess of \$50 million. The Department of Urology is a nationally recognized center of excellence for kidney disease.

Send curriculum vitae and names and addresses of three references to: **Dr. Paul E. DiCorleto, Chair, Department of Cell Biology, NC10, Cleveland Clinic Research Institute, 9500 Euclid Avenue, Cleveland, OH 44195.**

The Cleveland Clinic Foundation is an Equal Opportunity Employer.

BIOCHEMISTRY POSITION GRINNELL COLLEGE

Grinnell College invites applications for a tenure-track position in biochemistry at the **ASSISTANT PROFESSOR** level beginning August 1999. The appointee will be expected to teach introductory chemistry, biochemistry, and develop courses for our proposed biological chemistry major. Additional teaching responsibilities may include organic or physical chemistry depending upon the candidate's expertise. A Ph.D. in biochemistry or a related field is required. In their applications, candidates should address their interest in teaching and research in an undergraduate, liberal arts environment that emphasizes close faculty-student interaction. Laboratory facilities and instrumentation for teaching and research are excellent, and start-up funds are available. To be assured of consideration, send curriculum vitae, undergraduate and graduate transcripts, a statement of teaching interests/philosophy, and a research proposal. Arrange to have three letters of recommendation sent to: **Lee R. Sharpe, Chair, Department of Chemistry, Grinnell College, Grinnell, IA 50112-0806** by November 13, 1998. Telephone: 515-269-3008 or 515-269-3172; FAX: 515-269-4285; e-mail: sharpe@ac.grin.edu; website: www.grinnell.edu. Grinnell College is an Equal Opportunity/Affirmative Action Employer committed to employing a highly qualified staff that reflects the diversity of the nation. No applicant shall be discriminated against on the basis of race, national or ethnic origin, age, gender, sexual orientation, marital status, religion, creed, or disability.

FACULTY POSITION IN MICROBIOLOGY

The Dr. William M. Scholl College of Podiatric Medicine (SCPM) invites applications for a full-time faculty position in the Department of Basic Biomedical Sciences, available July 1, 1999, offering faculty rank and salary commensurate with professional experience and achievements. We require a Ph.D. in microbiology, or related area, and a firm commitment to teaching. Position involves teaching a comprehensive course in medical microbiology and immunology to podiatric medical students. Productivity in research and other scholarly activity is expected. Limited intramural funds are available for research. Please submit a letter of application, curriculum vitae, and supporting material including names and addresses of three references to: **Bruce L. Manion, Ph.D., Chairman, Search Committee, Scholl College of Podiatric Medicine, 1001 North Dearborn, Chicago, IL 60610.** E-mail: bmanion@scholl.edu. Please visit our website: <http://www@scholl.edu>.

POSITIONS OPEN

TWO FACULTY POSITIONS MOLECULAR SYSTEMATIST AND GENETICIST Department of Biology Southwest Texas State University

The Biology Department invites applications for two tenure-track positions at the **ASSISTANT PROFESSOR** level effective 1 September 1999. (1) A Molecular Systematist who uses DNA/RNA technology to investigate phylogeny and evolution, and who will develop an upper-division course in systematics. Applicants who can teach an upper-division course in entomology will be given preference. (2) A Geneticist with research interest in molecular genetics who will teach both a majors course in general genetics (to include a balance of molecular, Mendelian, and population genetics) at the sophomore level and a senior/graduate course in molecular biology and genetics. Successful candidates will be expected to develop vigorous, externally funded research programs, and train undergraduate and M.S.-level students. A Ph.D. is required and postdoctoral experience is desired. Applicants should state clearly the position applied for, submit a curriculum vitae, copies of up to five publications, statements of teaching and research philosophies, copies of transcripts, and a list of three references including telephone numbers and e-mail addresses to: **Francis L. Rose, Chair, (position applied for), Biology Department, Southwest Texas State University, San Marcos, TX 78666.** The Biology Department consists of 33 faculty, 100 graduate students, and 1,400 undergraduate majors. SWT, a state university with 21,000 students, is located at the headwaters of the San Marcos River between Austin and San Antonio. More can be learned about the Department at website: <http://www.bio.swt.edu>. Review of applications begins 1 December, 1998, and will continue until a suitable candidate is found. SWT is an Affirmative Action/Equal Opportunity Employer, and is committed to increasing the number of women and minorities in faculty and administrative positions.

FACULTY POSITION IN TRANSPLANTATION BIOLOGY The Lerner Research Institute Cleveland Clinic Foundation

We seek an individual at the level of **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** to establish a basic research laboratory focused on transplantation biology. The successful applicant (Ph.D. or M.D.) will possess or exhibit the potential to develop an outstanding national reputation as a basic scientist using state-of-the-art cellular/molecular approaches to study important problems in transplantation biology. Candidates with interests in chronic rejection or xenotransplantation are particularly encouraged to apply. Generous start-up support and highly competitive salary and benefits will be provided. This position is jointly sponsored by the Department of Immunology and the Renal Transplant Division in the Department of Urology. The Lerner Research Institute of the Cleveland Clinic Foundation, composed of more than 90 independent Investigators and over 600 employees, has a long-standing commitment to excellence in basic and applied biomedical research with an annual budget in excess of \$50 million. The Department of Urology is a nationally recognized center of excellence for kidney disease and transplantation.

Send curriculum vitae and names and addresses of three references to: **Dr. Thomas A. Hamilton, Department of Immunology, NN10, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195.**

The Cleveland Clinic is an Equal Opportunity Employer.

FACULTY POSITION IN DEVELOPMENTAL BIOLOGY

The Department of Biology, Middle Tennessee State University invites applications for a tenure-track position (Number 103400). **ASSISTANT/ASSOCIATE PROFESSOR** to develop a course in developmental biology and teach embryology and human anatomy and physiology. The successful applicant should have a background in embryology, cellular and molecular aspects of development, and molecular genetics. Research/public service is expected. Ph.D. required by August 1999 starting date. Application review begins November 16, 1998. Send application referencing position number, proof of employment eligibility, copies of transcripts, and three letters of reference to: **Dr. Amy Jetton, Committee Chair, Box 60, Middle Tennessee State University, Murfreesboro, TN 37132.** E-mail: ajetton@frank.mtsu.edu. Equal Opportunity/Affirmative Action/ADA Employer.

**DIRECTOR
DIVISION OF MICROBIOLOGY AND
INFECTIOUS DISEASES**

The National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH) is recruiting for the position of Director, Division of Microbiology and Infectious Diseases (DMID). Annual salary range from \$106,412 to \$125,900 (M.D.'s may be eligible for other special pays). This position has responsibility for providing scientific and administrative management to a staff of 60 employees and managing an annual budget of \$400 million. This individual will be charged with the exciting challenge of directing the NIH's major program of research grants and contracts in the areas of microbiology and infectious diseases. Applicants must hold either an M.D. or Ph.D. degree, have demonstrated scientific excellence and research experience with biomedical research programs funded through grants and/or contracts, where the scientific emphasis is on laboratory or clinical aspects of infectious diseases and the related science disciplines of microbiology, virology, bacteriology, mycology, and parasitology. Persons interested in this position may call **Dr. Stephen Straus, Chair of the Search Committee, 301-496-5221**. For more information on the application process, please contact **Ms. Lynn C. Hellinger** (see below). Applications should be submitted and postmarked no later than November 27, 1998, to:

**Ms. Lynn C. Hellinger
Director, Office of Human Resources Management, NIAID
Building 31, Room 7A20
31 Center Drive MSC-2520
Bethesda, MD 20892-2520
Phone: 301-496-9686**

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Number One

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— *U.S. NEWS & WORLD REPORT*

RESEARCH TECHNICIAN- MOLECULAR BIOLOGY PROGRAM

Memorial Sloan-Kettering Cancer Center, ranked by *U.S. NEWS & WORLD REPORT* as #1 in the nation for the 6th consecutive year, has the following research opportunity. Join our progressive team, where excellence and extraordinary service are crucial to providing the best cancer care anywhere.

You will perform a variety of techniques in molecular biology and biochemistry, organize/maintain the plasmids and strains (E.coli, yeast and mammalian cell lines) in lab's collection, order/maintain lab supplies inventory and equipment, and handle disposal of hazardous waste. Requires a BA/BS in a Life Science and be able to commit to 2 years.

We offer a competitive salary and comprehensive benefits, including 100% tuition reimbursement. Please forward your resume and salary requirements, to: **Employment Dept., #98208R, MSKCC, 633 Third Avenue, 5th Floor, New York, NY 10017. EOE/AA.**



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The best cancer care. Anywhere.

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SENIOR ENVIRONMENTAL SCIENTIST

This position participates in an interdisciplinary research program to study the effectiveness of wetland creation and restoration on phosphorus fate and transport. The successful applicant will conduct research on nutrient cycling in wetlands recreated from an agricultural land use, and will be located at the District's service center office in the town of Okeechobee, on the North Shore of Lake Okeechobee, approximately 60 miles from West Palm Beach, FL. The successful applicant will be expected to work closely with scientists at District Headquarters in West Palm Beach. This position requires a candidate who is interested in working in a highly progressive professional environment, utilizing a team approach to solve complex and challenging environmental problems at multiple scales. Experience with agricultural systems and isotopes are a plus. MS in Environmental Science or related discipline (Ph.D. preferred), with 4+ years related/qualifying experience, and a proven publication record are required. May be filled at the secondary Staff Environmental Scientist level. BS in Environmental Science or related discipline with 4+ years related/qualifying experience required. **Job Reference #SCI990581CH**

Our benefits include alternative work schedules, job sharing, telecommuting, tuition assistance, and wellness programs. For an opportunity that makes the grade, direct all applications, including your social security and ad reference number to:

**South Florida Water Management District
3301 Gun Club Road
West Palm Beach, FL 33406
JOB HOTLINE: 561-686-8800, x6364
www.sfwmd.gov**



EOE, M/F/D/V

POSITIONS OPEN

CHAIR, PHYSIOLOGY AND BIOPHYSICS GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE

Georgetown University Medical Center is seeking a nationally known academic Physiologist to Chair the Department of Physiology and Biophysics. The department maintains active research programs in broad areas of physiology (cardiovascular, endocrine, neuroscience, and renal) utilizing cellular, molecular, and integrative approaches. In addition, the department has a strong, nationally ranked graduate program leading to both the M.S. and Ph.D. degrees.

The ideal candidate will have a Ph.D., M.D., M.D.-Ph.D., or similar terminal degree, and should possess an outstanding record of research and scholarly achievements, and demonstrate leadership ability to manage and mentor a diverse group of scientists and to oversee the fiscal affairs of a department. The candidate should also be knowledgeable about the current trends in the education of medical and graduate students.

Review of applications will commence on October 30, 1998, and will continue until the position is filled. Candidates should send a letter of interest stating their qualifications for this position and a copy of their curriculum vitae to:

Raymond L. Woosley, M.D., Ph.D.
Chair, Physiology and Biophysics Search Committee
Georgetown University School of Medicine
3900 Reservoir Road N.W.
Washington, DC 20007

Georgetown University is an Affirmative Action/Equal Opportunity Employer. Georgetown University encourages applications from qualified women and minorities.

MOLECULAR BIOLOGY OF MINERALS

The University of Missouri-Columbia is seeking a tenure-track **ASSISTANT PROFESSOR** in nutritional sciences, with a Ph.D. in biochemistry, molecular biology, nutritional sciences, or related area, and with postdoctoral experience. The successful applicant will be expected to develop a nationally funded research program using molecular and biochemical techniques to study questions of broad nutritional importance in model systems at any phylogenetic level. Preference will be given to individuals focused on genetics of in-born errors of metal metabolism, metal-related regulation of gene expression, metal ion transport, or metalloprotein biochemistry. Laboratory space will be provided in newly remodeled facilities. The position, which is part of the interdisciplinary Food for the 21st Century Program, also includes support for technical staff and some teaching responsibilities. Applications will be accepted until December 1, 1998, or until the position is filled.

Send a curriculum vitae, representative publications, summary of past research and teaching accomplishments and future research plans, and arrange for three letters of reference to be sent to: **Dr. David Eide, Search Committee Chair, Nutritional Sciences Program, 217 Gwynn Hall, University of Missouri, Columbia, MO 65211.**

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

PATHOLOGY

The Division of the Biological Sciences, which includes the Pritzker School of Medicine, at the University of Chicago, is seeking a **CHAIR** of the Department of Pathology. This is a multidisciplinary department with major clinical programs in surgical and chemical pathology as well as research programs in immunology, lipoprotein metabolism, and vascular biology. The Chair reports to the Dean of the Division/Vice President of the University, and is responsible for providing academic and administrative leadership in clinical care delivery, research, and teaching of undergraduate, graduate, postgraduate, and medical students. The successful applicant will have an outstanding record of scientific accomplishment and demonstrated teaching and administrative abilities that will qualify him or her to oversee and enhance both the clinical and the research programs of the Department. Please send curriculum vitae and the names of three individuals familiar with your work to: **Kenneth S. Polonsky, M.D., Chair, Department of Pathology Search Committee, c/o Donna L. Szymanski, The University of Chicago, 5841 South Maryland Avenue, MC1000, Chicago, IL 60637-1470.** Application should be submitted by November 30, 1998. *The University of Chicago is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY OPENING CORNELL UNIVERSITY SCHOOL OF CHEMICAL ENGINEERING

Cornell University invites applications for a **TENURE-TRACK POSITION** in the School of Chemical Engineering. Appointment at any rank is possible depending on the candidate's experience and achievements. The successful candidate should be capable of developing an outstanding research program. Although all research areas will be considered, emphasis will be placed on work involving materials, polymers, or bioengineering.

Applications should include a current curriculum vitae, a statement of research interests, copies of key publications, and the names of at least three references. Submit applications to: **Faculty Search Committee, School of Chemical Engineering, 120 Olin Hall, Cornell University, Ithaca, NY 14853.**

Cornell is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION PHARMACOLOGY

The Department of Pharmacology at the University of Nebraska Medical Center invites applications for two tenure-track faculty positions at the **ASSISTANT PROFESSOR** or higher level. The Department currently consists of 11 full-time faculty and seeks individuals with research interests complementary to current departmental research efforts on signal transduction in the areas of neuroscience, cancer, and cardiovascular biology/pharmacology, using cell or molecular biology approaches. The positions are supported by competitive start-up packages and 12-month state-supported salaries. Review of applications will begin December 1, 1998, and continue until the positions are filled. Applicants should submit a curriculum vitae, a summary of research accomplishments and future research plans, and names of three references to: **Chair, Search Committee, Department of Pharmacology, University of Nebraska Medical Center, Omaha, NE 68198-6260.** *The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer. Women and minority researchers are particularly invited to apply.*

BIOCHEMISTRY FACULTY

The Department of Chemistry at Butler University seeks Ph.D. candidates for a tenure-track faculty position in biochemistry. Butler is a private institution of 3,200 students located in a residential area on the north side of Indianapolis. Butler's focus on quality undergraduate education requires the candidate to excel in classroom and laboratory teaching, along with involving undergraduates in their research activities. A strong biochemistry background along with knowledge of modern molecular biology is preferred. The department has 10 full-time faculty members, 120 majors, and a curriculum approved by the ACS. Visit our website: <http://iris.butler.edu>. Research start-up funds are available. Candidates should submit a curriculum vitae, narratives describing their research interests and teaching philosophy, undergraduate and graduate transcripts, and three letters of reference to: **Dr. J. L. Kirsch, Department of Chemistry, Butler University, Indianapolis, IN 46208.** Consideration of candidates will begin December 15, 1998, and continue until the position is filled.

FACULTY POSITION CELLULAR AND DEVELOPMENTAL BIOLOGY Department of Biochemistry, Molecular Biology, and Cell Biology Northwestern University

The Department of Biochemistry, Molecular Biology, and Cell Biology seeks outstanding candidates for a full-time faculty appointment (**RANK OPEN**). Exceptionally qualified candidates in the area of cellular and developmental biology are being sought. Candidates should submit a curriculum vitae, a list of publications, a statement of future research objectives, and three letters of reference to: **Faculty Search Committee, Department of Biochemistry, Molecular Biology and Cell Biology, Northwestern University, Evanston, IL 60208-3500.** To ensure full consideration, applications should be received by January 15, 1999.

Women and members of minority groups are urged to apply. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

NEUROSCIENTIST: ENDOWED CHAIR. Ideal candidates will be experienced Teacher-Researchers in the earlier stages of their careers with demonstrated success in undergraduate teaching and an ongoing program of biomolecular research in psychobiology/biopsychology, neuropharmacology, or other areas pertaining to the neurosciences. Duties: (1) develop/teach neuroscience courses in a discovery-based, biofocused science program funded by a major grant from the Howard Hughes Medical Institute; (2) establish/support ties between Centenary College and major research facilities at nearby Louisiana State University (LSU) Medical Center/Biomedical Research Institute. Centenary is ranked among the 200 best U.S. institutions in math/science, and U.S. *News & World Report* ranks it first among "best buys" in the South and eighth best overall within its class. Please submit curriculum vitae, publications, summary of research funding, statement of teaching philosophy, research agenda, and names of five references to: **Whited Search Committee, c/o Provost's Office, Centenary College, Shreveport, LA 71134-1188.** Position open until filled.

Biology. Tenure-track ASSISTANT PROFESSOR to teach cell/molecular biology and assist in introductory-level courses. Candidates should have a focus on discovery-based teaching, an interest in preparing students for medical and professional programs, and motivation to establish a research program to connect with the nearby LSU Medical Center and the Shreveport Biomedical Research Institute. Postdoctoral research experience a plus. Centenary is ranked among the 200 best U.S. institutions in math/science, and U.S. *News & World Report* rates it first among "best buys" in the South and eighth overall among the top institutions in its class. Candidates please send curriculum vitae, publications, research agenda, teaching philosophy, transcripts, and three to five letters of recommendation to: **Search Committee, c/o Provost's Office, Centenary College, Shreveport, LA 71134-1188.** Applications accepted until position is filled. *Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR CONSERVATION BIOLOGIST/ ENVIRONMENTAL LIFE SCIENTIST

The Department of Environmental Studies and Planning at Sonoma State University is seeking a tenure-track Assistant Professor with an earned doctorate or A.B.D. and anticipating completion of the Ph.D. by no later than August 20, 2000, in the life sciences, natural resources management, applied conservation biology, ecology, or landscape architecture, or related field to teach undergraduate courses such as conservation biology, environmental restoration, and/or environmental geographic information applications. Ideally the candidate would be willing to work with campus and community groups in activities related to environmental restoration and conservation biology. Applications must be postmarked by either January 8, 1999 (for fullest consideration), or February 19, 1999. Please request announcement# 013-99/00 from: **Professor James C. Stewart, Chair, Department of Environmental Studies and Planning, Sonoma State University, 1801 East Cotati Avenue, Rohnert Park, CA 94928-3609.** Telephone: 707-664-2306; e-mail: ensp@sonoma.edu; website: <http://www.sonoma.edu/FacAff/aa.html>. *Sonoma State University is an Affirmative Action/Equal Opportunity Employer.*

FACULTY MEMBER

The Division of Rheumatology, Allergy, and Clinical Immunology at the Duke University Medical Center is seeking a full-time faculty member to develop and direct a core facility in molecular immunology. The facility will provide expertise and service in diverse techniques focusing on flow cytometry and the utilization of MHC tetramerpeptide reagents to assess antigen binding to T cell receptors (TCR) and to quantitate antigen-specific T cell numbers. Technical skill and experience in recombinant DNA technology degree, and preparation of tetramer reagents for TCR binding are essential. Requirements include a M.D. or Ph.D. and significant basic research experience and publications. The **CORE DIRECTOR** will be expected to interact with Investigators pursuing both clinical and basic research as part of a Specialized Center of Research (SCOR) in rheumatoid arthritis as well as a Center for AIDS Research.

Send applications and the names of three references to: **Dr. David Pisetsky, Box 3544, Duke University Medical Center, Durham, NC 27710.**

Duke University is an Equal Opportunity/Affirmative Action Employer.

Simon Fraser University

Assistant Professor BIODIVERSITY in the Department of Biological Sciences

The Department of Biological Sciences is seeking a tenure-track faculty member in the area of BIODIVERSITY. The appointment will be made at the Assistant Professor level with a start date on or after September 1, 1999. The Department is particularly interested in individuals working on marine systems, but applicants focusing on other systems are also encouraged to apply. The successful candidate will pursue a vigorous, externally funded research program that includes the training of graduate students. She or he also will be expected to teach at the undergraduate and graduate levels, and to provide initiative and leadership in the development of the biodiversity content of these curricula. A Ph.D. degree is required, and postdoctoral experience is preferred.

Assistant Professor CELL BIOLOGY in the Department of Biological Sciences

The Department of Biological Sciences is seeking a tenure-track faculty member in the area of CELL BIOLOGY. The appointment will be made at the Assistant Professor level with a start date on or after September 1, 1999. Any area of modern Cell Biology is of interest, but preference will be given to candidates who study functional aspects in cellular systems that bridge our current research strength at the subcellular and the organ and tissue levels. The successful candidate will pursue a vigorous, externally funded research program that includes the training of graduate students. She or he also will be expected to develop upper-division undergraduate and graduate courses in cell biology, and contribute to the teaching of the introductory course in Cell Biology. A Ph.D. degree is required, and appropriate postdoctoral experience is preferred.

Applicants for either position should send, no later than December 31, 1998, a curriculum vitae, three representative reprints, a one-page summary of their research objectives, and three letters of reference to:

**Dr. Norbert H. Haunerland, Chair
Department of Biological Sciences
Simon Fraser University
8888 University Blvd.
Burnaby, BC V5A 1S6
Canada
Fax: 604-291-4312**

This advertisement is directed to Canadian citizens and permanent residents. This position is subject to final budgetary approval. Simon Fraser University is committed to the principle of equity in employment and offers equal employment opportunities to qualified applicants.

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-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.



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.

Discover the state-of-the-art. Find your future in Utah with Myriad.

RESEARCH SCIENTISTS

Leadership roles in gene discovery programs

We seek talented and versatile scientists to fill leadership positions in identifying genetic defects underlying common human diseases. You must have a Ph.D. in molecular biology, biochemistry or genetics, 2+ years' relevant postdoctoral experience, and a broad background in human or model organism genetics. In addition, you must be a team player, have excellent molecular biology skills and an appreciation of the scale and speed of genomic science in the 1990s.

RESEARCH SCIENTISTS

Characterization of novel genes and proteins involved in human disease

We're looking for motivated and creative scientists to investigate the functional significance of the novel genes identified through ProNet™. You must have a Ph.D. in the biological sciences and 2+ years' relevant postdoctoral experience. Expertise in mRNA quantification, cDNA synthesis, or protein expression and purification is desired, as well as interest and knowledge of human diseases.

SR. RESEARCH ASSOCIATES

Participate in developing/implementing high-throughput assays to understand gene function. You must have an MS or BS, significant experience in molecular biology, and knowledge of molecular biology techniques (PCR and cloning). Experience with yeast is desired.

RESEARCH ASSOCIATES - ALL LEVELS

Participate on a team whose goal is to clone disease predisposition genes identified through genetic linkage analysis. All positions require knowledge of molecular biology techniques and computer experience in Macintosh and Unix environments is desired. Entry-level positions require a BS degree and at least 1 year' experience in molecular biology. Experienced MS-level positions require the ability to work as a team, design experiments, and evaluate results. Supervisory experience is desired.

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



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POSITIONS OPEN

CHAIR DEPARTMENT OF PATHOBIOLOGY UNIVERSITY OF FLORIDA

Qualifications: Advanced academic degree; research leadership training and experience; demonstrated administrative skills and experience; educational (teaching) experience; experience within a medical diagnostic environment.

The University of Florida, College of Veterinary Medicine, is seeking applications and nominations for a Departmental Chair who is expected to develop and sustain quality course work in the department as appropriate to the current and future educational goals of undergraduate, professional, resident, and graduate programs. The individual will be expected to (1) lead the development of a nationally recognized research program involving all disciplines in the department; (2) develop and sustain high-quality academically oriented diagnostic services in the Veterinary Medical Teaching Hospital including anatomic pathology, surgical pathology, microbiology, and parasitology; (3) provide close liaison between the Department of Pathobiology and the scientific community of the Health Science Center, Institute of Food and Agricultural Sciences, and the State of Florida at large.

Letters of application or nomination should include a curriculum vitae, names of three persons who can provide letters of references, and a statement of career goals. The deadline for receiving applications is December 1, 1998, or until filled. All correspondence should be addressed to:

Dr. Eleanor Green
Search Committee Chair
College of Veterinary Medicine
University of Florida
P.O. Box 100136
Gainesville, FL 32610-0125
Telephone: 352-392-4700, ext. 5600

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

TENURE-TRACK FACULTY POSITION CELL SIGNALING

The Department of Pharmacology at the SUNY Health Science Center at Syracuse invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. The candidate will be expected to develop or extend an independent research program focusing on signal transduction/intracellular signaling and complement existing strengths of the Department (cardiovascular electrophysiology and molecular biology, cellular and molecular neurobiology, molecular pharmacology, and membrane transport; for details see [website: http://www.hscsy.edu/~pharm](http://www.hscsy.edu/~pharm)). A Ph.D. degree or equivalent, postdoctoral experience, and an excellent record of research productivity are required. Salary, space, and start-up funds are competitive with national levels. Send applications, including a statement of research interests and goals, a curriculum vitae, and three letters of reference to: **The Faculty Search Committee Chair, Department of Pharmacology, SUNY Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210.** The deadline for applications is December 1, 1998.

An Affirmative Action/Equal Employment Opportunity/ADA Employer, committed to excellence through diversity.

TENURE-TRACK FACULTY POSITION IN PHYSICS

Sarah Lawrence College, a coeducational liberal arts college dedicated to individualized education, is recruiting a broadly trained **PHYSICIST** for a tenure-track position beginning August 1, 1999. The successful candidate will teach general physics and other undergraduate courses of interest to liberal arts and science division students. The ability to work closely with students on a daily basis, to supervise individual student projects, and to design interdisciplinary courses is essential. Outstanding teachers in all areas of specialization will be considered. Sarah Lawrence College is located 15 miles north of New York City. Please send résumé, copy of undergraduate and graduate transcripts, three letters of recommendation (at least one addressing candidate's teaching strengths), and a statement of teaching interests to: **Dr. Daniel King, Chair, Physics Search, Sarah Lawrence College, Bronxville, NY 10708.** Website: <http://www.slc.edu>. Deadline for receipt is December 15, 1998. An Equal Opportunity Employer, Sarah Lawrence College encourages applications from minorities and women.

POSITIONS OPEN

ASSISTANT PROFESSOR MOLECULAR BIOLOGY

Connecticut College seeks to fill a tenure-track, Assistant Professor position in molecular biology beginning fall 1999. Experience in yeast or bacterial genetics/molecular biology and computational tools for sequence analysis and database mining is desirable. Opportunities are available to collaborate with researchers in related fields, including medicinal chemistry/computational chemistry.

Excellent performance in teaching is expected. Teaching responsibilities include a molecular biology course, a microbiology course, an additional course in the candidate's area of interest, and participation in introductory courses in biology. The standard teaching responsibility is five courses for the academic year, with each laboratory section counting as a full course.

Connecticut College is committed to research as an important component of undergraduate education; the successful candidate will be expected to develop a program that will involve undergraduates in some component of his or her research. A Ph.D. is required; postdoctoral work and teaching experience are desirable.

Connecticut College is a private, highly selective college with a strong commitment to the liberal arts tradition and an emphasis on broad interdisciplinary teaching and research. Tenure-track faculty receive a research stipend for their first two summers and a semester's leave at full salary after their third year if they are reappointed for the full probationary period. Tenured faculty receive 80 percent of salary during a sabbatical year or 100 percent salary during a one-semester sabbatical. Salary is competitive. Facilities include the new Olin Science Center and well-equipped research and teaching laboratories for molecular biology. Start-up funds for research are available.

Applications should include a curriculum vitae and statements of the candidate's research interests and teaching philosophy. Candidates should arrange for graduate transcripts and three letters of recommendation to be sent to the Chair of the Search Committee. Application review will begin December 15, 1998, and will continue until the position has been filled. All material should be sent to: **Robert Askins, Chair, Molecular Biology Search Committee, Box 5461, Connecticut College, 270 Mohegan Avenue, New London, CT 06320-4196.** E-mail: raask@conncoll.edu.

Connecticut College is an Affirmative Action/Equal Opportunity Employer and is engaged in further diversifying its faculty and staff.

ASSISTANT/ASSOCIATE PROFESSOR DEVELOPMENTAL/CELLULAR BIOLOGIST

The Waksman Institute at Rutgers University invites applicants for a faculty position at the Assistant Professor level with a joint appointment in the Department of Genetics. However, appointment at a higher rank will also be considered. The Institute (see [website: http://waksman.rutgers.edu](http://waksman.rutgers.edu)) has a scientifically diverse faculty and is especially interested in outstanding applicants who employ *C. elegans* or *Drosophila* for investigations of developmental genetics, although strong candidates in all areas of developmental biology/cell biology/molecular genetics will be considered. Please send a complete curriculum vitae, a brief description of research activities, and three letters of recommendation to: **Dr. Richard W. Padgett, Search Committee Chair, Waksman Institute, 190 Frelinghuysen Road, Rutgers University, Piscataway, NJ 08854-8020.** Applications will receive maximum consideration if received by December 1, 1998.

Rutgers University is an Equal Opportunity/Affirmative Action Employer.

The Department of Anatomy and Cell Biology and the Department of Pediatrics at the State University of New York, Downstate Medical Center at Brooklyn invite applications for a tenure-track faculty position at the rank of **ASSISTANT PROFESSOR** to be filled during the 1998-99 academic year. Applicants must have a Ph.D. and/or M.D. degree and postdoctoral experience in basic research with focus in developmental cardiology. Clinical and/or research in pediatric cardiology will be important, as the successful candidate will be a research resource for the Department of Pediatrics, Division of Pediatric Cardiology. Competitive salary and start-up funds are available. Interested individuals should send their curriculum vitae along with a letter describing their research plan and the names of at least three references to: **M. A. Q. Siddiqui, Ph.D., Professor and Chairman, Department of Anatomy and Cell Biology, 450 Clarkson Avenue, Box 5, Brooklyn, NY 11203.** SUNY HSCB is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

BIOLOGY ASSISTANT PROFESSOR. Keene State College is a public arts liberal arts college of the University System of New Hampshire with an enrollment of 5,000 students. The College has been recognized as a leader in American higher education for its commitment to its mission, broad-based strategic planning initiatives, and cohesive sense of community. The College is located in the scenic Monadnock Region of southwest New Hampshire, near experimental forests and national forests. The College owns the 400-acre Louis Cabot Preserve on Lake Nubanusit, while the City of Keene contains extensive conservation lands. The Department of Biology invites applications for a tenure-track position at the Assistant Professor level beginning fall 1999. The ideal candidate can teach undergraduate courses in plant systematics, anatomy and morphology of vascular plants, population genetics, introductory biology, and general education courses; supervise undergraduate research; and manage a small herbarium. Qualifications: Require Ph.D. completed by February 1, 1999, in biology, botany, plant science, plant systematics, plant population genetics, or related field; strong commitment to undergraduate teaching, to liberal arts education, and to an integrated biological perspective; good general knowledge of biology; some undergraduate teaching experience. Familiarity with New England flora or forest species desirable. Minimum salary for Assistant Professor: \$36,500. Submit letter of application, curriculum vitae, clear description of undergraduate teaching experience, statement of teaching philosophy/methods, statement of research interests, and three letters of reference (addressing candidate's undergraduate teaching experience) by December 18, 1998, to: **CHE102398, Biology Search Committee, Office of Human Resource Management, Keene State College, 229 Main Street, Keene, NH 03435-1604.** Keene State College is a member of the Council of Public Liberal Colleges, a national alliance of leading liberal arts colleges in the public sector. Keene State College is an Affirmative Action/Equal Employment Opportunity Employer and actively seeks women and minority candidates.

Biobehavioral health. **ASSISTANT or ASSOCIATE PROFESSOR.** Penn State, University Park. Candidates must have a Ph.D. with expertise in both molecular and cellular neuroscience and a behavioral-level area relevant to acute and health processes and disease in humans. Associate Professor candidates are expected to have a funded program of research. The specialty area within behavioral/functional neuroscience is open and could include developmental neuroscience, neuroendocrinology, neuroimmunology, neuropharmacology, or neurogenetics. The individual will have an opportunity to help bridge molecular/cellular approaches and whole organism behavioral approaches to health-related issues and disease. The candidates should have a strong interdisciplinary orientation that can complement expertise of existing faculty and contribute to an integrated, whole-organism approach to health-related processes. Applications will be considered beginning immediately and will continue until the position is filled. To receive full consideration, credentials must be received no later than November 30, 1998. Reply to: **Chair, Search Committee, Department of Biobehavioral Health, E315 Health and Human Development Building, Box S-3637W, University Park, PA 16802.** Penn State is committed to Affirmative Action/Equal Opportunity and the diversity of its work force.

ASSISTANT PROFESSOR DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY Medical College of Ohio

Applications are invited for a tenure-track, full-time faculty position from individuals who have a Doctoral degree, postdoctoral experience, and record of research productivity. The successful candidate is expected to develop an independent, extramurally funded research program and participate in teaching.

We are particularly interested in applicants whose research areas include cellular and molecular aspects of host-pathogen interactions at mucosal surfaces.

Competitive salary and start-up funds will be provided. Applicants should submit a statement of research goals with representative reprints, a curriculum vitae, and three letters of recommendation to: **Garry T. Cole, Ph.D., Chair, Department of Microbiology and Immunology, Medical College of Ohio, 3055 Arlington Avenue, Toledo, OH 43614-5806.** Deadline is December 15, 1998. Visit our website: <http://www.mco.edu:80/micro/index.html>. Affirmative Action/Equal Opportunity Employer.

nature Structural biology

seeks an EDITOR

Applications are invited for the position of Editor of *Nature Structural Biology*.

Nature America is seeking a successor to Guy Riddihough, the founding Editor of *Nature Structural Biology*, who is leaving the post after five successful years developing a journal that leads its field in quality, reputation and impact. We are looking for a successor who can continue to build *Nature Structural Biology's* role in structural studies, including increasing its coverage of structure-based investigation of biomolecular function.

The Editor is responsible for the editorial content of this leading international journal, working closely with a team of staff based in New York. Contact and communication with the structural and related biological research communities worldwide is central to the role so that the editorial profile of the journal continues to meet the needs and interests of its growing number of readers. Planning and management of editorial resources as part of the senior management team of the Company is an integral part of the job.

The ideal candidate should have a Ph.D., and post-doctoral training as a research scientist, must possess outstanding scientific judgement, and a broad knowledge and appreciation of structural biology required to select manuscripts for publication and commission reviews. Experience in the communication of science would be a distinct advantage.

Applications, which should include a curriculum vitae and a succinct (up to 1000 words) assessment of strengths and weaknesses of *Nature Structural Biology*, should be sent to Mary Waltham, President, Nature America Inc., 345 Park Avenue South, New York, NY 10010, Fax (212) 696-9009, to arrive no later than **November 13th, 1998**.



Nature America Inc.

Nature America, Inc.
345 Park Ave. South
New York, NY 10010

AS BIG AS LIFE ITSELF

For nearly 20 years, Genetics Institute has discovered the breakthrough products and set the direction for an industry. The ultimate success of Genetics Institute flows from a steady stream of creativity and innovation in both science and technology. Genetics Institute's research and development divisions have become recognized scientific centers of excellence by being vigilant in the search for fresh scientific talent. One way in which we accomplish this is our Postdoctoral Fellowship Program.

The Postdoctoral Fellowship Program at Genetics Institute represents a significant commitment to maintaining and strengthening the company's scientific environment. As a Postdoctoral Fellow, you will take advantage of existing scientific expertise and use it as a foundation to develop new skills and ideas. This is your opportunity to test the limits of your intellectual and experimental skills developed during graduate school.

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For information on exciting job opportunities in the Postdoctoral Program at Genetics Institute, visit our web site at:

Postdoctoral Fellow-Molecular Biology

In this position, you will study growth arrest and apoptosis in high cell density mammalian cell cultures. The successful candidate should be recently graduated from a Ph.D. program with proven expertise in the analysis of eukaryotic gene expression. A broad cell and molecular biology background is required, an emphasis on the cell cycle/cell proliferation and/or programmed cell death is preferred. Experience with methods for in situ analysis of gene expression (such as in situ PCR, immuno-histochemistry) and FACS analysis would be a plus. Strong verbal and written communication skills are desirable, as is experience with GCG and other DNA analysis software. **Code: ML**

Postdoctoral Fellow-Cellular Immunology

This is an exciting opportunity to work on independent research projects studying immune co-stimulation, immunomodulation by cytokines, and/or their antagonists. The candidate will evaluate novel therapeutic agents and how these molecules potentially effect the immune response and eventual outcome of disease. Responsibilities include performing in vitro and in vivo experiments involving cell assay systems, cytokine analysis, interactions with microorganisms, and protocol design and development. A Ph.D., M.D., or DVM with experience working in cellular immunology with murine models of infectious disease or viral infection is required. Background and training in immunology, microbiology, pathology, or pharmacology a plus. **Code: JS**

Postdoctoral Fellow-Bioanalytical Sciences

A primary goal of this research will be to develop and refine methodologies for assessing the physical characteristics and binding kinetics of a selectin antagonist. An array of technologies including BIAcore and Integral Workstations, PACS and binding assays will be employed by the candidate to measure the binding characteristics of cell surface-expressed and soluble versions of these molecules. The successful candidate will have experience in studying intermolecular interactions using one or more of these analytical methods. **Code: VV**

Please send your resume to: **Code _____, Genetics Institute, Human Resources, Attn: Meghan Dynan, One Burt Road, Andover, MA 01810; Fax: 978-623-2607. E-mail: mdynan@genetics.com**

Genetics Institute offers competitive salaries and benefits, including comprehensive health care, dental and life insurance, three weeks' paid vacation, 401(k), pension plan, relocation assistance, dependent care subsidy, and an on-site exercise facility.

Genetics Institute is proud to be an equal opportunity employer, dedicated to building strength through diversity.

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POSITIONS OPEN

THREE ASSISTANT PROFESSORSHIPS DEPARTMENT OF BIOLOGICAL SCIENCES ILLINOIS STATE UNIVERSITY Normal/Bloomington

Three tenure-track Assistant Professorships are available beginning August 1999.

CELL BIOLOGIST with research interests in fundamental aspects of cellular function. Teaching responsibilities will include an advanced graduate course in cell biology and an undergraduate course in cell biology or physiology. (Dr. David Borst, Chair).

IMMUNOLOGIST with research interests in contemporary problems in immunology. Teaching responsibilities will include participation in the undergraduate program and developing undergraduate and graduate courses in immunology. (Dr. Anthony Otsuka, Chair).

EUKARYOTIC MOLECULAR GENETICIST with research interests in the molecular genetics of a eukaryotic model organism. Specialization may include gene regulation, development, genomics, or other related areas. Teaching responsibilities include an introductory genetics course for biology majors and an advanced graduate course in molecular genetics. (Dr. Alan Katz, Chair).

The successful applicants will be expected to develop independent, high-quality, and extramurally funded research programs and to contribute to the training of Ph.D. and Master's students. Postdoctoral experience preferred. It is expected that the new hires will participate in the proposed Biotechnology Master's Sequence. Additional information can be obtained at website: <http://www.bioilstu.edu>. Applications should consist of curriculum vitae, copies of three to four publications, three recommendation letters, and a brief statement of research and teaching goals sent to the appropriate Committee Chair at: Department of Biological Sciences, Campus Box 4120, Illinois State University, Normal, IL 61790-4120. To assure full consideration, please apply by December 7, 1998.

Illinois State is an Equal Opportunity University encouraging diversity.

TENURE-TRACK POSITION UNIVERSITY OF CALIFORNIA, IRVINE

The Department of Biological Chemistry in the College of Medicine invites applications for a state-funded, tenure-track position at the **ASSISTANT PROFESSOR** level. Senior candidates of outstanding accomplishment will also be considered for the rank of **PROFESSOR**. Applicants should hold the Ph.D. or Ph.D.-M.D. degree and have postdoctoral experience. We are seeking individuals with expertise in genome-based research with medical relevance. Specialization can be in human or model vertebrate system genetics, or in the biochemical basis of disease. The individual is expected to establish an independent, funded research program of high caliber and participate in the training of graduate and medical students. A curriculum vitae, reprints of relevant publications, statement of research plan and teaching interests, and three letters of reference should be submitted prior to December 1, 1998, to: Department of Biological Chemistry Search Committee, Department of Biological Chemistry, College of Medicine, D240 Med Sci I, University of California, Irvine, CA 92697-1700.

The University of California, Irvine is an Equal Opportunity Employer.

UNIVERSITY OF CHICAGO

The Department of Ecology and Evolution invites applications for two faculty positions at **OPEN RANK** in the fields of ecology and evolution. We are searching broadly in these fields, and anticipate making one appointment at a Senior level and one at a Junior level. These positions will complement our recent recruitments in evolutionary genetics and behavior. Information about the department and the closely affiliated Committee on Evolutionary Biology can be found at website: <http://pondside.uchicago.edu/ecol-evol> and website: <http://pondside.uchicago.edu/ceb>. Send a curriculum vitae, selected reprints and preprints, statements of research and teaching interests, and the names and addresses of three references to: Search Committee, Department of Ecology and Evolution, University of Chicago, 1101 East 57th Street, Chicago, IL 60637. Applications will be accepted until the position is filled, but applications should be received before November 15, 1998, to insure full consideration. *The University of Chicago is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN



MOLECULAR GENETICS

The Department of Biology invites applications for an **ASSISTANT PROFESSOR** (tenure-track) in molecular genetics, beginning fall 1999. Interests from any area of experimental molecular genetics will be considered; research with a developmental and/or evolutionary component is preferred. A Ph.D. in biology or related field is required and postdoctoral experience in biology or related field is expected. Generous space and start-up funds are available. Arizona State University has excellent research support facilities including DNA sequencing and oligonucleotide synthesizing equipment, an elemental analyzer, confocal and ratio imaging microscopes, biological electron microscopes with high-pressure freezing, peptide synthesizing and sequencing. Successful candidates will be expected to establish an active research program, participate in undergraduate and graduate teaching, and perform professional service. Applicants must submit a curriculum vitae, e-mail address; selected reprints; a statement of research accomplishments and future directions; a statement of teaching experience, interests, and philosophy; and arrange to have three letters of recommendation sent to: The Molecular Genetics Search Committee, Department of Biology, Arizona State University, Box 871501, Tempe, AZ 85287-1501. References may be sent by mail or: FAX: 602-965-2519; e-mail: biology@asu.edu. Applications from two individuals wishing to share the appointment will be considered. Application deadline is November 30, 1998, with applications reviewed weekly thereafter until the position is filled. *Arizona State University is an Affirmative Action/Equal Opportunity Employer.*

ANIMAL DEVELOPMENTAL BIOLOGIST CELL BIOLOGIST

The Department of Biology, College of Charleston, invites applications for two tenure-track positions at the **ASSISTANT PROFESSOR** level to begin August 1999. Candidates must possess a Ph.D. and a strong commitment to teaching and research. We are particularly interested in candidates with postdoctoral experience who use molecular or genetic approaches to address problems in animal development or in fundamental questions at the cellular level, respectively. The College is a public liberal arts institution of 11,000 students. The Department of Biology offers programs leading to a B.A. or B.S. in biology, a B.S. in biology with emphasis in molecular biology, a B.S. in marine biology, a M.S. in marine biology, and a M.S. in environmental studies. Information on the Department can be found at website: <http://www.cofc.edu/~biology>. Applicants should submit a curriculum vitae, statement of teaching and research interests, copies of relevant publications, and three letters of reference to: Chair, Department of Biology, Cell or Developmental Biologist Search Committee, College of Charleston, Charleston, SC 29424. All application materials should be received by December 31, 1998. *The College of Charleston is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.*

Department of Biomedical and Health Sciences. Three positions: **ASSISTANT/ASSOCIATE PROFESSOR**. Responsibilities include teaching courses at the introductory and upper levels as well as developing new courses in your area of expertise. In addition, you will be responsible for advising majors in biomedical and health sciences and serving on appropriate institutional committees. We are looking for enthusiastic and energetic individuals who want to teach in an environment committed to quality undergraduate and graduate education. Research that can provide students first-hand experience in the laboratory is strongly encouraged. An earned Ph.D. in anatomy, microbiology, physiology, nutrition (or an R.D. with community nutrition experience) is required. Excellent teaching skills are similarly required. Selection process will begin December 1, 1998, and continue until the positions are filled. Applications must include all transcripts, curriculum vitae, and three letters of recommendation and be submitted to: Miles Hacker, Chair, Biomedical and Health Sciences Search Committee, Department of Biomedical and Health Sciences, Grand Valley State University, Allendale, MI 49401. E-mail: hackerm@gvsu.edu.

GVSU is an Affirmative Action/Equal Opportunity Employer. We encourage women and minorities to apply.

POSITIONS OPEN

TENURE-TRACK ASSISTANT PROFESSOR MOLECULAR GENETICS

Grand Valley State University is committed to providing a broadly based liberal undergraduate education. We have experienced steady enrollment growth for 10 years; each year the Biology Department has added new faculty and has more openings for fall 1999. This position is for an individual with expertise in approaching problems in cell biology from a molecular genetics perspective. A Ph.D. completed before fall 1999 in biology or a related field is required. Preference will be given to candidates with a broad-based biology background interest in teaching bioethics and/or human genetics, and who have demonstrated success in teaching and research involving undergraduate students. Excellent communication skills are required.

Responsibilities include teaching established undergraduate courses, especially a team-taught cell and molecular biology course, and a freshman biology course; developing and teaching new courses in areas of expertise; being involved in continuing scholarly development and in community service. Other assignments include advising majors and serving on committees. Research involving undergraduate students is encouraged. A complete application consists of a letter of application, curriculum vitae, unofficial transcripts, a statement outlining your expectations and goals as an undergraduate teacher, a statement of research goals and projects, and three letters of reference. Applications must be postmarked by November 30, 1998. Submit materials to: Dr. Patrick A. Thorpe, Chair, Molecular Genetics Search Committee, Department of Biology, Grand Valley State University, Allendale, MI 49401. E-mail: thorpep@gvsu.edu. *Grand Valley State University is an Affirmative Action/ADA/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

DEPARTMENT OF MOLECULAR BIOLOGY PRINCETON UNIVERSITY

The Department of Molecular Biology at Princeton University invites applications for a tenure-track faculty position in neurobiology. This is a tenure-track position at the **ASSISTANT PROFESSOR** level, although exceptional **SENIOR-LEVEL** applications may also be considered. The candidate must be well-trained in quantitative biophysical and cellular biological methods. We are seeking an innovator who exploits new ways of making cellular measurements. Optical methods for the analysis of synaptic function, or multielectrode arrays to analyze neuronal circuitry, are examples of such innovative technology. The department has extensive facilities that include confocal and electron microscopy, FACS, oligonucleotide/peptide synthesis, and a transgenic mouse facility. Ph.D.'s or M.D.'s with postdoctoral research experience should send a curriculum vitae, short summary of research interests, and three letters of reference to:

Neurobiology Search Committee
Department of Molecular Biology
Princeton University
Princeton, NJ 08544

Deadline for this search is January 1, 1999.

Princeton University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR GENETICS

Vanderbilt University School of Medicine invites applications for tenure-track positions in mammalian genetics. Appointments will be made at the Assistant Professor level. Applicants must have had research experience and high-quality publications in one of the following areas: (1) gene mapping, identification of disease loci, and mutational analysis; (2) population genetics and genetic epidemiology; (3) bioinformatics related to gene and genomic databases; or (4) use of mouse model systems for studies of molecular and developmental cell biology, regulation of gene expression, or models of human disease. Appointments will be in departments most relevant to the interests of the applicant and will come with well-appointed space and generous start-up funds.

Applicants should submit, by December 1, 1998, a curriculum vitae, three letters of reference, and a concise description of research plans to: Genetics Search Committee, c/o Jan Lotterer, CCC-3322 Med Ctr North, Vanderbilt University Medical Center, Nashville, TN 37232-2103.

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



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Electrophysiology

Requires a B.S./M.S. in Pharmacology, Physiology, or other recognized equivalent discipline. Minimum of 2 years of experience in an industrial or academic research laboratory in the field of ion channel research, including experience in patch clamp and *Xenopus* oocyte voltage clamp electrophysiological techniques. Special consideration will be given to candidates that have experience in cell culture techniques and *Xenopus* oocyte injection. (Job: EP1)

In Vitro/In Vivo Pharmacology

Requires a B.S./M.S. in Pharmacology, Physiology, or other life science discipline. Minimum of 2 years of experience in an industrial or academic research laboratory performing isolated tissue studies and/or *in vivo* pharmacology experiments. Must be experienced in handling and caring for small laboratory animals, i.e., mice, rats, and guinea pigs. Must be proficient at developing new test procedures and interested in working on a variety of therapeutic areas. (Job: PH1)

High Throughput Screening

Requires a B.S./M.S. in a biological science discipline. Experience in high throughput screening is desirable. Must be proficient at developing new test procedures. Special consideration will be given to candidates that have cell culture experience. (Job: SC1)

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Postdoctoral Research Opportunities Laboratory of Cell Biology National Cancer Institute

Michael M. Gottesman, M.D., Laboratory Chief

The Laboratory of Cell Biology in the National Cancer Institute is an interdisciplinary group of molecular and cell biologists, biochemists, structural biologists, and immunologists interested in exploring the biological basis of drug resistance and growth regulation in cancer, mechanism of antigen presentation energy-dependent protein folding and degradation, pigment formation in melanocytes, and structure and function of membrane proteins. The Laboratory is housed in newly renovated, well-equipped facilities, with a close-knit group of Principal Investigators interested in optimizing research training and mentoring in the Laboratory for all fellows. The Laboratory of Cell Biology has an exceptionally good record of placing fellows in academic, government, and industrial research jobs following training. Research opportunities for recent and prospective graduates are available with the following principal investigators:

Multidrug Resistance Section

Michael Gottesman, M.D.

This section uses cell biological and molecular genetic approach to focus on mechanisms of multidrug resistance in cancer cells and to exploit defined drug resistance mechanisms in gene therapy. **E-mail: mgottesman@nih.gov.**

Chemical Immunology Section

Ettore Appella, M.D.

This section uses cellular and biochemical methods to study the interaction between T cell receptors and their ligands, in an effort to understand how antigenic peptides influence immune responses. In addition, the section uses a biochemical and structural approach to study the function of the wild-type p53 protein. **E-mail: appellae@pop.nci.nih.gov.**

Pigment Cell Biology Section

Vincent J. Hearing, Ph.D.

This section focuses on factors important to the growth and differentiation of melanocytes and their significance to the proliferation and metastasis of malignant melanoma; characterizes melanogenic enzymes and structural matrix proteins that regulate the quality and quantity of melanin pigment produced within melanocytes; and their photoprotective properties are characterized. **E-mail: hearingv@nih.gov.**

Biochemistry of Proteins Section

Michael Maurizi, Ph.D.

This section studies the regulation and function of *in vivo* protein degradation and structure/function relationships underlying protein folding, unfolding, and degradation by ATP-dependent proteases. **E-mail: mmaurizi@helix.nih.gov.**

Transport Biochemistry Section

Suresh V. Ambudkar, Ph.D.

This group employs biochemical, pharmacological, and molecular biological approaches to study the roles of ABC transport proteins in cancer cells. **E-mail: ambudkar@helix.nih.gov.**

Crystallography Section

Di Xia, Ph.D.

This section combines macromolecular crystallography with other biophysical and biochemical techniques. This unit explores atomic details of protein structures to understand functions of macromolecules involved in membrane transport and cellular apoptosis. **E-mail: dixia@helix.nih.gov.**

To Apply

Please send a cover letter, curriculum vitae, bibliography, and a one-page statement including research interests and career goals to the individual investigators c/o **Michael M. Gottesman, M.D., Chief, Laboratory of Cell Biology, NCI, Building 37, Room 1A09, 37 CONVENT DR MSC 4255, BETHESDA, MD 20892-4255.**

POSITIONS OPEN

TENURE-TRACK ASSISTANT PROFESSOR MAMMALOGIST

Grand Valley State University is committed to providing a broadly based liberal undergraduate education. We have experienced steady enrollment growth for 10 years; each year the Biology Department added new faculty and has several openings for fall 1999. This position is for an individual with expertise in mammalogy who addresses problems in systematics, evolution, or ecology with a whole-organism, field-oriented approach. A Ph.D. completed before fall 1999 in zoology, biology, ecology, or a related field is required. Preference will be given to candidates with a broad background in biology, interest in teaching non-majors and vertebrate biology, and who have demonstrated success in teaching and research involving undergraduate students. Excellent communication skills are required.

Responsibilities include teaching established undergraduate courses, including non-majors biology and natural history of vertebrates; developing and teaching new courses in areas of expertise, including mammalogy; and being involved in scholarly activity and community service. Other assignments include advising majors and serving on committees. Research involving undergraduate students is encouraged. A complete application consists of a letter of application, curriculum vitae, unofficial transcripts, a statement outlining your expectations and goals as an undergraduate teacher, a statement of research interests, and three letters of reference. Applications must be postmarked by November 30, 1998. Submit materials to: Dr. Jodee Hunt, Chair, Mammalogist Search Committee, Department of Biology, Grand Valley State University, Allendale, MI 49401-9403. E-mail: huntj@gvsu.edu. Grand Valley State University is an Affirmative Action/ADA/Equal Opportunity Employer. Women and minorities are encouraged to apply.

ASSISTANT/ASSOCIATE PROFESSOR UNIVERSITY OF COLORADO SCHOOL OF MEDICINE Department of Pharmacology

Applications are invited for a tenure-track faculty position in the Department of Pharmacology. The individual recruited would ideally complement some of the current research strengths of the department in signal transduction, neuropharmacology, substance abuse, and biomolecular structure. Information about the department may be obtained at the website: <http://porsche.uchsc.edu/pharm/>.

Applicants must have a Ph.D. or M.D. degree, the potential to develop a vigorous research program with significant extramural funding, and a commitment to teaching medical and graduate students.

Review of applications will begin November 15, 1998, and will continue until the position is filled.

Submit a curriculum vitae, the names of three references, and a statement of current and future research interests to: Dr. Dermot M. F. Cooper, Chair, Search Committee, Department of Pharmacology, University of Colorado Health Sciences Center, Box C236, 4200 East Ninth Avenue, Denver, CO 80262.

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

POLYMER SCIENCE AND ENGINEERING UNIVERSITY OF MASSACHUSETTS AMHERST

The University of Massachusetts Amherst invites applications for two faculty positions in the Department of Polymer Science and Engineering. We anticipate that one appointment will be at the ASSISTANT, ASSOCIATE, or FULL PROFESSOR level while the other will be at the ASSOCIATE or FULL PROFESSOR level. Both appointments will begin as early as September 1999. Applicants from all areas of polymer science and engineering will be considered; candidates with interests and experience in materials or polymer synthesis are especially encouraged to apply. Applicants should send curriculum vitae, three letters of recommendation, and statements of teaching and research interests to: Chair, Faculty Search Committee, Department of Polymer Science and Engineering, University of Massachusetts, Amherst, MA 01003. Interviews will commence by December 1, 1998, and continue until both positions are filled. Information about the University of Massachusetts can be obtained at website: www.umass.edu and about the Department at website: www.pse.umass.edu. The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply.

POSITIONS OPEN

MOLECULAR BIOLOGIST TENURE-TRACK POSITION

The Department of Biology at the State University of New York (SUNY) at Fredonia seeks candidates for a tenure-track ASSISTANT PROFESSOR to begin August 1999. The Department offers undergraduate degree programs in biology, medical technology, recombinant gene technology, secondary education, and a Master's degree in biology. The department jointly sponsors undergraduate programs in biochemistry and environmental sciences and offers courses supporting the General College Program.

The successful candidate will possess strong communication skills; be committed to teaching at a comprehensive university; and the pursuit of an active research program complementing existing strengths of the department, and involving undergraduate and graduate students. Teaching responsibilities will include upper and graduate-level courses in biochemistry and molecular biology and courses supporting the General Education Program.

Candidate must possess a Ph.D. and postdoctoral experience is preferred. Complete application will include a curriculum vitae, undergraduate and graduate transcripts (unofficial copies), separate statements of teaching philosophy and research goals, and three letters of reference. Review of applications will begin on December 15, 1998.

Send application materials to: The Molecular Biology Search Committee, Department of Biology, SUNY Fredonia, Fredonia, NY 14063. Telephone: 716-673-3282; website: www.fredonia.edu. The Department encourages applications from minorities, women, and persons with disability. SUNY Fredonia is an Equal Opportunity/Affirmative Action Employer.

TENURE-TRACK ASSISTANT/ASSOCIATE PROFESSOR OF BIOLOGY

The Moorhead State University Biology Department invites applications for a tenure-track faculty position, at the Assistant or Associate Professor level, to begin August 19, 1999. Qualifications: a Ph.D. with broad training in developmental, cellular, and molecular biology; potential for excellence in undergraduate teaching; research experience; and the ability to utilize computers in teaching and research. Teaching responsibilities: developmental biology, cell and systems physiology, classes for the University's Liberal Studies Program, and laboratory sections in introductory biology classes. Additional responsibilities include participation in the Biotechnology Emphasis and research involving undergraduates. Visit website: <http://www.moorhead.msus.edu/~biology/> for additional information. Send résumé, graduate and undergraduate transcripts, statements of teaching philosophy and research interests, and three current letters of reference to: Dr. Mary A. Shimabukuro, Department of Biology, Moorhead State University, Moorhead, MN 56563. E-mail: biology@mhd1.moorhead.msus.edu; FAX: 218-236-2168; Telephone: 218-287-5000. Screening of completed applications will begin January 4, 1999, and continue until the position is filled. Moorhead State University is an Equal Opportunity/Affirmative Action Employer.

NATURAL RESOURCE MANAGEMENT ENVIRONMENTAL POLICY

Tenure-track ASSISTANT PROFESSOR to begin August 1999. Qualifications: Ph.D., strong interest in undergraduate liberal arts education, science background with proven interest/experience in two or more of the following areas: resource management, environmental policy, risk analysis, environmental assessment, or waste management. Responsibilities: teach in the program's core curriculum, including introduction to environmental science, environmental policy, and environmental management; teach advanced courses in specialty; and develop a community network with regional air, water, forest, and land resources Managers to provide research and internship opportunities for undergraduate students. Submit: curriculum vitae, official transcripts, reprints, a statement of undergraduate teaching/research interest, and three letters of reference (from authors) to: Dr. Richard Maas, Environmental Studies Program CPO #2330, University of North Carolina at Asheville, One University Heights, Asheville, NC 28804-8511. Telephone: 828-251-6366; FAX: 828-251-6913. Initial screening will begin in early December 1998. Position open until filled.

Equal Opportunity Employer.

POSITIONS OPEN

ENVIRONMENTAL SYSTEMS MODELING DARTMOUTH COLLEGE

Dartmouth College is expanding its interdisciplinary environmental studies program through a tenure-track appointment at the ASSISTANT PROFESSOR level to begin fall 1999. We seek a Natural or Social Scientist using mathematical and/or simulation modeling approaches to study environmental problems with an emphasis on large-scale systems. We are especially interested in land/atmosphere interactions as they relate to problems of global environmental change or the effects of pollutants on natural systems. Other areas of interest include human population and resource use and the sustainability of human-dominated ecosystems. The successful candidate will be expected to establish a vigorous externally funded research program and to teach at the undergraduate and graduate levels in the Environmental Studies Program. Courses might include introductory environmental science, global environmental issues, environmental modeling, and advanced topic courses in environmental systems and environmental policy. Individuals with an awareness of the policy implications of their work and having the background to teach courses that bridge environmental science and policy are preferred.

Ph.D. in a relevant area of the environmental sciences or social sciences such as ecosystem science, geography, systems engineering, economics, or a related field. Submit curriculum vitae, statement of research and teaching interests, representative reprints, and three letters of reference to: Dr. Ross A. Virginia, Search Committee Chair, Environmental Studies Program, Dartmouth College, 6182 Steele Hall, Room 306, Hanover, NH 03755-3577. FAX: 603-646-1682. Review of applications will begin January 15, 1999. Dartmouth College is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR UNIVERSITY OF CONNECTICUT Department of Molecular and Cell Biology Genetics

Our diverse and dynamic faculty is dedicated to excellence in both teaching and research. We integrate the study of biological structure with function through interdisciplinary research collaborations. As part of an ongoing expansion we are seeking to fill a tenure-track Assistant Professor position beginning August 1999. The successful candidate should have appropriate postdoctoral experience to develop a productive independent research program and to contribute to the important teaching mission of the department. Submit applications that include a curriculum vitae, a brief statement of research and teaching interests, and arrange to have three letters of recommendation sent. Applications will be reviewed upon arrival and will be accepted until the position is filled in eukaryotic genetics. Individuals using genetic approaches to the issues of chromosome transmission, structure, and function are of greatest interest. Send application to: Dr. Hal Krider, Eukaryotic Genetics Search Committee, Department of Molecular and Cell Biology, U-131, University of Connecticut, 75 North Eagleville Road, Storrs, CT 06269-3125. We encourage applications from underrepresented groups, including minorities, women, and people with disability. (Search #99A71)

OAKLAND UNIVERSITY ENVIRONMENTAL CHEMISTRY

The Department of Chemistry invites applications for a full-time, tenure-track position at the ASSISTANT or ASSOCIATE PROFESSOR level starting fall 1999. A Ph.D. in chemistry or an appropriately related environmental area is required. The successful candidate will be required to develop a strong, externally funded research program in environmental chemistry compatible with our Ph.D. in health and environmental chemistry and B.S. in environmental health. Research areas of interest include, but are not limited to, chemical toxicology, environmental analysis, and study of chemical fates in the environment. Teaching assignments will be mainly in environmental chemistry at the undergraduate and graduate levels. Submit curriculum vitae, a brief description of research plans, copies of transcripts, and arrange to have three letters of recommendation sent to: Professor P. Tomboulion, Department of Chemistry, Oakland University, Rochester, MI 48309-4477. Review of applications will commence December 1, 1998, and will continue until an applicant is chosen. Inquiries to e-mail: envsearch@ouchem.chem.oakland.edu. Oakland University is an Equal Opportunity/Affirmative Action Employer.

**National Institutes of Health
Director
Office of Legislative Policy and Analysis**

The NIH invites applications for the position of Director, Office of Legislative Policy and Analysis which reports to the Director, NIH. Help shape the future of this fast-paced, growing Federal medical research agency!

Provides executive leadership for NIH legislative policy, analysis, development, strategy and liaison relevant to NIH programs and activities. Analyzes the overall legislative needs of the NIH, directs the development of legislative proposals and testimony, and provides liaison with congressional committees. Represents the NIH with professional and patient advocacy groups and liaison activities with the Congress, the Department of Health and Human Services, and other agencies regarding pending legislation which may affect the NIH and the national medical and health research community. Is responsible for implementation of law, including appropriations.

Recruitment or relocation bonus may be available. Salary range is currently \$106,412 - \$125,900. **Mandatory qualifications:** (1) Ability to provide executive leadership and direction in legislative policy development, analysis and liaison to enhance the organization's ability to perform its mission; and (2) Ability to manage a legislative policy organization including establishing plans and policies, evaluating programs, developing and presenting budgets, and building and maintaining a culturally diverse staff.

Submit CV or resume, and bibliography if appropriate. Vacancy announcement should be obtained by calling 301-402-4111 (#OD-98-1081). TDD is 301-402-1970. Mail applications to **NATIONAL INSTITUTES OF HEALTH, OFFICE OF THE DIRECTOR EXECUTIVE OFFICE, ATTN: SUSAN ELDER, BLDG 31/ROOM 1C17, 31 CENTER DR MSC 2264, BETHESDA MD 20892-2264**. Application process questions may be addressed to Susan Elder on 301-435-2162. Applicants with access to Internet's World Wide Web may browse NIH Home Page to view announcement and may apply through Web at URL <http://helix.nih.gov:8001/jobs/> Applicants may browse the NIH Home Page at URL <http://www.nih.gov> Applicants may E-Mail materials to Susan_Elder@nih.gov

APPLICATIONS MUST BE POSTMARKED OR TRANSMISSIONS RECEIVED NO LATER THAN **November 13, 1998**

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

Be at the forefront...

...of drug development research with DuPont Pharmaceuticals Company. We are focused on meeting unmet medical needs through the discovery and development of innovative compounds leading to novel pharmaceuticals. We have an immediate need at our facilities in Wilmington, DE for the following:

Research/Sr. Research Scientist

The successful candidate will be responsible for creative assay design, development and execution, then characterization of resulting active compounds. Expertise in the following areas are very desirable: enzyme kinetics, organic and medicinal chemistry, automation work in 96-well or higher density formats, fluorescence, radiolabel-based assays and manipulation of data in Excel, Access and Oracle. Familiarity with protein chemistry, molecular biology, genomics and the drug discovery process are also helpful.

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



DuPont Pharmaceuticals Company

PHARMACEUTICAL

3-Dimensional Pharmaceuticals, Inc. is a drug discovery company which has developed a proprietary technology platform uniquely integrating structure-based drug design, combinatorial chemistry and high-throughput screening for the cost-effective discovery of novel pharmaceuticals. We are currently seeking individuals with excellent communication skills and outstanding qualifications to join our team in the following positions:

High-Throughput Drug Screening (Job code: HTS1)

Qualified candidates will possess a BS/MS degree in chemistry, biochemistry, or engineering, and have experience in a high-throughput drug screening environment. Experience with assay technologies that include fluorescence detection, assay miniaturization, and liquid handling robotics desired. Responsibilities include liquid handling, robotic programming, and implementation as it applies to HTS drug discovery. Preference will be given to candidates with excellent computer and mechanical skills.

Senior Engineer/Mechanical (Job code: LID1)

MS/PhD-level position available to develop instrumentation and proprietary hardware for high-throughput screening. Develop and integrate optical and electromechanical systems. Minimum 3 years experience in instrument design and development for the scientific market. Laboratory automation, robotics integration, and liquid handling experience. Injection molding experience is a plus.

Senior Engineer/Electrical (Job code: LID2)

MS/PhD-level position available to develop solid-state imaging instrumentation and proprietary hardware for high-throughput screening. Minimum 5 years experience in instrument design and development, solid-state imaging and signal processing. Development capabilities with C/C++ and MS Windows NT required. Embedded controller layout and firmware design experience, as well as board level development, are pluses.

Scientific Programmers (Job code: SP1)

BS/MS/PhD-level positions available for computational chemists/scientific programmers to develop state-of-the-art computational tools in the areas of computer-aided combinatorial drug design and chemi-informatics. Strong background in methods/software development and proficiency in C++ under Windows/UNIX required. Experience with Windows and database programming and a background in chemical computation are highly desired.

Located in Exton, PA, **3DP** offers a comprehensive compensation and benefits package. Qualified individuals are invited to send their cover letter and resume with contact data for three references before November 25, 1998 to: **3-Dimensional Pharmaceuticals, Inc., Job Code: _____, 665 Stockton Drive, Suite 104, Exton, PA 19341.** No phone calls, please.



**3-Dimensional
Pharmaceuticals, Inc.**

An equal opportunity employer

www.3dp.com

POSITIONS OPEN

ENVIRONMENTAL BIOLOGIST MICHIGAN STATE UNIVERSITY

The Department of Zoology invites applications for a tenured, academic-year faculty position in environmental biology at the **ASSOCIATE/FULL PROFESSOR** level for fall 1999. The candidate should have a Ph.D. and record of successfully funded research in ecology or environmental toxicology. Preference will be given to candidates with a commitment to teaching at the interface of ecological science and environmental policy and a demonstrated record of involvement in environmental policy at the state, national, or international levels.

The University has very strong teaching and research programs in environmental sciences and engineering, environmental toxicology and ecology, evolution, and behavioral biology. The candidate is expected to contribute to current interdisciplinary activities across campus to integrate science and public policy. The salary and start-up package will be competitive and commensurate with the qualifications of the individual selected.

Applicants should submit a curriculum vitae, a letter outlining professional interests and goals, three letters of recommendation, and representative reprints to: **Environmental Biologist Search Committee, Department of Zoology, 203 Natural Science Building, Michigan State University, East Lansing, MI 48824-1115.** The application deadline is December 1, 1998, or until a suitable candidate is recruited.

Women and minority scientists are especially encouraged to apply. Michigan State University is an Affirmative Action/Equal Opportunity Institution. Disabled persons have the right to request and receive reasonable accommodation.

ASSISTANT/ASSOCIATE PROFESSOR ENERGY AND ENVIRONMENTAL TECHNOLOGY Sonoma State University

The Department of Environmental Studies and Planning invites applications for a tenure-track Assistant/Associate Professor, starting August 1999. To be recommended for appointment, the candidate must have earned a doctorate or a terminal degree combined with substantial experience in physics, engineering, architecture, environmental technology, or a related field. Appointment may be made at the rank of **LECTURER** for candidates who are A.B.D. and are anticipating completion of the Ph.D. by no later than August 20, 2000. A person is sought to (1) teach courses in energy management and sustainable architecture, and (2) to direct, with assigned time, the Earthlab and the Environmental Technology Center (ETC), which is an integral part of it. The ideal candidate should demonstrate excellent teaching ability and have a proven record of successfully obtaining and administering grants. Applications must be postmarked by either January 8, 1999 (for fullest consideration), or February 19, 1999. Please request announcement# A014-99/00 from: **Professor James C. Stewart, Chair, Department of Environmental Studies and Planning, Sonoma State University, 1801 East Cotati Avenue, Rohnert Park, CA 94928-3609.** Telephone: 707-664-2306; e-mail: ensp@sonoma.edu; website: <http://www.sonoma.edu/FacAff/aa.html>. Sonoma State University is an Affirmative Action/Equal Opportunity Employer.

The University of California, San Diego, Department of Chemistry and Biochemistry seeks outstanding candidates for a tenure-track **ASSISTANT PROFESSOR** position in environmental chemistry. All areas of environmental chemistry will be considered, including aquatic, atmospheric, biogeochemistry, environmental sensing, and green chemistry. Applicants must have a Ph.D. or equivalent degree in chemistry or a related field. A dissertation or research experience in some area of environmental science is required. Salary to be commensurate with qualifications and based on University of California salary scale. Applications, indications of interest, and recommendations of others who should be considered are most welcome. Candidates should send a curriculum vitae and a list of publications to: **Chair, Environmental Search Committee 3-533, University of California, San Diego, Department of Chemistry and Biochemistry, La Jolla, CA 92093-0332.** Prompt response is recommended. All applications received by December 1, 1998, will be assured full consideration, but we will consider later applications until the position is filled. *UCSD is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.*

POSITIONS OPEN

ASSISTANT PROFESSOR NEUROBIOLOGIST

Tenure-track opening for Neurobiologist in the Department of Biological Sciences at DePaul University starting September 1999. Successful candidate will be broadly trained in neurobiology with a strong commitment to undergraduate education. All subdisciplines and animal model systems (invertebrate or vertebrate) considered. Ph.D. required; postdoctoral and previous teaching experience preferred. Teaching responsibilities to include some combination of biology courses with laboratory for non-majors; coteaching introductory biology sequence for majors; intermediate-level undergraduate course(s) in neurobiology; and graduate/advanced undergraduate course in candidate's area of expertise. Modest research support and start-up funds available. The Department is housed in a new Biology and Environmental Sciences Building that includes modern laboratory space and ample animal care facilities. Review of applications will begin December 15, 1998, and will continue until position is filled. Please send curriculum vitae; three letters of reference; statement of teaching and research interests; statement of your educational philosophy; and list of equipment and supply needs with cost estimates to: **Neurobiology Search Committee, Department of Biological Sciences, DePaul University, 2325 North Clifton Avenue, Chicago, IL 60614.** Additional inquiries to above address, or: FAX: 773-325-7596; e-mail: jdean@wppost.depaul.edu. The Department of Biological Sciences seeks diversity in its faculty. We encourage applications from women, people of color, and the members of other historically underrepresented groups. DePaul University is committed to diversity and equality in education and employment.

DARTMOUTH MEDICAL SCHOOL DEPARTMENT OF PATHOLOGY

The Department of Pathology at Dartmouth Medical School is seeking an individual for a tenure-track position with an appointment as an **ASSISTANT or ASSOCIATE PROFESSOR**. The search will concentrate on candidates holding M.D. or M.D.-Ph.D. degrees who have completed pathology residency training. Postdoctoral research training in a recognized center with an investigative focus on cell-cycle control and/or transmembrane signaling in normal or neoplastic cells is strongly desired. The candidate should have a record of independent productivity and funding or a strong evidence of funding potential. It is envisioned that approximately 75 percent of the individual's time will be devoted to basic research. Medical student teaching and administrative and clinical assignments can be arranged to accommodate the candidate's requirements. The new faculty member will be expected to secure and maintain research funding, join the appropriate graduate training program, and direct an active research laboratory with the capacity to train Ph.D. candidates and Postdoctoral Fellows. Please send curriculum vitae, a research statement, and the names and addresses of three referees to:

William F. Hickey, M.D.
Professor and Chairman, Department of Pathology
Dartmouth Medical School
Dartmouth-Hitchcock Medical Center
Lebanon, NH 03756

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

ASSISTANT PROFESSOR OF PHYSIOLOGY

The Department of Physiology at Midwestern University invites applications for a full-time, tenure-track faculty position at the rank of **ASSISTANT PROFESSOR**. Applicants must have a Ph.D. and two to three years of postdoctoral training. The successful candidate will be expected to teach in physiology courses for medical, pharmacy, and allied health students and to develop and maintain an externally funded research program. Special consideration will be given to candidates with research interests that complement the department's expertise in cardiovascular physiology. Interested persons should submit a curriculum vitae that includes a brief summary of research interests, future research plans, teaching experience, and the names and addresses of four references to:

Dr. Jacquelyn Smith
Department of Physiology
Midwestern University
555 31st Street
Downers Grove, IL 60515

Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.

POSITIONS OPEN

RALPH N. ADAMS DISTINGUISHED PROFESSORSHIP IN CHEMISTRY UNIVERSITY OF KANSAS

Applications and nominations are invited for a newly established Distinguished Professorship in chemistry. The successful candidate must bring an impressive history of research accomplishment recognized at the international level, a strong record of external grant funding, and a commitment to both graduate and undergraduate teaching. The successful applicant will be expected to provide leadership in the enhancement and expansion of bioanalytical chemistry at KU through interactions with other units such as the Departments of Molecular Biosciences, and the Schools of Pharmacy, Engineering, and Medicine. Candidates interested in analytical aspects of neuroscience and/or molecular biology are preferred, but those with interests in other areas of bioanalytical chemistry will be considered. The Professorship offers a generous start-up package, annual discretionary resources, and a salary commensurate with the position.

Complete applications should include (1) a curriculum vitae; (2) a brief description of research goals for the next five years; (3) a description of current personnel and funding resources, including research grants; (4) a description of teaching expertise and interests; (5) and the names of at least three references. Send applications to: **Professor George S. Wilson, Department of Chemistry, University of Kansas, Lawrence, KS 66045.** E-mail: wilson@kuhub.cc.ukans.edu. Telephone: 785-864-5152. Screening of applications will begin January 2, 1999, and will continue until the position is filled.

Equal Opportunity/Affirmative Action Employer.

DEPARTMENT HEAD DEPARTMENT OF BIOLOGY FALL 1999 TENURED FULL PROFESSOR

Northern Michigan University invites applications for Department of Biology Head as tenured Full Professor. Requirements include a Ph.D., demonstrated administrative abilities, and a record of professional accomplishments in teaching and research. Head has overall responsibility for instruction, recruitment, promotion/tenure, budget; and is expected to teach, direct research, act as departmental advocate, and lead in Equal Opportunity. Complete qualifications provided on request.

For information visit website: <http://www.nmu.edu/www-edgar/biology/web/>.

Application review begins December 1, 1998, and continues until position is filled. Appointment begins July 1, 1999. Send curriculum vitae, statement of administrative philosophy and vision, and names, addresses, telephone numbers, and e-mail addresses of five references to:

Chair, Department Head Search Committee
Department of Biology
1401 Presque Isle Avenue
Northern Michigan University
Marquette, MI 49855-5341
Telephone: 906-227-2310
FAX: 906-227-1063
E-mail: biology@nmu.edu

A complete listing of qualifications for the position will be provided upon request. *Northern Michigan University is an Affirmative Action/Equal Opportunity Employer.*

THEORETICAL ECOLOGIST OR THEORETICAL EVOLUTIONARY BIOLOGIST

The Department of Zoology, University of Florida invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. We seek a person who uses mathematical tools and modeling approaches to advance ecological or evolutionary theory and who will strengthen our program in ecology, evolution, and physiology. The person hired will be expected to establish a nationally recognized, externally funded research program, supervise graduate students, develop a graduate course, and contribute to the undergraduate teaching program. Please submit a curriculum vitae, recent reprints, and statements of research and teaching interests, and have three letters of reference sent to: **Dr. Larry McEdward, Theoretician Search Committee, Department of Zoology, P.O. Box 118525, University of Florida, Gainesville, FL 32611-8525.** Deadline for receipt of applications is December 11, 1998. For more information contact: e-mail: theory@zoo.ufl.edu; website: <http://www.zoo.ufl.edu>. The University of Florida is an Equal Opportunity/Affirmative Action Institution. The selection process will be conducted under the provisions of Florida's "Government in the Sunshine" and Public Records Laws.

Coordinating Editor

Physiological Genomics, a new research journal published by The American Physiological Society, has an immediate need for a Coordinating Editor to be based in Boston, Massachusetts. Responsibilities include:

- recruitment of articles through direct contact with the scientific community
- writing of research commentaries, editing and proofreading copy
- coordinating the receipt and review of manuscripts
- close coordination with authors, editors, and publisher
- representation of the journal at scientific meetings

The ideal candidate will possess an advanced degree in the biomedical sciences or science journalism or closely related discipline, 2-6 years related work experience, excellent writing skills to communicate complex concepts clearly and strong editorial and interpersonal skills.

Brigham and Women's Hospital/Harvard University and The American Physiological Society offer an outstanding compensation and benefits package. Please forward your resume, writing sample and salary requirements to: Dr. Victor Dzau, Editor-in-Chief, *Physiological Genomics*, c/o The American Physiological Society, Publications Department, 9650 Rockville Pike, Bethesda, MD 20814-3991.

DIRECTOR, NORTHWESTERN UNIVERSITY BIOTECHNOLOGY LABORATORY

Responsibilities: Northwestern University Biotechnology Laboratory (NUBL) provides DNA synthesis and DNA sequencing services with 3 Ph.D.-level staff for approximately 200 faculty and staff on the Evanston and Chicago Campuses. NUBL has a QIAGEN robot, Storm Phosphorimager, ABI 373, ABI377, and ABI310 sequencers, ABI392, ABI394, and AB3948 oligonucleotide synthesizers, 2 thermal cyclers, and the foundations of a bioinformatic service (novel accounting database and software, BioLIMS database, servers, and software). NUBL is positioning itself to become a high-throughput DNA sequencing and genotyping laboratory for basic and clinical researchers at NU.

To serve as director, the candidate should have experience with basic and advanced molecular biology methods, techniques, and instrumentation, familiarity with bioinformatic concepts and methods, ability to manage highly trained staff members, and form internal collaborations that aid in building biotechnology resources at NU. The Director interacts, assists, and educates faculty, postdoctoral fellows, graduate students, and staff in biotechnology methods and instrumentation. To develop and maintain cutting-edge biotechnology and bioinformatic resources at NU, the Director is encouraged to form alliances with biotechnology and pharmaceutical companies. NUBL is a nonprofit, break-even operation that requires basic knowledge of business operations.

Qualifications: Ph.D. in molecular biology or related field with at least five years of postdoctoral/industrial experience. Applicants should have demonstrated expertise in a wide array of molecular biological techniques including cloning, sequencing, PCR, hybridization, plasmid constructions, and library construction/screening. Additional experience in genome projects and DNA microarray techniques or protein analysis techniques is highly desirable. Strong computer skills, as well as organizational, business, interpersonal, and communication skills are essential.

Additional Comments:

Type of Position and Salary: Full-time, 12-month regular academic professional position. Salary is commensurate with experience.

Application: Send letter of application with complete curriculum vitae and three letters of recommendation to: Dr. David Johnson, Associate Vice President for Research, c/o Steve O'Connor, Crown Building, 633 Clark St., Evanston, IL 60208. Deadline for full consideration, applications should be received by 5:00 pm on Nov. 15, 1998.

Northwestern is an Equal Opportunity Employer.



OREGON HEALTH SCIENCES UNIVERSITY BIOCHEMISTRY & MOLECULAR BIOLOGY

SENIOR ASSISTANT PROFESSOR/ ASSOCIATE PROFESSOR BIOLOGICAL CHEMISTRY

The Department of Biochemistry and Molecular Biology at OHSU, School of Medicine is undergoing a period of expansion. We wish to recruit an outstanding scientist who is employing innovative chemical approaches to the study of biological systems.

We will offer an attractive start-up package, competitive salary, and the opportunity to participate in the growth and development of a dynamic and interactive department in a highly desirable location. Faculty will be expected to direct competitive research programs and assist in graduate and medical school teaching. Applications should be received by November 30, 1998. Informal inquiries can be made via e-mail, kaplanj@ohsu.edu.

Interested candidates should send a copy of your curriculum vitae, a description of research interests, and the names of three references to:

Professor Jack H. Kaplan, Ph.D., F.R.S.
Faculty Search (BC)

Department of Biochemistry and Molecular Biology, L224
Oregon Health Sciences University
3181 S.W. Sam Jackson Park Road
Portland, OR 97201-3098
<http://www.ohsu.edu/som-Biochem>

OHSU is an Affirmative Action/Equal Opportunity Employer.



OREGON HEALTH SCIENCES UNIVERSITY BIOCHEMISTRY & MOLECULAR BIOLOGY

PROFESSOR OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

The Department of Biochemistry and Molecular Biology at OHSU, School of Medicine is undergoing a period of expansion. We are interested in recruiting a senior faculty member who will supply leadership to our developing programs. Areas of particular interest include (i) protein assembly and trafficking; (ii) posttranslational protein modification.

We will offer an attractive salary and start-up package and the opportunity to play a key role in the development of an interactive department in a stimulating scientific environment set in one of the most desirable areas in the country. Applications should be received by November 30, 1998. Informal inquiries can be made via e-mail, kaplanj@ohsu.edu.

Interested candidates should have a sustained record of externally funded research. Send a copy of your curriculum vitae, a description of research interests, and the names of three references to:

Professor Jack H. Kaplan, Ph.D., F.R.S.
Faculty Search (S)

Department of Biochemistry and Molecular Biology
Oregon Health Sciences University
3181 S.W. Sam Jackson Park Road
Portland, OR 97201-3098
<http://www.ohsu.edu/som-Biochem>

OHSU is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR VETERINARY MOLECULAR BIOLOGY

Applications are invited for a tenure-track position with rank commensurate with experience. This position is 90 percent research, 10 percent instruction, and is supported by a generous start-up package, including technical support, and a competitive salary. A Ph.D. or Ph.D.-D.V.M. in a biomolecular discipline and postdoctoral experience are required for all candidates. The potential to establish, or evidence of, a competitive, independent research program is required for candidates at the Assistant Professor level. Candidates at the Associate level are expected to have already established, extramurally funded research programs. Collaboration with various groups is encouraged and the department and university have several multiuser facilities to promote interaction among faculty. We are seeking an outstanding scientist who is addressing important problems in mammalian disease at the level of basic mechanisms. Individuals, using biochemical, cellular, and/or genetic approaches to investigate infectious agents or host response to disease are encouraged to apply. Interested applicants should send letter of application, curriculum vitae, selected reprints, a summary statement concerning research plans and grant proposals, and arrange for three letters of reference to be sent to: **Chair, Search Committee, Veterinary Molecular Biology, Montana State University, Bozeman, MT 59717-0360.** Screening will continue until a suitable applicant is hired. For a full job description and additional information about our department visit our website: <http://www.montana.edu/www/vmb/>. ADA/Equal Opportunity/Affirmative Action/Veterans Preference.

ASSISTANT PROFESSOR BIOCHEMISTRY

Applications are invited for a tenure-track position to begin fall 1999. Candidates must possess a Ph.D. in biochemistry or chemistry and have had postdoctoral experience. A commitment to excellence in teaching at the undergraduate and graduate levels is expected. In addition, the successful applicant will be expected to maintain a vigorous, externally funded research program in an area that emphasizes the more chemical aspects of biochemistry. Our website: <http://utachem.uta.edu> contains further information on the department and this position. Applicants should submit a curriculum vitae, a concise (four-page maximum) description of their proposed research program, and arrange to have at least three letters of recommendation sent to: **Biochemistry Search Committee, Department of Chemistry and Biochemistry, Box 19065, University of Texas at Arlington, Arlington, TX 76019.** Review of applications will begin November 16, 1998, and continue until the position is filled. *The University of Texas at Arlington is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR CHEMICAL ENGINEERING Massachusetts Institute of Technology

Applicants are sought for a junior-level, tenure-track faculty position in the Department of Chemical Engineering at the Massachusetts Institute of Technology. Applicants should have a Ph.D. in chemical engineering or a closely related field, should have demonstrated excellence in academic research, and should have a strong interest in teaching graduate and undergraduate chemical engineering students. Send résumé including the names of at least three references, graduate transcripts, and a description of research interests to: **Dr. Robert C. Armstrong, Head, Department of Chemical Engineering, Massachusetts Institute of Technology, 66-350, Cambridge, MA 02139.** Material should be received by January 1, 1999. *MIT is an Equal Opportunity/Affirmative Action Employer.*

Rensselaer Polytechnic Institute Department of Chemistry (website: <http://www.chem.rpi.edu/chemweb/base.html>) invites applications for a tenure-track ASSISTANT PROFESSORSHIP in biochemistry to begin fall 1999. Exceptional candidates may be considered for appointment at a higher rank. Applications should include a curriculum vitae with a brief description of proposed research projects and letters of recommendation from three professional references. Applications should be submitted by January 15, 1999, to: **Joseph T. Warden, Chair, Faculty Search Committee, Department of Chemistry, Rensselaer Polytechnic Institute, Troy, NY 12180-3590.** *Rensselaer Polytechnic Institute is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates.*

POSITIONS OPEN



Anatomy in the tenure track. Applications are invited for the first of two positions at **ASSISTANT PROFESSOR.** Higher ranks may be negotiable. Ideal candidates should have outstanding research training and extramural support for their independent research. Preference will be given to applicants working in basic cell biology, respiratory biology, or neuroscience to support existing strengths in anatomy. Excellent opportunities exist for strong collaborations in such growth areas as the neurobiology program, the West Virginia University centers in cancer biology and PET, and in federal research centers for occupational medicine (CDC) and forensic identification (FBI). Please send applications and supporting documents by November 30, 1998, to: **Dr. Richard Wiggins, Chairman, Anatomy Department, West Virginia University, P.O. Box 9128, Morgantown, WV 26506.**

WVU is an Equal Opportunity Employer.

CONSERVATION BIOLOGIST

Tenure-track, entry-level **ASSISTANT PROFESSOR** position in the Department of Biological Sciences, Towson University. Position involves teaching one to two courses per semester (nine to 12 contact hours per week). Teaching responsibilities will include some combination of an introductory biology course for majors or non-majors and upper-level/graduate courses in general ecology and area of specialization. Participation in newly established Environmental Science and Studies Program expected. Successful candidate also is expected to establish an extramurally funded research program involving undergraduates and M.S. candidates. Ph.D. required, postdoctoral experience preferred. Send curriculum vitae, copies of all transcripts, one-page statements of teaching philosophy and research interests, and three letters of reference to: **L. Scott Johnson, Biological Sciences, Towson University, Towson, MD 21252.** E-mail: sjohnson@towson.edu. Applications should be postmarked by 15 December 1998. For additional information, see website: www.towson.edu/~wubah/biology. *Towson University is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to diversity. Women, minorities, persons with disability, and veterans encouraged to apply.*

Faculty position in environmental biology. College of New Rochelle. The Department of Biological Sciences at the College of New Rochelle invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level, beginning September 1999. The School of Arts and Sciences is a women's college with a strong commitment to undergraduate teaching. The successful candidate will teach courses in environmental biology and be responsible for overseeing the interdisciplinary environmental studies program. Requirements are a Ph.D. in biology, a broad background in the biological sciences, demonstrated evidence of teaching at the undergraduate level, and a willingness to teach a variety of courses to a population with diverse learning styles. Interested applicants should send a letter of application, including a statement of teaching and research interests, a curriculum vitae, and three letters of reference, by December 1, 1998, to: **Dr. Thomas Venanzi, Chair, Division of Natural Sciences and Mathematics, College of New Rochelle, 29 Castle Place, New Rochelle, NY 10805.** *CNR is an Affirmative Action/Equal Opportunity Employer.*

CELL/DEVELOPMENTAL BIOLOGIST

The Washington College Biology Department invites applications for an entry-level tenure-track position in cell/developmental biology, at the rank of **ASSISTANT PROFESSOR** beginning August 1999. Commitment to excellence in undergraduate teaching and research and a Ph.D. are required. Teaching responsibilities include introductory biology, cell biology, and developmental biology, with an additional course possible in area of expertise. Washington College is a private liberal arts college located on the Eastern Shore of Maryland. Send curriculum vitae, statement of teaching philosophy, three letters of reference, and undergraduate and graduate transcripts to: **Dr. Kathleen M. Verville, Chair, Department of Biology, Washington College, 300 Washington Avenue, Chestertown, MD 21620** by December 15, 1998. *Washington College is an Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.*

POSITIONS OPEN

WILDLIFE ECOLOGIST, ASSISTANT PROFESSOR. Tenure-track, 12-month position (70 percent research and 30 percent teaching) requires a Ph.D. in wildlife ecology or closely related field. Individuals with specific training and experience in landscape or systems-level approaches to sustainable natural resource management will be given preference. Responsibilities include development of a research program (with outside funding) directed at understanding and managing natural systems for long-term sustainability. There should be a willingness to contribute to the Department's efforts to provide leadership in effective management of arid lands, and training of students in management of arid lands, particularly of southwestern United States and Mexico. A substantial commitment is required for quality classroom teaching at the undergraduate and graduate levels. Good communication skills desirable, with the ability to interact effectively with students, public agencies, landowners, special interest groups, and other researchers. Submit a curriculum vitae plus a personal statement describing (1) research interests, (2) teaching philosophy, and (3) courses you are able to offer. A list of references should be included (name, address, telephone, e-mail). Reference letters will be requested after an initial screening. Closing date is 15 January 1999 with an anticipated starting date on or about 1 July 1999. For additional information contact: **Don Caccamise, Telephone: 505-646-7051; FAX: 505-646-1281; e-mail: dcaccami@nmsu.edu.** Application materials should be sent to: **Search Committee, Department of Fishery and Wildlife Sciences, New Mexico State University, Box 30003, MSC 4901, Las Cruces, NM 88003-8003.** *NMSU is an Equal Employment Opportunity/Affirmative Action Employer.*

UNIVERSITY OF WASHINGTON DEPARTMENT OF BIOCHEMISTRY CHAIR

The University of Washington seeks a **PROFESSOR** and **CHAIR** of the Department of Biochemistry. The applicant must have a Ph.D., M.D., or equivalent degree; a commitment to graduate, undergraduate, and medical education; and a demonstrated record of leadership with an interest in administrative and academic activities. The candidate must be an internationally recognized scientist and have an outstanding record of accomplishment with an ongoing, independent, and well-supported research program.

For more information about the Department and research areas of the faculty please see the Department homepage on the World Wide Web. The address is website: <http://weber.u.washington.edu/~biowww>.

Please submit applications or nominations by December 15, 1998, to: **Wayne E. Crill, M.D., Chair, Biochemistry Chair Search Committee, Physiology and Biophysics, University of Washington, Box 357290, Seattle, WA 98195-7290.** *The University of Washington is an Affirmative Action/Equal Opportunity Employer.*

Three tenure-track positions of **ASSISTANT/ASSOCIATE PROFESSOR** are available. One position is to assume organization of a new course in basic aspects of pharmacology for medical students and to conduct independent research. Two other positions are sought for research/teaching in molecular biology, biochemistry, or molecular pharmacology. Please submit curriculum vitae, a statement of future research plans, and, if applicable, current interest in organizing a course for pharmacology. Request three letters of recommendation to be sent to: **Dr. Gerald Litwack, Chairman Department of Biochemistry and Molecular Pharmacology, Jefferson Medical College, Thomas Jefferson University, 350 BLSB, 233 South 10th Street, Philadelphia, PA 19107.** Applications will be considered until January 31, 1999. *Thomas Jefferson University is an Equal Opportunity Employer.*

COLUMBIA UNIVERSITY DEPARTMENT OF BIOLOGICAL SCIENCES

Columbia University invites applications for the position of **ASSOCIATE/FULL PROFESSOR** in the Department of Biological Sciences. Preference will be given to applicants whose research focuses on cell biology, but other areas of modern biology will be considered. Applicants should have an outstanding record in research. The department currently includes 23 faculty and over 100 Fellows and graduate students. Send curriculum vitae by January 31, 1999, to: **Prof. Carol L. Prives, Chair, Faculty Search Committee, 600 Fairchild Center, Department of Biological Sciences (MC2402), Columbia University, New York, NY 10027.** *Columbia University is an Affirmative Action/Equal Opportunity Employer.*

Genome Systems, Inc., a wholly owned subsidiary of Incyte Pharmaceuticals, Inc., is a leader in providing genetic engineering products, reagents and services for the general scientific community.

QA/QC COORDINATOR

Genome Systems, Inc. has an immediate opening for a highly motivated, detail-oriented individual to fill our QA/QC position in our Mapping department. This position will be responsible for developing, implementing, and monitoring objective methods for assessing the quality of data produced by the Mapping group. This position works closely with our Process and Development group and the Mapping Production group to define SOP's and methods for assuring compliance. BS in Biology along with 5-8 years experience or MS in Biology along with 2-5 years experience. Broad molecular biology background and strong computer skills desired.

If you recognize these qualities in yourself, we want to hear from you. We offer competitive salaries, an outstanding benefits package and significant opportunities for professional growth. Mail/fax your resume with cover letter specifying position to Human Resources Dept., Genome Systems, Inc., Reference: Job #GS0394, 4633 World Parkway Circle, St. Louis, MO 63134 FAX (314) 506-6421. No phone calls please. Visit our website at: www.genomesystems.com An Equal Opportunity Employer, M/F/V/D



GLOBAL OPPORTUNITIES



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NATIONAL UNIVERSITY of SINGAPORE DEPARTMENT OF BIOLOGICAL SCIENCES

FACULTY SEARCH

The Department of Biological Sciences at the National University of Singapore (NUS) invites applications for tenure-track, senior positions (Professor/Associate Professor) in Organismal/Cellular/Molecular Biology. We seek outstanding individuals with proven excellent track records of research and scholarship who have vision and can provide leadership in teaching and research. Candidates must be willing to assume a major leadership role that involves overseeing the academic and research programmes, external relationship and the management of the Department. NUS is in the same league as the top 88 "Research 1 Universities" in USA (Carnegie Classification), and faculty can expect at least the same salary level and research support as these top universities.

Candidates are requested to send their curriculum vitae, a brief research plan, and three letters of recommendation to:

Professor T. J. Lam
Head

Department of Biological Sciences
National University of Singapore
Lower Kent Ridge
Singapore 117600
SINGAPORE

Fax: (65) 779-5671

E-mail: dbshead@nus.edu.sg

Only shortlisted candidates will be notified.

For more details, visit us on the Internet:

[http://www.nus.sg/NUSinfo/Appoint/sc-DBS\(Hd\).html](http://www.nus.sg/NUSinfo/Appoint/sc-DBS(Hd).html)

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SR. SCIENTIST

Utilizing bioinformatic approaches to drug discovery and database development, you will develop software and large-scale genome sequence databases and implement database management systems. Requires a PhD in related field with expertise in bioinformatics tool development, post-doctoral research in Molecular, Cellular, Developmental Biology or Immunology, and skills in Molecular Biology and genomic sequence analysis. Job Code: B98-022.

SCIENTIST

You will implement novel techniques to support rapid high throughput expression of novel therapeutic targets and utilize your ties with academia for assistance in securing future access to novel developments. A PhD in Biology or Biochemistry, 2-4 years of post-doctoral training, and a proven track record of experience with different expression systems, in particular BVE and Drosophila S2, are required. Expertise in molecular biology techniques and demonstrated skills in mutagenesis and protein expression also essential. Job Code: B98-027.

Berlex is a U.S. subsidiary of an international Fortune 500 company with breakthrough products in Multiple Sclerosis, Diagnostic Imaging, Leukemia, and Cardiovascular diseases. We offer competitive salaries and a generous benefits package. To apply, send your CV/resume to: BERLEX, HUMAN RESOURCES EMPLOYMENT/JOB CODE _____, 15049 SAN PABLO AVE., RICHMOND, CA 94804-0099. Principals only, please. EOE. Visit our website at www.berlex.com

BERLEX

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MIT

ASSISTANT PROFESSORS OF COGNITIVE SCIENCE

The MIT Department of Brain and Cognitive Sciences anticipates making two tenure-track appointments in cognitive science at the Assistant Professor level. We encourage applications from candidates working in any area of cognitive science. We especially encourage applications from candidates who combine experimental psychology with biological approaches, including functional brain imaging or other techniques of cognitive neuroscience.

Applications should include a brief cover letter stating the candidate's research and teaching interests, a vita, three letters of recommendation and representative reprints. Send applications by January 1, 1999 to: Cognitive Search Committee, E25-406, MIT, Cambridge, MA 02139. Qualified women and minority candidates are especially encouraged to apply. MIT is an Affirmative Action/Equal Opportunity Employer.



**MASSACHUSETTS INSTITUTE
OF TECHNOLOGY**

POSITIONS OPEN

INSTRUCTORS ASSISTANT PROFESSORS CHEMISTRY AND PHYSICS

Southeastern Louisiana University is seeking applicants for two Instructors and three tenure-track Assistant Professors in the Department of Chemistry and Physics available August 1999. Assistant Professor qualifications: Undergraduate degrees and a Ph.D. in chemistry from an accredited university. Strong commitment to undergraduate teaching not only in their area of specialization, but also in introductory and service courses, and be prepared to develop a vigorous, independent research program that will attract outside funding. Preference will be given to applicants with coursework and formal training in physical, organic, and biochemistry. Instructor qualifications: M.S. in chemistry or A.B.D. toward a Ph.D. in chemistry. Strong commitment to teaching introductory and service courses in chemistry.

Salary and applications: Salary is commensurate with experience and qualifications. Review of applications will begin November 20, 1998, and will continue until qualified candidates are identified. Application packet should include a letter of application; a complete curriculum vitae including telephone numbers, addresses, and a list of all publications; a brief statement of teaching experience and philosophy; a brief statement of research interests; three current letters of reference; and a copy of all transcripts (originals required upon employment). Submit application packet to: **Dr. Linda Munchausen, Department of Chemistry and Physics, Southeastern Louisiana University 878, Hammond, LA 70402.** SLU is an Affirmative Action/ADA/Equal Employment Opportunity Employer.

The Department of Pathology and Laboratory Medicine, Texas A&M University Health Science Center in College Station, Texas invites applications for a tenure-track position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Applicants should have an M.D. or M.D.-Ph.D. degree(s), postgraduate training in anatomic or clinical pathology, and a firm commitment to active laboratory research. Major responsibilities for the individual will be development of an independent research program, teaching in our core medical student pathology course, and participation in our graduation student program. The first two years of the medical curriculum are located on the major campus of Texas A&M University. This location provides opportunity for interaction with other university departments.

Applicants may send their curriculum vitae, a statement of research goals, and the names of three references to: **Faculty Search Committee, c/o Mary Payne, Department of Pathology and Laboratory Medicine, 208 Reynolds Medical Building, College Station, TX 77843-1114.** FAX: 409-862-1299.

Structural biology **RESEARCH ASSOCIATE** to study recombinant peptides using an integrated application of molecular and structural biology, including studies of structural properties of protein domains with CD, FTIR, EPR, etc. Ph.D. and prior experience in molecular biology required; experience in protein chemistry desired; experience or interest in biophysical methods helpful. Submit curriculum vitae, a description of research experience and the names and telephone numbers of three references to: **L. W.-M. Fung, Department of Chemistry, Loyola University Chicago, Chicago, IL 60626.** FAX: 773-508-3086. Position open until filled. *Equal Opportunity/Affirmative Action Employer.*

PHYSIOLOGIST. The Department of Biology at Sonoma State University seeks an Animal Physiologist with expertise in comparative approaches and an interest in human physiology. This is a **TENURE-TRACK POSITION**, beginning fall 1999. See full announcement at website: www.sonoma.edu/biology or request from: **Dr. Philip T. Northern, FAX: 707-664-3012; e-mail: phil.northern@sonoma.edu.** Applications postmarked by January 4, 1999, will receive priority consideration, and the final postmark deadline is February 1, 1999. *An Affirmative Action/Equal Opportunity Employer.*

MacMurray College is seeking a new **TEACHER** in biology beginning August 1999. Qualifications: Ph.D., qualified to teach courses in introductory biology, genetics, microbiology, cell biology, and biochemistry experience. Send letter of application, curriculum vitae, teaching philosophy, graduate school transcripts, and the names of three references to: **Dr. Jim Goulding, Dean of the College, MacMurray College, 447 East College, Jacksonville, IL 62650** by November 20, 1998. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

TENURE-TRACK ASSISTANT/ ASSOCIATE PROFESSOR GENETICS Tufts University

The Department of Biology invites applications for a tenure-track position at the Assistant or Associate Professor level to begin September 1, 1999. A Doctoral degree, postdoctoral experience, and a record of research productivity are required. The successful candidate will be expected to establish and maintain an active research program with extramural funding that combines genetic analysis and molecular biology. The research should involve graduate and undergraduate students. Teaching responsibilities include courses in genetics at the undergraduate and graduate levels and contributions to a team-taught course in the department. Candidates should have both teaching ability and motivation. Applicants should submit a curriculum vitae, three recent publications, separate statements of (1) research interests and plans and (2) teaching experience and plans, and should have three letters of reference sent to: **Chair, Genetics Search Committee, Department of Biology, Tufts University, Medford, MA 02155.** The department's website: www.tufts.edu/as/biology/. Review of applications begins December 22, 1998, and will continue until the position is filled. *Tufts University is an Affirmative Action/Equal Opportunity Employer. We are committed to increasing the diversity of our faculty. Members of underrepresented groups are strongly encouraged to apply.*

ASSISTANT PROFESSOR PHARMACOLOGY

Pharmacologist. The Ohio State University, Division of Pharmacology, College of Pharmacy, invites applications for the position of Assistant Professor of pharmacology beginning September 1999. Qualified candidates should have a Ph.D. in pharmacology, toxicology, or related field, and postdoctoral experience. Areas of high priority include biochemical, molecular, or cellular studies involved in the pharmacological or toxicological action of drugs. This is a tenure-track position with excellent prospects for an individual committed to quality teaching and research, and a willingness to work in a collaborative environment within the University health science community. A complete curriculum vitae and the names and addresses of at least three persons, from whom letters of recommendation can be solicited, should be sent to: **Ralf Rahwan, Ph.D., Chair of Search Committee, Division of Pharmacology, College of Pharmacy, The Ohio State University, 500 West 12th Avenue, Columbus, OH 43210.** *Ohio State University is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT/ASSOCIATE PROFESSOR MOLECULAR GENETICS

Center in connective tissue diseases is seeking a Molecular Geneticist at the Assistant/Associate Professor level to conduct mouse and human research in the areas of musculoskeletal diseases such as osteoporosis. Experience in QTL, FISH, positional cloning, antisense and overexpression studies is essential. Experience with ENU mutagenesis desirable. Salary and benefits competitive; possible long-term position. Send résumé, cover letter, and names of three references to: **Dr. Strong, Musculoskeletal Disease Center, P.O. Box 7210, Loma Linda, CA 92354.**

STAFF SCIENTIST. Position available to clone CTL and B cell tumor antigens. Candidates must have a Ph.D. or an M.D.-Ph.D., a minimum of three years of postdoctoral training, and have successfully cloned mammalian antigen(s) as documented by publication(s). Please send curriculum vitae, list of publication, and research experience description to: **The Wistar Institute, Human Resources Department, Attn: Dr. Dorothee Herlyn, 3601 Spruce Street, Philadelphia, PA 19104.** *Equal Opportunity Employer/Affirmative Action/Minorities/Females/Disabled/Veterans.*

The Department of Physiology and Biophysics at the University of Alabama at Birmingham invites applications for one tenure-track **ASSOCIATE PROFESSOR**. Expertise needed in intracellular signaling, molecular biology, electrophysiology, and confocal and electron microscopy of ion channels. Please send curriculum vitae, statement of research plan, and three letters of recommendation by November 1, 1998, to: **Dale J. Benos, Ph.D., 1918 University Boulevard, MCLM 706, Birmingham, AL 35294.** *The University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

TWO TENURE-TRACK POSITIONS BOTANY AND CELL BIOLOGY

The Department of Biology at James Madison University invites applications for two tenure-track **ASSISTANT PROFESSOR** positions to begin August 1999. We seek individuals with a strong commitment to teaching and establishing a research program involving undergraduates and Master's students. Teaching responsibilities for the Botanist will include general botany for majors, and an upper-level course in plant taxonomy/systematics or anatomy/morphology. Teaching responsibilities for the Cell Biologist will include an introductory cell biology course for majors and an upper-level course in their specialty, with preference given to applicants having the ability to teach immunology. The candidates must show evidence of excellent teaching and communication skills, including familiarity with instructional technology. A Ph.D. is required. To apply, send a curriculum vitae, statement of research interests, and statement of teaching philosophy to either: **Botany Search or Cell Biology Search, Department of Biology, James Madison University, Harrisonburg, VA 22807.** Review of applications will begin on November 30, 1998. Questions regarding these positions should be directed to **Jon Monroe, e-mail: monroejd@jmu.edu** for the botany position or **Douglas Dennis, e-mail: dennisdc@jmu.edu** for the cell biology position. For more information website: <http://www.jmu.edu/biology/jobs.html>. *James Madison University is an Equal Opportunity/Affirmative Action/Equal Access Employer and especially encourages applications from minorities, women, and persons with disability.*

DIRECTOR ARIZONA LIVER INSTITUTE

The University of Arizona College of Medicine is establishing a liver research institute and is recruiting an outstanding Physician/Scientist to serve as the Director of the institute and as a tenured faculty member of the Department of Medicine. The institute is supported with the equivalent of a \$10 million endowment. The new Director will be required to develop a targeted research program in one or several areas of liver disease investigations. The candidate should be a Senior Research Scientist with an M.D. or M.D.-Ph.D. degree, have an extensive record of research in the field of liver disease, and evidence of ongoing federal peer-reviewed funding. Direct applications to:

**James E. Dalen, M.D., M.P.H.
Vice President for Health Sciences
Dean, College of Medicine
The University of Arizona
P.O. Box 245018
Tucson, AZ 85724-5018**

Application review begins November 9, 1998, and will continue until position is filled. The University of Arizona is an Equal Employment Opportunity/Affirmative Action/ADA Employer.

Northeast Louisiana University invites applications for **DEPARTMENT HEAD** in biology to begin July 1, 1999. We seek a leader with the administrative skills and vision to lead an evolving department that offers B.S. and M.S. degrees. A Ph.D. and a strong record of active research are required. There are 16 full-time Biologists using organismal and molecular approaches to study evolution, systematics, and ecology. Submit curriculum vitae, statement of administrative philosophy, research needs, teaching interests, and telephone numbers and addresses (including e-mail) of three references by December 1, 1998, to: **Department Head Search, Department of Biology, Northeast Louisiana University, Monroe, LA 71209-0520.** For more information, visit our website: www.nlu.edu/biology/. *NLU is an Affirmative Action/Equal Employment Opportunity Employer.*

SCIENCE PROGRAM OFFICER DAVID AND LUCILE PACKARD FOUNDATION Los Altos, California

The applicant should have a Ph.D. in science or engineering with experience in research and either teaching or public policy work. Some administrative experience is preferred. Duties include planning and implementing grants programs, analyzing proposals, and working with grantees. The total science grants budget in 1999 is \$67 million. For details on the foundation and this position, see website: www.packfound.org. Apply by November 30, 1998, to: **Kenneth Ford, Director of Science Programs, e-mail: k.ford@packfound.org; FAX: 650-917-6180.**

CAREER DEVELOPMENT OPPORTUNITIES IN GENOMICS RESEARCH AND ANALYSIS
FOR

Computer Scientists
Engineers
Mathematicians
Physicists
Chemists

Success of the Human Genome Project depends on collaborations between biologists and non-biology scientists, such as computer scientists, engineers, mathematicians, physicists, and chemists. To prepare a larger number of non-biologists to participate in the Human Genome Project as full partners, the National Human Genome Research Institute has developed two programs to recruit non-biologists into genomics research and analysis.

The Individual Mentored Research Scientist Development Award is intended to foster the career development of non-biologists who wish to acquire knowledge of genomics so that they can contribute to the Human Genome Project.

Awards are from three to five years and include salary (up to \$125,000 or the current NIH cap), research support (up to \$20,000), and tuition.

The Institutional Mentored Research Scientist Development Award has the same goal as the Individual Mentored Research Scientist Development Award, but is awarded to institutions. These, in turn, select the individuals to be trained.

The institutional award is a five-year award. The allowable costs are the same as for the individual awards. *Only U.S. citizens or permanent residents are eligible for these awards. Minorities, women, and individuals with disabilities are encouraged to apply.*

For more information on these two programs, please visit our website: <http://www.nhgri.nih.gov/Grant_info/Funding/Training/>, or contact:

Bettie J. Graham, Ph.D.
National Human Genome Research Institute
National Institutes of Health
Bethesda, MD 20892
E-mail: bettie_graham@nih.gov



National
Human Genome
Research Institute

**MARKET SEGMENT MANAGER,
MOLECULAR BIOLOGY**

Sigma is currently seeking a Market Segment Manager, Molecular Biology, to research and analyze market opportunities and technical trends in the life science research market, engage in market development for and sales of molecular biology products, including epitope mapping technologies, in the genomics and molecular biology industry, including the custom service industry, establish and manage distribution agreements, assist in development of gene regulation and expression products and identify and analyze potential merger/acquisition candidates within the molecular biology industry. Requires Bachelor's degree or equivalent-level degree in Molecular Biology, Biochemistry or closely related life science discipline and at least one year of experience in job offered. Successful candidate must be able to perform job duties on date of application. Qualified applicants must presently be eligible for permanent employment in the United States. Salary \$57,000 - \$78,000 per year, plus employee benefit plan; 40 hours per week.

Send resume and details of experience to Human Resources (AD-98-352-001); Sigma Aldrich, Inc.; 3050 Spruce Street; St. Louis, MO 63103

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**NATIONAL UNIVERSITY OF SINGAPORE
DEPARTMENT OF BIOLOGICAL SCIENCES**

The Department of Biological Sciences at the National University of Singapore invites applications for a RESEARCH OFFICER to work in the area of biodiversity. The position will involve the coordination of research activities pertaining to biodiversity, with emphasis on zoology, in the Department. The Officer will work closely with the staff of the Department's Zoology Research Museum (Zoological Reference Collection), as well as resident professors involved in biodiversity research and teaching. The Officer will also help with the educational programmes, liaise with and assist visiting researchers, manage research data pertaining to the Museum, manage the Department's journal (The Raffles Bulletin of Zoology), and assist with various corporate matters. The position requires at least a M.Sc. (or equivalent), preferably in zoology.

Applicants should submit a letter of application together with a complete curriculum vitae (including job experience, language and writing skills) and publication list. In addition, the applicant should arrange for two letters of reference, which should be sent directly to:

Prof. T. J. Lam
Head
Department of Biological Sciences
National University of Singapore
Kent Ridge Crescent
Singapore 119260

Fax: (65) 779-2486
E-mail: dbshead@nus.edu.sg

Application deadline: 1 November 1998

Only shortlisted candidates will be notified.

For more details, visit us on the Internet:

[http://www.nus.sg/NUSinfo/Appoint/sc-DBS\(RO\).html](http://www.nus.sg/NUSinfo/Appoint/sc-DBS(RO).html)

POSITIONS OPEN

RESEARCH SCIENTISTS

INSMED Pharmaceuticals, Inc. is a privately held pharmaceutical company that discovers and develops novel drugs acting against insulin resistance-mediated diseases. INSMED has established a drug discovery program aimed at the identification of novel small molecules active against these diseases.

In order to strengthen this program we are currently looking for talented researchers with experience in the purification and structure clarification of complex carbohydrates, and within the field of physiology.

STRUCTURAL CARBOHYDRATE CHEMIST

The candidate will hold a Ph.D. degree in carbohydrate chemistry and will have more than two years of postdoctoral experience in the field of carbohydrate structure clarification and purification.

PHYSIOLOGIST

The candidate will hold a Ph.D. degree in physiology or related field. In addition, the candidate will have more than two years of postdoctoral experience working with small animals and/or primary cell systems, preferably within the field of insulin biology.

Each candidate will have a strong record of scientific accomplishments.

In addition to an exciting and rapidly developing environment, INSMED Pharmaceuticals, Inc. offers a competitive salary and employee stock options. INSMED Pharmaceuticals, Inc. also offers a scientifically exciting environment with many academic collaborations. To be considered for either of these exciting positions, please mail, FAX, or e-mail your application and curriculum vitae by November 30, 1998, to:

Linda Boatright
Manager, Human Resources
INSMED Pharmaceuticals, Inc.
800 East Leigh Street, Suite 206
Richmond, VA 23219
FAX: 804-828-6894
E-mail: boatright@insmed.com
Website: www.insmed.com

GENBANK DATABASE ANALYST COMPUTERCRAFT CORPORATION

Scientific Data Analyst to help build and maintain GenBank, the National Institutes of Health (NIH) DNA Sequence Database, produced by the National Center for Biotechnology Information (NCBI) at NIH. This position is with ComputerCraft Corporation, working as a contractor on location at NCBI. Responsibilities include review and analysis of DNA sequence submissions to GenBank from individual laboratories as well as sequencing centers, use of bioinformatics software to ensure database quality control, editing database records to conform to international sequence database guidelines, and extensive communication with scientists around the world regarding their sequence submissions. Excellent opportunity to use state-of-the-art computer systems and gain experience using bioinformatics tools developed by a leading computational biology research group. This is not a laboratory position, but extensive molecular biology laboratory experience is needed to understand the information in the database records and communicate with scientists. Ph.D. in molecular biology or related field required. Excellent communication skills required. Experience with computers and DNA sequence analysis software also important. Mail/FAX résumé with cover letter and list of references to: **ComputerCraft Corporation, 6707 Democracy Boulevard, Suite 101, Bethesda, MD 20817. FAX: 301-530-0634, Attn: Molecular Biologist.**

The ARS, USDA Plant Protection Research Unit located on the Cornell University campus is seeking applicants for a **STAFF SCIENTIST** to join a team of scientists studying the development of fungi as biocontrol agents or producers of novel biopesticidal compounds. The incumbent will develop a new, independent research program that utilizes molecular and genetics approaches to study entomopathogenic fungi relative to the expression, regulation, and function of genes and gene products that play a role in insect infection or toxemia. *Candidates must be U.S. citizens, have a degree in entomology, plant pathology, or mycology with a strong background in molecular biology.* Salary ranges from \$38,593 to \$52,423, commensurate with experience. For application procedures, call: **Dina Marinos, Telephone: 607-255-8468** or download from the Internet at website: **www.ars.usda.gov**, Job Opportunities. Applications must be marked ARS-X9E-9022 and postmarked by November 27, 1998.

POSITIONS OPEN

COVANCE

THE DEVELOPMENT SERVICES COMPANY

STAFF SCIENTIST/STUDY DIRECTOR GENETIC TOXICOLOGIST

Covance Laboratories Inc., a global contract research organization, has an exciting opportunity for a highly motivated, customer-focused scientist to assume a Study Director role in its Genetic and Cellular Toxicology Unit in Vienna, Virginia. The successful candidate must possess outstanding interpersonal skills with M.S./Ph.D. or equivalent. Responsibilities include the conduct of ICH/OECD regulatory-specific assays for detecting genetic damage in mammalian test systems; analysis and interpretation of data; training and mentorship of technical personnel; scientific and regulatory consultation or representation; development of new scientific or technological innovations. Requires extensive written and verbal communication with clients in pharmaceutical and chemical industries. Experience with ICH genetic tox protocols in a GLP environment is preferred.

Covance Laboratories Inc., offers a competitive salary and comprehensive benefits package. For consideration, send résumé to: **Attn: SH-Science-387, Covance Laboratories Inc., 9200 Leesburg Pike, Vienna, VA 22182-1699. FAX: 703-759-6947. Equal Opportunity Employer/Affirmative Action/Minorities/Females/Disabled/Veterans. Covance promotes a drug-free work environment.**

LABORATORY MANAGER HIGH-RESOLUTION ICP-MS LABORATORY

The Old Dominion University Research Foundation on behalf of the College of Sciences at Old Dominion University seeks to hire a full-time Laboratory Manager for a new, multidisciplinary ICP-MS laboratory.

Responsibilities include maintaining a new Finnigan MAT Element ICP-MS and associated peripherals (including a laser ablation system), carrying out routine analyses and developing new analytical methods, overseeing laboratory operations, and participating in data analysis, interpretation, and publications. The successful candidate will have the opportunity to interact with faculty in the College of Sciences with diverse research and teaching interests in the field of environmental biogeochemistry. We seek a candidate with a B.S. or advanced degree in analytical chemistry or earth sciences, and mass spectrometry experience.

Salary will be commensurate with experience. Applications received by December 1, 1998, will be assured consideration. Application materials should include a curriculum vitae, statement of career goals, description of training and experience, and names of at least three references and be sent to: **The Old Dominion University Research Foundation, P.O. Box 6369, Norfolk, VA 23508.** Additional information about the position may be obtained by contacting: **Dr. Simon Thorrold, Telephone: 757-683-4804; e-mail: athorrol@odu.edu; or Dr. Cynthia Jones, Telephone: 757-683-4497; e-mail: cjones@odu.edu. Specify Job# 98044.**

The Old Dominion University Research Foundation is an Equal Opportunity/Affirmative Action Employer.

The USDA, Agricultural Research Service, Center for Medical, Agricultural, and Veterinary Entomology, Gainesville, Florida seeks a **RESEARCH ENTOMOLOGIST, GS-0414-11/12. Candidates must be U.S. citizens.** The position involves conducting experiments and reporting research findings as part of a long-range program to develop semiochemical-based detection and control technology for biting and nuisance flies of medical and veterinary importance. In addition to basic educational requirements, applicants must demonstrate: (1) ability to conduct research and report research findings; (2) ability to analyze and interpret insect behavior; (3) ability to conduct behavioral and electrophysiological assays of insect responses to semiochemicals; (4) skill in the use of semiochemicals for insect detection and control; and (5) skill in the application of experimental designs and statistical methods. For information on the research program contact: **Dr. Donald Barnard, Telephone: 352-374-5930; e-mail: dbarnard@gainesville.usda.ars.gov.** For application procedures/forms contact: **Jackie Sullivan, Telephone: 352-374-5861.** Applications submitted in response to this advertisement must include announcement# ARS-S95-9002, must be postmarked by November 30, 1998, and mailed to: **USDA, ARS, AFM, HRD, Southern Services Branch, 5601 Sunnyside Avenue, Beltsville, MD 20705-5105. USDA/ARS is an Equal Opportunity Provider and Employer.**

POSITIONS OPEN

RESEARCH SCIENTIST

MicroGenomics, Inc., a San Diego biotechnology company specializing in the capture and exploitation of novel microbial biosynthetic pathways, is seeking a Ph.D.-level scientist with a strong biochemistry/analytical chemistry background to join our research team. The ideal candidate will have expertise in methods for separation and structural analysis of small molecules, and experience in molecular biology. Please send a curriculum vitae and cover letter to: **MicroGenomics, Inc., 11211 Sorrento Valley Road, Suite Q, San Diego, CA 92121.**

ASSOCIATE DIRECTOR MICHIGAN AGRICULTURAL EXPERIMENT STATION Michigan State University

Associate Director/Professor (full-year, full-time, tenure system). The Associate Director will provide additional leadership to the Michigan Agricultural Experiment Station (MAES) and be responsible to the Director for shared decision making associated with the overall administration of the Station. Responsibilities include interacting with department Chairpersons in the research planning, budgeting, and evaluation process; coordination of MAES programs with agricultural, natural resources, family and community clientele groups; administration of State, Regional, and Hatch research projects; management of special MAES projects; and liaison with the Michigan State University Vice President for Research and Graduate Studies and the Director of the Michigan State University Extension. The Associate Director will serve as Acting Director in the Director's absence. Requirements include a Ph.D. degree in a field of agriculture, natural resources, behavioral sciences, or a closely related area; proven record of research accomplishments; and demonstrated interest and potential for administration. Send letter of application, complete résumé, and the names, addresses, and telephone numbers of three references to: **Dr. William Taylor, Chairperson, Search Committee, Michigan Agricultural Experiment Station, Michigan State University, 109 Agriculture Hall, East Lansing, MI 48824 by December 1, 1998.** For questions, Dr. Taylor can be reached at **Telephone: 517-353-0647; e-mail: taylorw@pilot.msu.edu.** *Michigan State University is an Affirmative Action/Equal Opportunity Institution. Disabled persons have the right to request and receive reasonable accommodation. Women and minorities are encouraged to apply.*

CALIFORNIA INSTITUTE OF TECHNOLOGY

We seek a Ph.D. scientist to coordinate and lead research in the functional genomics gene expression laboratory at Caltech. This is a pivotal position in a new highly interdisciplinary research program that includes Nucleic Acid Biochemists developing improved gene expression technology, Physical Scientists and Engineers developing new instrumentation, Computational Scientists developing advanced methods for large-scale data analysis, and Biologists who will use expression laboratory instruments and technical support to study diverse biological problems. Scientific creativity plus keen collaborative, management, and organizational skills will be essential. A Ph.D. or equivalent in molecular biology, biochemistry, chemistry, or other pertinent field is required. Research experience in 2-D microarray methods and analysis, other large-scale high-throughput gene expression technologies, and/or nucleic acid chemistry is highly desirable. Depending on experience, the salary range will be \$50,000 to \$65,000. Address application, curriculum vitae, three letters of reference, and pertinent research papers to: **Professor Barbara Wold, California Institute of Technology, Biology Division 156-29, Pasadena, CA 91125.** *The California Institute of Technology is an Equal Opportunity/Affirmative Action Employer and encourages the applications of qualified women, minorities, veterans, and disabled persons.*

POSTDOCTORAL RESEARCH ASSOCIATE position available immediately to study neurotoxicity of organophosphorus pesticides. Qualifications include Ph.D. in toxicology, pharmacology, or neuroscience. Send curriculum vitae to: **Dr. Carey Pope, Division of Toxicology, College of Pharmacy, Northeast Louisiana University, 700 University Avenue, Monroe, LA 71209-0470.**



UNIVERSITY of PENNSYLVANIA

Department of Pharmacology

Assistant Professor

Tenure-track faculty position available at Assistant Professor level.

Requirements:

Demonstrated ability to conduct research projects, supervise post-doctoral fellows and organize effective collaboration within and outside the University. Expertise in drug delivery, vascular biology, oxidative stress and pulmonary pathophysiology. Experience in biochemical, immunological and cell biology methods. Independent funding from NIH and National Agencies.

Applications, including a curriculum vitae, selected reprints or preprints, a statement of research interests, and the names and addresses of three references should be sent to:

Dr. Garret FitzGerald
Chair

Department of Pharmacology
Medical School of the
University of Pennsylvania
Philadelphia, PA 19104-6084

Women and minorities are especially encouraged to apply. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

University of California, Los Angeles Astrobiologists (4 positions)

The Center for Astrobiology of the Institute of Geophysics and Planetary Physics (IGPP) at UCLA is searching for an Assistant Professor (tenure-track) and three Postdoctoral Fellows (two-year positions) in Astrobiology. We seek persons with a Ph.D. or equivalent degree in disciplines relevant to Astrobiology and a willingness to work collaboratively in one or more of the following fields: paleobiology and ecosystem evolution (ancient Earth life and its planet-modifying capabilities), evolution of life (comparative genomics and molecular mechanisms of evolution), solar system exploration (search for life outside Earth, especially on Mars and Europa), extrasolar planetary science (prediction, detection, observation of bodies that may be abodes for life). Appointments will be made in IGPP or jointly between IGPP and one of the departments of the Life Sciences and Physical Sciences divisions of the College of Letters and Science. The successful candidate for the tenure-track position should have postdoctoral experience and will be expected to carry out independent research and teach in at least one College department. Demonstrated interest in teaching and the ability to inspire undergraduate and graduate students is essential. The Postdoctoral Fellows will carry out collaborative research within the Center for Astrobiology.

UCLA's Center for Astrobiology is a founding member of the NASA Astrobiology Institute (NAI). Members of the Center and their research interests are listed at <http://astrobiology.ucla.edu>. Facilities available to appointees include the Keck telescopes in Hawaii, NASA's airborne infrared observatory (SOFIA), the Keck ion microprobe at UCLA, MVACS instruments near the south pole of Mars (launch date January 3, 1999), and core facilities for automated DNA sequencing and analysis. In addition, UCLA astrobiologists will have the opportunity to work collaboratively with a large number of scientists at the other NAI member institutions (see <http://astrobiology.arc.nasa.gov> for details).

To apply, send your curriculum vitae and a letter of application specifying the nature of the position sought (and have 3-5 letters of reference sent separately) to **Director, Center for Astrobiology, Institute of Geophysics and Planetary Physics, UCLA, Box 951567, Los Angeles, CA 90095-1567 USA** by November 30. For further information contact **J. William Schopf**, Chair of the Astrobiology Search Committee (schopf@ess.ucla.edu) or **Bruce Runnegar**, Director, UCLA Center for Astrobiology (runnegar@ucla.edu).

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

U.S. DEPARTMENT OF ENERGY
OFFICE OF BIOLOGICAL AND ENVIRONMENTAL RESEARCH



Alexander Hollaender DISTINGUISHED Postdoctoral Fellowship Program

Research Opportunities in Energy-Related
Life, Biomedical, and Environmental
Sciences including Human and Microbial
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- Research in OBER-sponsored programs
- Tenable at various laboratories
- Stipends \$37,500
- Doctoral degree received after April 30, 1997
- U.S. citizens or PRA eligible

Information and application:
<http://www.orau.gov/ober/hollaend.htm>

or
Hollaender Postdoctoral Fellowships
Science and Engineering Education, MS 36
Oak Ridge Institute for
Science and Education
P.O. Box 117
Oak Ridge, TN 37831-0117
(423) 576-9975

Deadline January 15, 1999

GLOBAL OPPORTUNITIES



Founded 1905

NATIONAL UNIVERSITY OF SINGAPORE DEPARTMENT OF PHYSICS Faculty Search

The Department of Physics, Faculty of Science, National University of Singapore (NUS) invites applications for tenure-track positions beginning **July 1999**.

Preference will be given to applicants who specialize in the following areas:

*Surface and Materials Physics
Mesoscopic and Nano-device Physics
Optical Physics
Biophysics
Physics of Macromolecules*

Candidates with outstanding potential and promise will be considered even if their fields of specialization do not fall within the above categories. They should possess leadership qualities and are expected to build up the respective research strengths in the Department.

All levels of appointment—Assistant Professor, Associate Professor, and Professor—will be considered. NUS is in the same league as the 88 top "Research 1 universities" in USA (Carnegie Classification), and faculty can expect at least the same salary levels and research support as these top universities.

Outstanding individuals with strong commitment to research and teaching are encouraged to send their curriculum vitae, a brief research plan, and three letters of recommendation to:

Associate Professor C. H. Lai
Head
Department of Physics
National University of Singapore
Block S12, Lower Kent Ridge Road
SINGAPORE 119260
E-mail: phylaich@nus.edu.sg

Application Deadline: 15 January 1999

Only shortlisted candidates will be notified.

For more details, visit us on the Internet at:
<http://www.nus.sg/NUSinfo/Appoint/sc-Phys.htm>.

POSITIONS OPEN

TENURE-TRACK POSITION IN TOXICOLOGY

The Department of Pharmacology and Toxicology at the Medical College of Virginia, Virginia Commonwealth University invites applications for a tenure-track faculty position. Rank will be based upon background and experience. The successful applicant will be expected to maintain an extramurally funded, nationally recognized research program and to contribute to departmental teaching programs, including a strong graduate program (supported by two training grants). Individuals with interest in and documented contributions to any area relevant to toxicology are encouraged to apply. Areas of particular interest include immunotoxicology, carcinogenesis, and neurotoxicology. Applicants who use cellular/molecular approaches to study questions in liver biology may also qualify for secondary appointment in the University's internationally recognized Liver Center. Our department is ranked among the top five pharmacology departments nationwide based on NIH research support and current research strengths include neuropharmacology, molecular pharmacology, and toxicology. Required are a Ph.D. in a related field and/or M.D., as well as an excellent publication record. Applicants should submit a curriculum vitae and the names and addresses of three references by November 30, 1998, although the search will remain open until a suitable candidate is identified and the position filled. Address submissions to: **Chair, Search Committee F5781, Virginia Commonwealth University, P.O. Box 980613, Richmond, VA 23298-0613.** Position description available. *VCU is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities, and persons with disability to apply.*

TENURE-TRACK POSITIONS IN GENETIC MEDICINE

Weill Medical College of Cornell University

As part of a significant enhancement of its basic biomedical science research programs and laboratory facilities, Weill Medical College of Cornell University is undertaking a major program initiative in the area of genetic medicine and is seeking to recruit tenure-track faculty at all levels. We are especially interested in candidates with research interests related to developmental genetics and telomere/chromosome functions. Exceptional candidates in other related/appropriate fields will also be considered. Candidates for junior positions should demonstrate the potential for establishing a vigorous independent research program, and candidates for senior positions should have an outstanding record of productivity. Candidates should have Ph.D. or M.D. degrees.

Recruited faculty will receive generous start-up support. Candidates may participate in the Graduate School of Medical Sciences program, which includes faculty from the Weill Medical College and the Sloan-Kettering Institute. Applications should include a curriculum vitae, statement of research interests, and three letters of recommendation. Applications should be sent to: **Bernadette M. Mosellie, Genetic Medicine Recruitment Team, Box# 27, Weill Medical College of Cornell University, 1300 York Avenue, New York, NY 10021.**

Equal Employment Opportunity/Affirmative Action/Minorities/Females/Disabled/Veterans.

POSTDOCTORAL POSITIONS RAMMELKAMP CENTER FOR EDUCATION AND RESEARCH

Postdoctoral positions are available immediately for U.S. citizens or permanent residents to study the physiology, pharmacology, and biochemistry of ion channels. Projects involve discovery of novel ion channels, ion channel modulators, and ion channel ligands. Methods include interaction cloning, genomics, high-throughput fluorescence imaging, patch-clamp, two microelectrode voltage clamp, mutagenesis, protein analysis, and transgenic and knock-out mice. Background in electrophysiology or molecular biology is essential. Compensation for qualified individuals is excellent. Applicants must send a cover letter describing research experience and interests, their curriculum vitae, and three letters of recommendation from senior individuals familiar with their work to: **Arthur M. Brown, M.D., Ph.D., Vice President for Research, Rammelkamp Center for Education and Research, MetroHealth Medical Center, 2500 MetroHealth Drive, R-301, Cleveland, OH 44109-1998. Telephone: 216-778-5960; FAX: 216-749-3889; e-mail: abrown@research.mhmc.org.** MetroHealth is an affiliate of Case Western Reserve University. Candidates must meet all requirements to work within the United States. *Equal Opportunity Employer.*

POSITIONS OPEN

ARABIDOPSIS FUNCTIONAL GENOMICS CONSORTIUM

Has openings for **RESEARCH ASSISTANT PROFESSOR, POSTDOCTORAL ASSOCIATES, COMPUTER PROGRAMMERS, GRADUATE STUDENTS, RESEARCH TECHNICIANS.**

The Arabidopsis Functional Genomics Consortium (AFGC) is an NSF-funded collaboration among several U.S. academic institutions working together to utilize and develop state-of-the-art technologies in *Arabidopsis* genomics.

Our program includes services and technology development in plant gene expression using DNA microarray technology and PCR-assisted site-selected mutagenesis to functionally characterize the *Arabidopsis* genome. Special emphasis will be placed on the characterization of plant-specific genes and the development and adaption of bioinformatics systems to support these technologies. We invite applications for positions in the AFGC to join us in the challenge of developing breakthroughs in plant genomics research. The Institutions of the AFGC along with their experimental emphasis and personnel openings are listed below. Candidates should apply directly to the address indicated for each position of interest. Applications should indicate the position title, and include a curriculum vitae, and the names of three references. Review of candidates will begin immediately and continue until all positions are filled.

Michigan State University: DNA microarray analysis. Candidates for Research Assistant Professor, Postdoctoral Associate, Graduate Students, and Technician positions should apply to: **Dr. Pam Green, MSU-DOE Plant Research Laboratory, Michigan State University, East Lansing, MI 48824-1312.**

Carnegie Institute at Stanford University: DNA microarray analysis and bioinformatics. Candidates for Postdoctoral Associate and Technician positions should apply to: **Dr. Shauna Somerville, The Carnegie Institute of Washington, Plant Biology Department, 290 Panama Street, Stanford, CA 94305-4101.** Candidates for Computer Programmer and Bioinformatics, Postdoctoral Associate positions should apply to: **Dr. Mike Cherry, Stanford University, Genetics, Stanford University Medical Center, Stanford, CA 94305-5120.**

University of Wisconsin at Madison: PCR-assisted site-selected mutagenesis. Candidates for Postdoctoral Associate and Technician positions should apply to: **Dr. Rick Amasino, Biochemistry Department, University of Wisconsin, Madison, WI 53706.** Or: **Dr. Mike Sussman, Biotechnology Center, 425 Henry Mall, University of Wisconsin, Madison, WI 53706.**

Yale University: PCR-assisted site-selected mutagenesis. Candidates for Postdoctoral Associate and Technician positions should apply to: **Dr. Steve Dellaporta, Department of Biology, Yale University, 165 Prospect Street, New Haven, CT 06511.**

All Institutions are Affirmative Action/Equal Opportunity Employers. Disabled persons have the right to request and receive reasonable accommodations. The AFGC is especially interested in applications from underrepresented minorities and women.

AQUATIC TOXICOLOGIST

The Institute of Environmental and Human Health (TIEHH) at Texas Tech University/Texas Tech University Health Sciences Center seek an outstanding scientist to lead research and education efforts in aquatic toxicology, starting on/before 1 June 1999. The successful candidate will attract significant extramural funding and provide excellent instruction at the graduate level. Academic appointment will be with a suitable Department at Texas Tech. Research affiliation will be with TIEHH, where Texas Tech has invested significantly in facilities to provide an excellent opportunity for interdisciplinary research and education.

Applicants should have a record of (1) government and industrial funding to evaluate toxicant impacts in aquatic systems; (2) developing successful collaborations of faculty, staff, and students to conduct interdisciplinary aquatic toxicology research; (3) integrating aquatic toxicology courses into an existing curriculum. Applications received by 4 December 1998 will be considered. Although we seek an established scientist, outstanding candidates of all ranks will be considered. Applicants should send a curriculum vitae and arrange to have three reference letters sent to: **G. Cobb, Chairman, Aquatic Toxicologist Search, 1207 South Gilbert Drive, Lubbock, TX 79416.** Texas Tech University is an Equal Employment Opportunity/Affirmative Action/Americans with Disabilities Act Employer.

POSITIONS OPEN

DIRECTOR OF RESEARCH AND CONSERVATION

The Zoological Society of San Diego seeks a scientist to direct its programs in research and conservation. This individual will be responsible for the eight laboratories of the Center for Reproduction of Endangered Species (CRES) and for the Society's various field research and conservation projects and programs. Applicants must have outstanding scientific credentials, management experience, and strong motivational and communication skills. Duties include oversight of the Society's scientific activities, interactions with other conservation organizations, and generation of extramural funding. The appointee will be expected to continue active involvement in his/her own research.

The Zoological Society is a not-for-profit organization that operates the San Diego Zoo, the San Diego Wild Animal Park, and CRES. An annual budget of approximately \$5 million is devoted to research applied to conservation, and this commitment to biodiversity conservation will continue to grow. A prominent scientist is needed to lead this effort.

The review of applications will begin immediately. The search will close on December 15, 1998. Submit curriculum vitae, a list of four professional references, and a summary of research, administrative, and leadership accomplishments to: **The San Diego Zoo/Human Resources Office, P.O. Box 120551, San Diego, CA 92112-0551.**

Equal Opportunity Employer.

MULTIDISCIPLINARY SCIENCE LECTURESHIP

The University of Maryland Baltimore County (UMBC) has created a Multidisciplinary Science Lectureship and invites qualified persons to apply. The successful candidate will direct an innovative, multidisciplinary, laboratory-based science course designed for non-science majors. The new course, scheduled to be offered in pilot form for the first time in fall 1999, will eventually accommodate approximately 300 students per semester. A template for the course was developed by an on-campus committee and centers on water and basic exploration of its chemical, physical, biological, and environmental aspects.

The anticipated initial appointment, at the Lecturer level, is non-tenure-track but annually renewable. Salary is dependent on candidate's qualifications and experience.

Applicants should have a broad-based interdisciplinary post-Baccalaureate education in the natural sciences. A Ph.D. is preferred. In addition, the applicant should have substantial post-secondary teaching experience, be familiar with recent science education reforms, and be comfortable with student-centered and inquiry-based approaches to science teaching.

To apply, send cover letter, current curriculum vitae, teaching portfolio, and the names and addresses of three persons who can supply letters of reference, if requested. Deadline for receipt of all materials is December 15, 1998.

Mail materials to: **Dr. R. C. Reno, Chair, Screening Committee LBSC, Physics Department, University of Maryland Baltimore County, 1000 Hilltop Circle, Baltimore, MD 21250.**

UMBC is an Equal Opportunity/Affirmative Action Employer.

STAFF SCIENTIST

The Clinical Brain Disorders Branch of the NIH is seeking a Staff Scientist for the support of radiopharmaceutical production for the SPECT program as well as the development of new synthesis methods. Must have a minimum of eight years of experience in the production of I-123-based tracers for *in vivo* human neurochemical imaging, including radiolabeling techniques and the synthesis of the necessary organic compounds. Must be proficient in radioisotope handling methods, laboratory techniques such as HPLC, TLC, and related bioassay protocols.

Interested applicants should submit curriculum vitae/bibliography, résumé, or optional OF 612 (Application for Federal Employment) to: **Mollie P. Strotkamp, NIMH Personnel Office, Building 45, Room 3AN-32, 9000 Rockville Pike, Bethesda, MD 20892** on or before October 28, 1998.

The National Institute of Mental Health is an Equal Opportunity Employer.

EUROPEAN OPPORTUNITIES

PREPARATORY COMMISSION FOR THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization with its Headquarters in Vienna is the international organization setting up the global verification system foreseen under the Comprehensive Nuclear-Test-Ban Treaty (CTBT), which is the Treaty banning any nuclear weapon test explosion or any other nuclear explosion. The Treaty provides for a global verification regime, including a network of 321 stations worldwide, a communications system, an international data centre, and on-site inspections to monitor compliance.

We seek to recruit a highly qualified candidate for the following position:

POST: Equipment Officer

ORGANIZATIONAL SETTING: On-Site Inspection Division, Equipment Section

GRADE: P-4

VACANCY ANNOUNCEMENT NO:

VA109-56-1998

DEADLINE: 9 November 1998

REPORTING DATE: As soon as possible

DUTIES AND RESPONSIBILITIES:

Provide scientific and technical advice on matters connected to the role and operation of equipment related to approved OSI technologies; develop detailed specifications of equipment for all OSI phases; in association with collaborating national facilities, develop and implement programmes for testing, validation, and certification of OSI equipment.

QUALIFICATIONS:

Advanced university degree in nuclear science, geophysics, or a related technical field. At least 7 years of experience in programmes related to equipment testing, evaluation, and certification. Experience in the organization of field work, experiments, surveys, and on-site inspection highly desirable. Development of scientific software as well as knowledge of computer hardware requirements and system integration issues preferred. Fluency in English and a good knowledge of at least one other of the official languages of the CTBTO Preparatory Commission. Excellent communication skills in English essential.

REMUNERATION/CONTRACT:

Depending on professional background and experience, indicative tax-free annual net base salary (inclusive of a variable element for post adjustment) from US\$68,441 (without dependants) and US\$73,517 (with dependants), subject to deductions of contributions to the CTBTO Provident Fund and Health Insurance Scheme. Additional benefits include, when applicable, dependency allowance, education grant for children, rental subsidy, six weeks vacation per year, home leave travel every two years. Initial contract for fixed-term of three years.

For more information, see the CTBTO Preparatory Commission's home page:

<http://www.ctbto.org>. CTBTO Preparatory Commission, Personnel Section, Vienna International Centre, Room E0807, P.O. Box 1200, A-1400 Vienna. Tel: (43.1) 26030 6210. Fax: (43.1) 26030 5897. E-mail: ctbto_personnel@ctbto.org. Please only e-mail ASCII text-formatted messages and attachments as we are unable to read other formats at this time.

THE PREPARATORY COMMISSION FOR THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION IS COMMITTED TO A POLICY OF EQUAL EMPLOYMENT OPPORTUNITY.

The Science of Agricultural Genetics

RESEARCH ASSOCIATE

Corn EST Mapping, Physical Mapping. (Job #98-00294C)

The applicant will be involved in the development of new technologies for physical mapping of corn genes and expressed sequenced tags (ESTs). The primary responsibilities of this position will include: cloning of genomic DNA fragments in cosmids and plasmids, generation and analysis of high density arranged genomic libraries, DNA purification from plant tissues and bacterial clones, restriction enzyme digestions, gel fractionation of DNA fragments using agarose (standard as well as pulse-field gel electrophoresis) and polyacrylamide (including use of the ABI Prism 377 DNA sequencer), DNA-blot hybridization and PCR amplification. Experience with molecular markers and computer databases is required. Strong interpersonal skills and the ability to communicate effectively with other members of the group are necessary. If you have an MS or BS in Genetics, Molecular Biology or related discipline and at least 4 years of relevant experience and if you value working in a discovery-oriented team environment, we encourage you to apply for this position.

POST-DOCTORAL RESEARCH SCIENTIST

Tissue-Specific Gene Expression (Job 98-00295B)

The in situ gene expression group is seeking a highly motivated post-doctoral scientist to develop a high-throughput method for plant in situ hybridization, and to analyze the expression patterns of a large number of maize genes and EST clones. The goal of the project is to establish an in situ gene expression database that facilitates the identification of genes with agronomically important functions and the isolation of novel tissue-specific promoters. Required qualifications include strong experience in molecular biology, in situ hybridization, histology techniques and gene expression analysis. Proficiency with sequence databases and functional genomics strategies, excellent communication and organization skills are essential. Educational requirements include a Ph.D. in Biology or related discipline with a strong background in plant molecular biology and genetics.

Please submit your scannable resume to: Pioneer Hi-Bred International, Inc. ATTN: Human Resources - Research (Job #98-XXX), PO Box 1004, Johnston, IA 50131-1004; e-mail: jobsresearch@phibred.com, For information on scannable resume visit our website www.pioneer.com. Application review process will begin November 13, 1998.

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



PIONEER HI-BRED INTERNATIONAL, INC.

An Equal Opportunity Employer

GLOBAL OPPORTUNITIES



UNITED ARAB EMIRATES UNIVERSITY FACULTY OF MEDICINE AND HEALTH SCIENCES DEPARTMENT OF MEDICAL MICROBIOLOGY

Assistant/Associate Professor/Professor of Bacteriology Assistant/Associate Professor of Virology Assistant/Associate Professor of Parasitology

The Faculty of Medicine and Health Sciences, United Arab Emirates University invites applications for academic positions in Bacteriology, Virology and/or Parasitology. The successful candidates shall provide undergraduate teaching of bacteriology, virology and/or parasitology, participate in graduate program development and research and/or provide clinical leadership in their respective areas. FHMS operates an integrated/problem-based curriculum and provides research opportunities in a new state of the art medical school complex with two associated referral hospitals: web site at <http://www.uaeu.ac.ae>. The research of the Department is concentrated on cellular and molecular aspects of immune responses to infection and autoimmunity but interest in any aspect of host-parasite relationship would be welcome.

Applicants should hold a Ph.D. and/or an M.D. degree, with evidence of advanced training, teaching experience and quality research. Faculty will receive tax-free salary, annual tickets, support for housing and dependants' school fees.

Informal enquiries: Professor ML Lukic, Acting Chair, +971 3 5039514/672000 (tel) or 671966 (fax) or email: mbio@medic.uaeu.ac.ae.

Applications should include a full CV indicating depth of interests and experience, a list of all publications and name/phone/fax/address of five referees and addressed to:

Director of Personnel
Faculty of Medicine and Health Sciences
UAE University, P O Box 17666
Al Ain, United Arab Emirates

Applications open until positions are filled, however, we expect successful candidates to be in place before August 31, 1999.

POSITIONS OPEN

DIRECTOR CONSERVATION RESEARCH FELLOWSHIP PROGRAM

The Nature Conservancy (TNC) seeks a Director for the nation's first Postdoctoral Fellowship program devoted entirely to conservation: the David H. Smith Conservation Research Fellowship Program. The ideal candidate will be a mid-level Ph.D. scientist whose work has successfully combined academic research and publication with more applied work in conservation. Experience working with conservation practitioners or land managers highly desirable. Appropriate areas of specialization include conservation biology, natural resource management, ecosystem ecology, or related fields. The Director will create, manage, and publicize the program; develop relationships with key academic institutions; promote research to strengthen TNC's ecoregion- and site-based conservation; identify resources to expand the program; and play an integral role in strategic planning related to the overall role of science and research in TNC's work. Salary range of \$70,000 to \$80,000. With generous donor support, the program is already funded at a level that will support 48 Postdoctoral Fellows over a ten-year period. For a detailed position description see website: <http://www.tnc.org> or contact: M. Perez, Telephone: 703-841-4845; e-mail: mperez@tnc.org. Submit applications by November 30, 1998, to: Dr. Elizabeth Chornesky, The Nature Conservancy, 4245 North Fairfax Drive, Arlington, VA 22203-1606.

POSTDOCTORAL POSITIONS IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

Positions are available to study the mechanism of action of specific deoxynucleotide-metabolizing enzymes (deoxycytidylate deaminase and thymidylate synthase) that are targets for cancer chemotherapy. Gene isolation and amplification as well as the regulation of their protein products in eukaryotic and prokaryotic systems are being studied. Once obtained, substrate and regulatory sites on the protein products will be determined by functional group-specific reagents and affinity labels. In addition, site-specific mutagenesis will be employed to establish the relation of structure to function in these enzymes as well as their subunit interaction, which is essential for the restoration of enzyme activity on mixing inactive mutants. The role of protein phosphorylation in these processes is also being investigated. Cloning, sequencing, and tissue culture experience is desirable. The research will be conducted in a well-equipped core facility. Compensation from Health Research Inc. dependent upon experience. Send résumé and three references to: Dr. Frank Maley, Wadsworth Center for Laboratories and Research, Empire State Plaza, Box 509, Albany, NY 12201. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION IN THEORETICAL POPULATION GENETICS

NIH-funded Postdoctoral position is available to work on statistical methods for linkage disequilibrium mapping of mutations underlying complex genetic diseases. A Ph.D. in biology, applied mathematics, or statistics is required. Candidates should have skills in C programming, numerical analysis, population genetics theory, or human genetics. Annual salary of \$30,000 plus benefits. Send curriculum vitae, recent publications, and the names of three references to: Dr. Bruce Rannala, Department of Ecology and Evolution, State University of New York, Stony Brook, NY 11794-5245. E-mail: rannala@life.bio.sunysb.edu. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Employer.

RESEARCH TECHNICIANS. Advanced Viral Research Corp. (ADVR), a leader in the development of peptide nucleic acids, is seeking personnel to staff its new research laboratories in Westchester County, New York. Candidates should have B.S./M.S. degrees with at least one year of laboratory research experience and should be familiar with techniques in molecular biology, virology, and/or cellular immunology. We offer highly competitive compensation and benefits packages. Please submit curriculum vitae to: Human Resources Department, Advanced Viral Research Corp., 200 Corporate Boulevard South, Yonkers, NY 10701. FAX: 914-376-7383. ADVR is an Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOW POSITIONS CLEVELAND CLINIC FOUNDATION LERNER RESEARCH INSTITUTE Department of Cell Biology

Two funded positions are available for Postdoctoral Fellows in a laboratory that focuses on the mechanisms through which reactive oxidant species contribute to atherosclerosis and other chronic inflammatory diseases. One Fellow with experience in cellular and molecular biology and/or immunohistochemistry is needed to study monocyte-endothelial interactions induced by specific oxidation pathways and products found *in vivo*. A second Fellow experienced in analytical techniques such as HPLC, GC, and mass spectrometry is wanted to participate in developing and applying methods to identify specific oxidation products of proteins, lipids, and DNA in model systems and clinical specimens. Applicants should have a Ph.D. and/or M.D. and be highly motivated. Candidates with exceptional qualifications are eligible for Institute Fellowships with salary supplements.

Send a curriculum vitae, description of career goals, and e-mail addresses or letters from three references to: Stanley L. Hazen, M.D., Ph.D., Department of Cell Biology, Cleveland Clinic Foundation, 9500 Euclid Avenue, NC-10, Cleveland, OH 44195. E-mail: hazens@cesmtp.ccf.org; website: <http://www.lri.ccf.org/ri/pi/hazens.html>.

POSTDOCTORAL RESEARCH ASSOCIATE

The Biological Chemistry Department at Southern Research Institute has a challenging opportunity for a Postdoctoral Scientist to design and perform laboratory research necessary to characterize purine metabolism in mycobacteria. The project will involve purification and analysis of purine metabolic enzymes, characterization of the metabolism and mechanism of action of nucleoside analogs in mycobacteria and human cells, and interaction with Organic Chemists in the development of novel antimycobacterial agents with special focus on *Mycobacterium tuberculosis*. The successful candidate will have a recent Ph.D. in biochemistry, microbiology, or a related discipline, preferably related to purine metabolism in mycobacteria. Excellent oral and written skills required. Send your curriculum vitae, a cover letter describing your research experiences and goals, and reference information to: Sheryl H. Brown, Department 535, Southern Research Institute, P.O. Box 55305, Birmingham, AL 35255-5305. FAX: 205-581-2200; e-mail: s.r.brown@sri.org; website: www.southernresearch.com. Equal Opportunity Employment/Affirmative Action Employer.

POSTDOCTORAL POSITION

A Postdoctoral position is available in the Department of Neurosurgery at the University of Texas M. D. Anderson Cancer Center investigating the mechanisms of cell cycle control, apoptosis, and gene therapy in brain tumors.

Candidates should have a Ph.D. or M.D. with a strong background in biochemistry and molecular biology.

Send curriculum vitae with bibliography, summary of research experience, and the names, addresses, and telephone numbers of three references to:

Frederick F. Lang, M.D.
Department of Neurosurgery
M. D. Anderson Cancer Center
1515 Holcombe Boulevard, Box 64
Houston, TX 77030

Equal Opportunity/Affirmative Action Employer. Women and minority candidates are strongly encouraged to apply. Smoke-free environment.

POSTDOCTORAL POSITIONS. Available in Departments of Biochemistry (Job# 12947), Cell Biology and Anatomy (Job# 996290), Microbiology and Immunology (Job# 996289), Molecular and Cellular Biology (Job# 12946), Pathology (Job# 996288), Pediatrics (Job# 996287), Pharmacology/Toxicology (Job# 996286) and Physiology (Job# 996293), and the Arthritis Center (Job# 996292) and Children's Research Center (Job# 996291). A Ph.D., M.D., or equivalent degree required. Positions available during 1998 and 1999. Review of applications begins November 6, 1998, and will continue until filled. Send application, citing specific Job#, to: (appropriate Department Head), The University of Arizona, Arizona Health Sciences Center, Tucson, AZ 85724. Department of Human Resources website: <http://hr2.hr.arizona.edu/>. The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer. Minorities/Women/Disabled/Veterans.

POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITION IN MOLECULAR PATHOBIOLOGY OF BILIARY CANCER

A Postdoctoral position is available immediately in the Division of Experimental Pathology to study the role of tyrosine kinase growth factor receptor genes in the pathogenesis of experimental rat and human biliary cancer. Applicants must be highly motivated, possess a Ph.D. degree in cell and molecular biology, experimental pathology, or related field, and have a strong interest in hepatobiliary cancer research. Experience in liver cell culture, transfection, immunohistochemistry and *in situ* hybridization, gene cloning, and gene knockout technology is highly desirable. Salary is commensurate with qualifications and experience. Qualified applicants should send a curriculum vitae and the names of three references to:

Dr. Alphonse E. Sirica
Professor of Pathology and Division Chair
Division of Experimental Pathology
Medical College of Virginia Campus of
Virginia Commonwealth University
P.O. Box 980297
Richmond, VA 23298-0297
Telephone: 804-828-9594
FAX: 804-828-9749
E-mail: asirica@hsc.vcu.edu

Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS IN PROSTATE CANCER BIOLOGY The University of Washington Medical Center

Three new openings available for study of prostate cancer biology, specifically in the areas of (1) cancer cachexia and (2) bone metastases. The successful applicants will join a multidisciplinary team of Investigators. Fellowships are funded for up to three years and are available beginning in January to July 1999 with starting salaries ranging from \$25,000 to \$28,000 per year dependent upon experience. Applicants should have a Ph.D. or M.D. and have research experience in either bone biology, molecular biology, cell biology, immunology, or other discipline that would prepare them well for study of cancer cachexia or bone metastases. Direct questions to e-mail: vessella@u.washington.edu.

Send curriculum vitae and list of references to: Robert Vessella, Ph.D., Department of Urology, Box 356510, University of Washington, Seattle, WA 98195.

The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available in molecular pharmacology at the Karmanos Cancer Institute at Wayne State University, to investigate gene regulation and protein structure-function of the human reduced folate membrane transporter for antifolate anticancer agents. A major goal of our program is to move basic cellular and molecular research findings into translational studies of drug-resistant pediatric cancers. Candidates should have a Ph.D. with a strong background in molecular biology and biochemistry. Send curriculum vitae, statement of research accomplishments, and the names of three (3) references to: Dr. Larry H. Matherly, Karmanos Cancer Institute, 110 East Warren Avenue, Detroit, MI 48201. FAX: 313-832-7294; e-mail: matherly@kci.wayne.edu. Wayne State University School of Medicine, the country's largest single-campus medical school, is an Equal Opportunity/Affirmative Action Employer.

A POSTDOCTORAL POSITION is available to work on the development of highly processive, least error-prone Reverse Transcriptases (RTs) for use in the Human Genome Project. The project will involve engineering of variant RTs, testing for improved processivity and fidelity, and their use in constructing full-length cDNA libraries. We are seeking an individual with a Ph.D. degree and experience in protein purification, nucleic acid–enzymology, and molecular biology. Send complete curriculum vitae and a list of three references by e-mail to: Dr. Vinayaka R. Prasad, Department of Microbiology and Immunology, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461. E-mail: prasad@aecom.yu.edu. An Equal Opportunity Employer.



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Founded 1905

National University of Singapore

Faculty Position Department of Physiology

Applications are invited for a faculty position in the Department of Physiology, Faculty of Medicine, National University of Singapore. The successful applicant should possess an M.D. or Ph.D. degree (or equivalent) and should have had at least two years of postdoctoral experience. He/she is expected to teach human physiology at both undergraduate and graduate levels, to conduct independent research, and to compete successfully for research funding from intramural and extramural sources. A medical background or research experience in molecular biology will be an advantage. Remuneration will be commensurate with experience. Applicants should send their *curriculum vitae*, a brief description of research plans, and the names and addresses of three referees to:

**Head, Recruitment Committee
Department of Physiology
Faculty of Medicine
National University of Singapore
10 Kent Ridge Crescent
Singapore 119260**

For more details, visit us on the WWW:

<http://www.nus.sg/NUSinfo/Appoint/med-physio.htm>

Only shortlisted candidates will be notified.

EUROPEAN OPPORTUNITIES

THE UNIVERSITY of York

DEPARTMENT OF BIOLOGY

LECTURESHIP - THE PLANT LABORATORY

Applications are invited for a Lectureship in Plant Biology in the Department of Biology (RAE 5). We seek an individual applying molecular approaches to basic problems in plant biology. The appointee will be based in the recently built Plant Laboratory in an internationally acclaimed research environment. It is expected that the appointee will complement the research and teaching interests of existing staff.

The position is available from 1 January 1999 and salary will be within the Lecturer Grade A (£16,655 - £21,815 pa) or Grade B (£22,726 - £29,048 pa) scale, depending upon experience.

Informal enquiries may be made to Dianna Bowles (wjs3@york.ac.uk); Ottoline Leyser (hm011@york.ac.uk); Dale Sanders (ds10@york.ac.uk); or to the Head of Department, Alastair Fitter (01904 432851); (le3@york.ac.uk).

For further particulars and details of how to apply please write to the Personnel Office, University of York, Heslington, YORK YO10 5DD or e-mail on: jobs@york.ac.uk, quoting reference number 6/3070. The closing date for applications is 13 November 1998.

POSTDOCTORAL POSITIONS IN HEMATOPOIESIS

Postdoctoral positions are available to study gene regulation, transcriptional mechanisms, and gene therapy approaches in hematopoietic systems. The following faculty members, who meet on a regular basis to discuss their mutual interests, have postdoctoral training positions available for NIH-supported research in their laboratories.

**Mount
Sinai**

George Atweh, MD (Hematology, Box 1079)
Gene transfer into hematopoietic stem cells
for the treatment of hemoglobinopathies.

Margaret H. Baron, MD, PhD (Hematology, Box 1079)
Transcriptional regulation during hematopoietic differentiation and development.

James J. Bieker, PhD (Molecular Biology, Box 1126)
Transcriptional regulation of gene expression during erythropoiesis.

Jonathan D. Licht, MD (Cancer Center, Box 1130)
Transcriptional function of PLZF in acute promyelocytic leukemia. Transcriptional function of BRCA1.

Schickwann Tsai, MD, PhD (Gene Therapy/Molecular Medicine, Box 1496) Hematopoietic stem cell biology.

Individuals with training in molecular biology and/or biochemistry will be given preference. Interested candidates should send curriculum vitae and names, addresses, and phone numbers of three references to one or more of the above faculty members (please indicate department and Box number) at:

Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. We are an equal

Mount Sinai School of Medicine

POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITIONS IN REGULATION OF ASYMMETRIC STEM CELL KINETICS

Positions available immediately for recent graduates trained in biochemistry, cell biology, and molecular biology with interests in the function of tumor suppressor proteins and guanine ribonucleotides in asymmetric stem cell kinetics.

Research projects include investigations of p53 tumor suppressor protein function, DNA replication, cyclin kinase regulation, gene expression analyses by cDNA array techniques, isolation of cell division control genes by insertional mutagenesis, and guanine ribonucleotide metabolism.

Interested graduates should forward curriculum vitae and three letters of reference to:

James L. Sherley, M.D., Ph.D.
Division of Bioengineering and
Environmental Health
Massachusetts Institute of Technology
Building 16, Room 755
77 Massachusetts Avenue
Cambridge, MA 02139

POSTDOCTORAL POSITIONS DNA ARRAYS AND CANCER MUTATION DETECTION

Positions available as part of multi-institutional NCI-funded Program Project and DNA Array Grants to develop (i) novel DNA chips for quantitative SNP detection, and their use in (ii) identification of mutations and new cancer genes associated with tumor development. Applicants should have a Ph.D., preferably with experience in genomics, nucleic acid chemistry, automation in DNA and PCR technology, human or cancer genetics. Competitive salary commensurate with experience. Send curriculum vitae and names of three references to:

Professor Francis Barany
Programs of Biochemistry, Structural Biology, and
Molecular Biology
Box 62, Cornell University Medical Center
1300 York Avenue
New York, NY 10021
FAX: 212-746-8587

Equal Opportunity Employer.

POSTDOCTORAL FELLOW NEUROBIOLOGY

Study the neurochemical anatomy of spinal cord and brainstem circuits involved in uterine innervation. Particular emphasis on estrogen effects, estrogen receptors, and neurotransmitters. Experience with immunohistochemistry and cell biology desirable. Send curriculum vitae indicating position and department, description of research experience, and names of three references by January 1, 1999, to: Human Resources, c/o Raymond E. Papka, Ph.D., Northeastern Ohio Universities College of Medicine, 4209 State Route 44, P.O. Box 95, Rootstown, OH 44272-0095. E-mail: rpapka@neoucom.edu. NEOUCOM is an Equal Employment Opportunity/Affirmative Action Educator and Employer.

POSTDOCTORAL POSITIONS available to study (1) T cell recognition in autoimmunity or (2) the MHC Class I-related receptor, FeRn. Experience in cellular and molecular/biophysical techniques desirable. Please send curriculum vitae and names, addresses, and so forth of three referees to: Dr. E. Sally Ward, Center for Immunology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-8576. E-mail: sally@skylab.swmed.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available to study glucocorticoid-induced expression of the fatty acid synthase gene in fetal lung and signal transduction mechanisms in surfactant secretion in isolated lung cells. Background in molecular biology and/or protein phosphorylation required. Send curriculum vitae and names of three references to: Dr. Seamus A. Rooney, Department of Pediatrics, Yale University, P.O. Box 208064, New Haven, CT 06520-8064.

A **POSTDOCTORAL POSITION** is available to examine the molecular aspects of acclimation of cyanobacteria to their environment that will entail the use of differential display and microarray technology. Contact: Arthur Grossman, Carnegie Institution of Washington, 260 Panama Street, Stanford, CA 94305. E-mail: arthur@andrew.stanford.edu.

POSITIONS OPEN

POSTDOCTORAL POSITIONS

The Gwen Knapp Center is part of the newly formed Institutes of Molecular Medicine, and interdepartmental research organization located within The University of Chicago. Several projects are available immediately within this interactive and productive research center. The following projects under the direction of the listed Investigator are available immediately within this interactive and productive research center: **Craig Thompson:** T cell activation and apoptosis; **Phillip Ashton-Rickardt:** T cell memory; **Guido Franzoso:** Transcriptional regulation; **Steven Reiner:** Helper T cell differentiation; **Chung-Ru Wang:** MHC Class Ib molecules in T cell development. Competitive applicants must have demonstrated excellence in laboratory research. Reply by mail with curriculum vitae and the names of three references to: Ms. Sarah Rose, Gwen Knapp Center for Lupus and Immunology Research, The University of Chicago, 924 East 57th Street, Room R413A, Chicago, IL 60637-5420. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOW HUMAN GENE THERAPY RESEARCH INSTITUTE

The Human Gene Therapy Research Institute (HGTRI) has available a Postdoctoral position for research in gene transfer systems and their application to the treatment and prevention of cancer.

Laboratory focus is on translational research with a long-term goal of improving gene transfer into humans. Backgrounds in molecular virology, cancer biology, immunology, and microbiology will be considered. Position is available immediately.

HGTRI is a not-for-profit, research organization located in Des Moines, Iowa. Laboratories provide state-of-the-art equipment, animal facility, administrative and technical support. Applicants should submit curriculum vitae, outline of current and future research interests, and three references to: Human Resources, Iowa Health System, 1313 High Street, Suite 111, Des Moines, IA 50309. E-mail: foertsba@ihs.org. Equal Opportunity Employment/Affirmative Action/Minorities/Females/Disabled/Veterans.

POSTDOCTORAL FELLOW

As part of a recently approved expansion of my laboratory, we have an immediate opening for a Postdoctoral Fellow with a strong background in molecular biology, preferably with experience in the area of retinoid metabolism. We are using a variety of *in vivo* and *in vitro* systems to investigate retinoid-nutrient-drug interactions to better understand basic control mechanisms involved with these interactions in both normal and malignant tissues. This position represents an excellent opportunity to become involved in basic research in cancer and nutrition in a challenging and energetic environment. Mail curriculum vitae and names, addresses, and telephone numbers of three references to: Dr. Kevin C. Lewis, Nutrient Interactions Group, Basic Research Laboratory, Division of Basic Sciences, National Cancer Institute, Frederick Cancer Research and Development Center, NIH, Building 560, Room 12-27, Frederick, MD 21702. Telephone: 301-846-5175; e-mail: lewisck@ncifcrf.gov.

POSTDOCTORAL FELLOW EVOLUTIONARY PHYSIOLOGY AT UCLA

Multiyear position open in the Diamond group for laboratory studies of vertebrate physiological design from an evolutionary perspective. Projects include regulatory physiology of reptiles and amphibians (*J. Exp. Biol.* 198: 1313, 1995), intestinal nutrient transport (*Nature* 386: 457, 1997), and total parenteral nutrition in rats. Required: experience in studying isolated tissues, handling live vertebrates, and evolutionary/ecological reasoning. Send curriculum vitae, statement of experience and interests, copies of papers or abstracts, and several letters of reference to: Dr. Jared Diamond, Physiology Department, UCLA Medical School, Los Angeles, CA 90095-1751. FAX: 310-206-5661; e-mail: jdiamond@mednet.ucla.edu.

POSITIONS OPEN

ALLERGY AND INFLAMMATION MOLECULAR HEMATOPOIESIS

Two **POSTDOCTORAL POSITIONS** available immediately. The first in the molecular biology and immune functions of eosinophils to analyze eosinophil effector mechanisms and structure-function relationships for eosinophil granule protein mediators of inflammation and tissue damage in asthma and allergic and parasitic diseases. Experience in molecular biology, protein expression/purification, carbohydrates/lectins, membrane biology, and protein structure-function preferred. The second in transcription factors in hematopoietic development to study transcriptional regulation of eosinophil differentiation and to design strategies for identifying and cloning transcription factors that regulate myeloid-specific gene expression. Molecular biology experience in transcription factor research, yeast 1-2 hybrid cloning systems, and transgenic analyses preferred. Mail/FAX curriculum vitae and three letters of reference to: Steven J. Ackerman, Ph.D., Department of Biochemistry and Molecular Biology (MC536), A-312 College of Medicine West, University of Illinois at Chicago, 1819 West Polk Street, Chicago, IL 60612. FAX: 312-996-5623.

UIC is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP VASCULAR CELL AND MOLECULAR BIOLOGY Albert Einstein College of Medicine

The laboratory of J. Anthony Ware is seeking Ph.D.'s and/or M.D.'s to join our research program in basic mechanisms of cardiovascular disease. The laboratory's goal is to identify and characterize molecular triggers of endothelial cell growth, migration, and adhesion that lead to angiogenesis, including a newly identified modulator of integrin function, the PKC family, and the endothelial thromboxane A₂ receptor. Molecular skills and/or experience with vascular cell biology desirable. Send curriculum vitae and names of three references to: J. Anthony Ware, M.D., Sidney L. and Miriam K. Olson Professor of Cardiology, Professor, Molecular Pharmacology, Chief, Cardiovascular Division, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. FAX: 718-430-8989; e-mail: jaware@acom.yu.edu. Equal Opportunity Employer.

RESEARCH POSITIONS

POSTDOCTORAL and SENIOR TECHNICIAN positions immediately available in a laboratory focusing on genetic and mammalian genomic analysis. These studies include gene mapping, positional cloning, and complex trait analysis. The successful applicant will have a strong molecular genetics background. Experience in genomic analysis highly desirable. Please send a curriculum vitae and names of three references to: David R. Beier, M.D., Ph.D., Associate Professor of Medicine, Brigham and Women's Hospital, Harvard Medical School, 75 Francis Street, Boston, MA 02115. FAX: 617-264-5292; e-mail: beier@rascal.med.harvard.edu. Brigham and Women's Hospital is an Equal Opportunity Employer.

POSTDOCTORAL POSITION CELLULAR IMMUNOLOGY

A Postdoctoral position to study cytokine regulation during experimental cutaneous leishmaniasis is immediately available at The University of Pennsylvania. Knowledge of immunology and molecular techniques preferred. Send curriculum vitae and names of three references to: Jay Farrell, Ph.D., Laboratory of Parasitology, University of Pennsylvania, 3800 Spruce Street, Philadelphia, PA 19104.

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

POSTDOCTORAL POSITION (two) leukocyte recruitment studying rheumatoid arthritis; (one) gene therapy; (three) angiogenesis, cell adhesion, and cytokines (*Nature* 376:517; *Science* 258:1798; *J. Clin. Invest.* 101: 746). Experience with adenoviral vectors, immunoassays, angiogenesis and cell adhesion assays, arthritis animal models, gene knockout mice, and molecular biology desirable. Send curriculum vitae and three reference names to: Dr. Alisa Koch, Northwestern University Medical School, Ward 3-315, 303 East Chicago Avenue, Chicago, IL 60611. FAX: 312-503-0994; e-mail: aekoch@nwu.edu.

**Karolinska Institutet
Center for Genomics Research
Postdoctoral Computational Biologist**

The Center for Genomics Research (CGR) at Karolinska Institutet (KI) in Stockholm, Sweden is looking for a postdoctoral fellow to participate in a newly started bioinformatics project. The aim of the project is to use comparative genomics approaches to identify and characterize new members of protein families relevant to neurological or psychiatric diseases, with a special focus on receptors.

The successful candidate should have a Ph.D. in bioinformatics or related field and detailed knowledge of molecular biology. Alternatively, a Ph.D. in molecular biology and more than one year of experience in bioinformatics is acceptable. A broad experience of sequence comparison, database searching, and homology analysis techniques is a prerequisite.

Bioinformaticians

Individuals wanting to pursue postdoctoral or predoctoral studies in bioinformatics areas, e.g., genomic annotation, prediction methods, database searching, or sequence clustering, are also encouraged to contact us. Applicants should have a biological or computational background and experience with bioinformatics.

CGR is the most recent department at KI, and was founded following an agreement of support and scientific collaboration with Pharmacia & Upjohn in 1997.

Please send applications with attached CV and relevant publications to:

**Erik Sonnhammer, Ph.D.
Bioinformatics Unit
Center for Genomics Research
Karolinska Institutet
S-171 77 Stockholm, Sweden
Fax: +46-8-337983
E-mail: erik.sonnhammer@cgr.ki.se
WWW: <http://www.cgr.ki.se>**



**Heriot-Watt University
Edinburgh**

DEPARTMENT OF BIOLOGICAL SCIENCES

PROFESSOR OF BIOCHEMISTRY

Biological Sciences is a multi-disciplinary department of 22 academic staff with a research focus on the beverage fermentation industries. In the recent Research Assessment Exercise, staff were graded 4 by the Food Science and Technology Panel for their research in cereal science and technology and microbial molecular biology and physiology. It is intended to support and extend this research activity through the appointment of a senior academic with expertise in the biochemistry/molecular biology of foods or food commodities.

You will be expected to continue and develop research of international standing and will preferably have strong links with industry. You will also be involved in the development of undergraduate programmes in food science.

Informal enquiries should be addressed to Professor Fergus G Priest, Head of Department of Biological Sciences, tel 0131 451 3464; fax 0131 451 3009; email F.G.Priest@hw.ac.uk

Further particulars and an application form are available from the Personnel Office, Heriot-Watt University, Edinburgh EH14 4AS. Tel 0131 451 3475 (24 hours) quoting Ref 163/98/SC. Closing date: 30 November 1998.

INSTITUTE OF BIOLOGICAL SCIENCES

The Institute aims to consolidate research in genetics by investment in new staff and facilities in the area of Functional Genomics.

**PROFESSOR OF
FUNCTIONAL GENOMICS**

Applications are invited from individuals with proven leadership qualities and generic research skills in structural and functional genome analysis to enhance existing research strengths in plant and fungal molecular genetics, parasite proteomics, microbial and plant metabolome analysis, bioinformatics and intelligent computing.

**LECTURESHIP IN
MOLECULAR GENETICS**

A Lectureship in plant/fungal molecular genetics is available to consolidate activity in Functional Genomics in Aberystwyth. Suitable applicants will have research experience in areas such as gene mapping and mutagenesis, positional cloning, transcriptome profiling and bioinformatics.

Informal email enquiries to the Institute Director Prof. John Draper (jhd@aber.ac.uk) or the Director of Research Prof. Douglas Kell (dbk@aber.ac.uk). Further information about the Department can be found via <http://www.aber.ac.uk/abc/home.html>.

DEPARTMENT OF COMPUTER SCIENCE

LECTURESHIP IN BIOINFORMATICS

Applications are invited for a Lectureship in the field of Bioinformatics. One responsibility will be to help extend the existing collaboration with the Institute of Biological Sciences, which has already led to joint research grants totalling over £1.8M. The successful candidate will have an excellent research record in computing techniques relevant to data mining or other aspects of bioinformatics, and will be required to contribute to the general teaching of Computer Science, as well as appropriate specialised topics.

Informal enquiries may be made to the Head of Department, Frank Bott (mfb@aber.ac.uk) or to the Director of Research, Jem Rowland (jjr@aber.ac.uk). Further information about the Department can be found via <http://www.aber.ac.uk/~dcswww>.

The lectureship posts are for an initial fixed term of five years. Salary:- Lecturer A/B - £16,655 to £29,048 per annum and minimum salary within the Professorial range - £35,170 per annum.

Further particulars and an application form can be obtained from the Personnel Office, Old College, King Street, Aberystwyth SY23 2AX. Tel: (01970) 621832, e-mail: personnel@aber.ac.uk

Applicants for the Professorial post are asked to provide 12 copies of their current curriculum vitae, together with the names and addresses of 3 academic referees.

Closing date: 27 November 1998.



Prifysgol Cymru
Aberystwyth
The University of Wales



POSITIONS OPEN

POSTDOCTORAL POSITION TRANSCRIPTIONAL REGULATION

A three-plus-years position is available immediately to study promoter interactions at several nuclear genes for cytochrome *c* oxidase subunits, including interactions among transcription factors and isolation of new factors. Training in molecular biology is essential; protein chemistry is helpful. A competitive salary and a benefits package will depend on training and experience. To apply, send or FAX a curriculum vitae, a short statement of research experience and interests, and names of three references to: Dr. Lawrence I. Grossman, Center for Molecular Medicine and Genetics, Wayne State University School of Medicine, 540 East Canfield, Detroit, MI 48201. FAX: 313-577-5218; e-mail: l.grossman@wayne.edu. WSU is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS

Analysis of transcriptomes in relation with neuromuscular diseases using macro- and micro-array platforms.

We are seeking experienced scientists with specific skills in cDNA cloning, gene mapping, expression profiling, and data analysis to work within the frame of the Integrated Molecular Analyses of Genomes and their Expression (IMAGE).

Send curriculum vitae and two letters of recommendation to: Charles Auffray, Genexpress, CNRS UPR 420, BP 8, 94801 Villejuif cedex France. E-mail: obrasier@infobiogen.fr.

POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE

University of Colorado Health Sciences Center

To focus on the mechanism of action of hematopoietic growth factors and to examine inhibition of differentiation by specific oncogenes using cell culture and ES technology. Experience in molecular/cellular biology is highly desirable. Send curriculum vitae and the names of three references to: Dr. Andrew S. Kraft, Division of Medical Oncology, 4200 East 9th Avenue, Denver, CO 80262. FAX: 303-315-5502.

UCHSC is an Equal Opportunity/Affirmative Action Employer.

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 is available immediately for a highly motivated individual to study neuroendocrine functions of the skin. Strong background in molecular, cellular biology, and biochemistry is essential. Send curriculum vitae, brief description of experience, and names of three references to: Andrew Slominski, M.D., Ph.D., Department of Pathology, Loyola University Medical Center, Building 103, Room 0177, 2160 South First Avenue, Maywood, IL 60153. E-mail: aslomin@wpo.it.luc.edu; FAX: 708-327-2620; Telephone: 708-327-2613. Loyola University is an Equal Opportunity/Affirmative Action Employer.

NIH-funded **POSTDOCTORAL POSITION** available to study the molecular and cellular basis of malaria parasite development in *Anopheles* mosquitoes. Applicants should have a Ph.D. and expertise in molecular/cell biology and in parasitology or biochemistry. Send statement of interest, curriculum vitae, and addresses of three references to: Dr. Shirley Luckhart, Department of Biochemistry, 124 Engel Hall, Virginia Tech, Blacksburg, VA 24061. E-mail: luckhart@vt.edu. Virginia Tech is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS available to study molecular and cellular biology of antigen presentation by MHC class II molecules. Experience in immunology and molecular biology preferred. Send curriculum vitae and names and addresses of three references to: Elizabeth Mellins, H306B Department of Pediatrics, Stanford University Medical Center, Stanford, CA 94305. E-mail: mellins@stanford.edu.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to an individual who has less than five years of postdoctoral experience and is interested in the physics of membrane ion channels. Independence a plus. Ideally (but impossibly) the candidate combines experimental skills (preferably, in ion channel reconstitution or patch-clamp techniques) with a flair for statistical physics, polymer science, and electrochemistry. Osmotic stress and open-channel noise analysis, the main experimental techniques, complement standard single-channel statistical methods. Objects examined include but are not limited to VDAC, porins, alphatoxin, alamethicin. (For sample work see: *Nature* 370:279; *Nature* 385:319; *Biophys. J.* 74:2365.) Applicants are invited to send their full curriculum vitae and two letters of recommendation to: Dr. Sergey M. Bezrukov or Dr. V. Adrian Parsegian, Laboratory of Physical and Structural Biology, National Institute of Child Health and Human Development, National Institutes of Health, Building 9, Room 1E-122, Bethesda, MD 20892-0924.

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POSTDOCTORAL POSITION in immunology available immediately, to study the molecular basis for the selective recruitment of lymphocytes, particularly gamma/delta T cells, into tissues. Opportunity to work with a committed group of Investigators studying leukocyte trafficking with access to state-of-the-art equipment, such as digital imaging fluorescent microscopes, cell sorters, and DNA sequencers. Applicants must have cellular immunology and, preferably, molecular biology experience, and ability to design appropriate experiments and write manuscripts. Send a letter of application, curriculum vitae, and have three letters of reference sent to: Dr. Mark Jutila, Associate Professor and Head, Veterinary Molecular Biology, Montana State University, Bozeman, MT 59717-3610. FAX: 406-994-4303; e-mail: uvsjm@montana.edu. ADA/Affirmative Action/Equal Opportunity/Veteran's Preference.

POSTDOCTORAL POSITION IN CANCER GENETICS

A funded Postdoctoral position is available immediately to study the genetic mechanisms of human prostate cancer. The technique of representational difference analysis will be applied to map the loci of novel tumor suppressor genes and to obtain gene expression profiles. The ideal candidate will have experience in basic molecular genetic techniques. Applicants must have a doctoral degree and documented experience in molecular genetics techniques (PCR, DNA hybridization, DNA sequencing, DNA cloning). Send curriculum vitae and names of three references to: Chris Moskaluk, M.D., Ph.D., Box 214, Health Sciences Center, University of Virginia, Charlottesville, VA 22908. The University of Virginia is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP. NIH-funded position available immediately to study molecular mechanisms leading to genome rearrangements and chromosomal translocations (see: *Blood* 87:2649; *MCB* 17:4070). Requires a Ph.D. or M.D., demonstrated scientific excellence, strong communication skills, and substantial experience in standard molecular biology techniques. Please send or FAX curriculum vitae and names of three references to: Dr. Peter Aplan, Roswell Park Cancer Institute, Buffalo, NY 14263. FAX: 716-845-4502; e-mail: paplan@sc3101.med.buffalo.edu.

POSTDOCTORAL POSITION in molecular oncology to study the expression and function of paired domain transcription factors in cancer. A current focus is the chimeric PAX3-FKHR and PAX7-FKHR proteins generated by chromosomal translocations in rhabdomyosarcoma. Experience in molecular biology is required. Send curriculum vitae and names of three references to: Dr. Frederic G. Barr, Department of Pathology, University of Pennsylvania, 36th Street and Hamilton Walk, Philadelphia, PA 19104-6082. FAX: 215-898-4227. Equal Opportunity Employer/Affirmative Action.

A **POSTDOCTORAL POSITION** is available to study growth factor signaling and apoptosis in breast cancer. A Ph.D. degree with a strong background in molecular and cellular biology is required. Send curriculum vitae, a brief description of research experience, and names of three references to: Dr. Hyeon-Reh Choi Kim, Department of Pathology, Wayne State University, School of Medicine, 540 East Canfield, Detroit, MI 48201. FAX: 313-577-0057; e-mail: hrckim@med.wayne.edu.

POSITIONS OPEN

BACTERIAL EVOLUTION THE UNIVERSITY OF ARIZONA

A **POSTDOCTORAL POSITION** is available to study the rates and patterns of evolution in bacterial genes and genomes. Ongoing projects examine (1) biases in substitution rates in *E. coli* and *Salmonella*, (2) the organization of bacterial chromosomes, and (3) the evolution of virulence attributes in enteric bacteria. Ph.D. in related field required. Please send curriculum vitae and the names of two referees to: Howard Ochman, Department of Ecology and Evolutionary Biology, 310 Biological Sciences West, P.O. Box 210088, University of Arizona, Tucson, AZ 85721-0088. Applications will be reviewed beginning October 12, 1998, and continue until the position is filled.

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A **POSTDOCTORAL POSITION** is available in the Department of Medicine at the University of California, San Diego and the VA Medical Center, San Diego to examine the regulation of expression the 5-lipoxygenase and the role in inflammatory and allergic diseases. Transcriptional and posttranscriptional regulation of this pathway will be examined. A strong background in molecular biology and interest in inflammation are required. Applicants should send their curriculum vitae, letters of recommendation, and a cover letter describing their experience and research interest to: Timothy D. Bigby, M.D., VA Medical Center, San Diego, M.C. 111J, 3350 La Jolla Village Drive, San Diego, CA 92130. E-mail: tbigby@ucsd.edu.

POSTDOCTORAL RESEARCH ASSOCIATE

Position available to study immunochemical and cellular aspects of mucosal immunity. Experience in cellular immunology required. Background in molecular biology is also desirable. Send curriculum vitae and names of three references to: Dr. Paul C. Montgomery, Professor and Chair, Department of Immunology and Microbiology, Wayne State University Medical School, 540 East Canfield Avenue, Detroit, MI 48201. Wayne State University is an Equal Opportunity/Affirmative Action Employer. All buildings, vehicles, and structures at WSU are smoke-free. Wayne State University—people working together to provide quality service.

POSTDOCTORAL FELLOWSHIP WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

Available position to study cell surface receptor biology (e.g., *J. Biol. Chem.* 272:16838, 1997). Provide curriculum vitae to: Alan L. Schwartz, Box 8116, Washington University School of Medicine, St. Louis, MO 63110 USA. FAX: 314-454-0537; e-mail: schwartz@kids.wustl.edu. An Equal Opportunity/Affirmative Action Employer. Minorities/Females/Disabled/Veterans.

POSTDOCTORAL POSITION available at the University of Southern California/Norris Cancer Center to study the molecular basis of stress induction in mammalian cells. Research includes regulation of gene expression, functional role of stress proteins in apoptosis and tumorigenesis, and cancer gene therapy. Send résumé to: Dr. Amy Lee, Department of Biochemistry and Molecular Biology, NOR 507, University of Southern California School of Medicine, 1441 Eastlake Avenue, Los Angeles, CA 90033. E-mail: amylee@zygote.hsc.usc.edu.

POSTDOCTORAL FELLOW M.D. OR PH.D.

Ideal candidate must have hands-on experience in surgical techniques and integrative cardiac physiology. Candidates must be U.S. citizens or permanent residents. Curriculum vitae should be sent to: Dr. Judith K. Gwathmey, Professor of Medicine and Physiology, Boston University School of Medicine, e-mail: gwathmey@tiac.net. An Affirmative Action/Equal Opportunity Employer.

The Division of Digestive Diseases, The Ohio State University College of Medicine and Public Health, has positions open for **POSTDOCTORAL FELLOWS** who have obtained their Ph.D. in molecular biology. Those interested should send cover letter and curriculum vitae to: Barbara Hilling, Digestive Diseases, 410 West 10th Avenue, Room N214 Doan Hall, Columbus, OH 43210-1228. Telephone: 614-292-6828; FAX: 614-688-5706.

POSTDOCTORAL POSITIONS IN ASTRONOMY AT MPIA

The Max-Planck-Institut für Astronomie (MPIA) in Heidelberg, Germany invites applications for a number of postdoctoral research positions in observational astronomy, theoretical astrophysics, or instrumentation.

Positions are available on the German BAT scale (BAT IIa) offered initially for two years with extensions possible up to a total of five years. Additional "fellowships" are offered for two-year periods. The successful candidates are expected to carry out observational or theoretical research programs and will have full access to both the MPIA's (super)computing facilities and to the telescopes on Calar Alto, which are operated by the MPIA; further, they will have access to ESO's La Silla and VLT facilities. Candidates may be asked to devote a modest fraction of their time to functional duties at the Calar Alto Observatory or at the Heidelberg Institute.

The MPIA operates the Calar Alto Observatory (<http://www.mpia-hd.mpg.de/CAHA/>), which has a total of four telescopes (Schmidt, 1.23m, 2.2m, and 3.5m). In addition to a standard suite of spectrographs and CCD cameras, there is a variety of new instruments and ongoing instrumental programs for these telescopes; these include wide-field near-infrared imaging (OMEGA Prime, 1024x1024 HgCdTe), a thermal infrared camera (128x128 SiAsBIB), and an operative adaptive optics system for the 3.5m telescope with sodium laser guide star. The MPIA is building the CONICA high-resolution camera for the VLT and actively collaborates with ESO. It is constructing a 10-micron beam combiner for use with the VLT interferometer. The institute also operates the ISOPHOT Data Center in Heidelberg, and is a partner in the LBT Project. In addition to its general computing facilities, the MPIA offers special computers for theoretical research including an ORIGIN 2000 system, a cluster of 7 special hardware devices (GRAPE) connected to local Ultra Sparc Workstations, and access to a parallel Cray T3E-600 and a vector NEC SX-4B supercomputer at the MPP Computing Center near Munich.

Among the broad range of applications we are soliciting, we are particularly interested in finding candidates for two areas: (1) The theory group at MPIA is seeking to fill a position on the BAT IIa level (2 + 3 years) with a possible promotion to BAT Ib after the first year. We seek qualified theoretical astrophysicists with research interests that overlap with the current research areas of the theory group: computational fluid dynamics, dynamical processes in the interstellar medium, star formation, structure and dynamics of galaxies, and galaxy formation. The successful candidate will be asked to participate in organizing the theory group and supervising its graduate students. (2) A group at MPIA is likely to join as a partner the Sloan Digital Sky Survey project; we seek to fill a position for a liaison to the SDSS, who will work on the survey data.

Further information can be found on the Website: <http://www.mpia-hd.mpg.de/welcome.html> or <http://www.mpiahd.mpg.de/mpia/projects.html>

Applicants should have a Ph.D. in astronomy, physics, or a related field by the start of the appointment. The positions may commence as early as February 1999; later start dates are also possible. The monthly stipend depends on age and marital status, but is typically above DM 3,000 per month after taxes. The application should describe research experience and interests, and should include a complete curriculum vitae and bibliography. Two letters of recommendation should be sent directly to the address below, along with the name, address, and phone number of an additional scientist who would be willing to give a reference. Application materials should be sent no later than 31 December 1998, to:

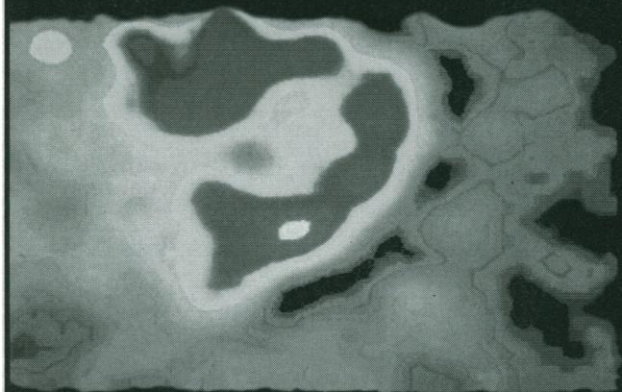
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Your entry into Bioinformatics may have been via a Biology, Chemistry or related qualification coupled with good computational skills; or you may equally be a computational expert with practical experience in a major laboratory. In this role you will benefit from the support of a thriving research and development organisation with a global reputation and the scope to generate original solutions. REF: Z/DDP/9/S

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POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP position is available immediately to participate in the study of cardiac morphogenesis and dysmorphogenesis. The experimental approaches include (1) analysis of embryonic development in transgenic animal models using *in situ* hybridization and immunohistochemical techniques, (2) *in vitro* studies of mechanisms responsible for cardiac septation, (3) *in vivo* microinjection of retroviral constructs, and (4) cell targeting and tracing techniques. Applicants must have significant hands-on experience in molecular biological techniques. Experience in experimental, embryological, and *in vitro* culture techniques is preferred. Salary and benefits are commensurate with experience. Send curriculum vitae and names and telephone numbers of three references to: **Dr. Andy Wessels**, Department of Cell Biology and Anatomy, Cardiovascular Developmental Biology Center, Medical University of South Carolina, P.O. Box 250508, Suite 601, 173 Ashley Avenue, Charleston, SC 29425-2204. Telephone: 843-792-8183; FAX: 843-792-0664; e-mail: wesselsa@musc.edu. *Women and minorities are encouraged to apply. An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL/RESEARCH ASSOCIATE position. Molecular cytogeneticist. Ph.D. to study etiology of hormonally related cancers. Experience in mammalian tissue culture, molecular biology, karyotyping, CGH, FISH. Knowledge of Vysis Workstation useful. Proficiency in English, spoken and written, is essential. Submit curriculum vitae and list of three references with telephone numbers to: **Dr. Jonathan J. Li**, Kansas Cancer Institute, Kansas University Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66009. FAX: 913-588-4740; e-mail: jli1@kumc.edu.

POSTDOCTORAL POSITION available to participate in studies directed toward the identification and characterization of genes involved in inherited immunodeficiencies, particularly genes controlling B cell development. The applicant should have a Ph.D. or M.D.-Ph.D. and experience in molecular biology and/or tissue culture.

Please send curriculum vitae, statement of research interests, and three letters of reference to: **Dr. M. E. Conley**, Department of Immunology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105.

POSTDOCTORAL POSITIONS available immediately to study mechanisms mediating effects of insulin and growth factors on gene expression (*JBC* 273:6482, 1998). Molecular and cellular approaches will be used to study protein/protein and DNA/protein interactions mediating effects of insulin/IGF responsive transcription factors on gene expression. Send curriculum vitae and names of three references to: **Terry Unterman, M.D.**, Room 5A122A Research, VA West Side Medical Center, Chicago, IL 60612. FAX: 312-455-5877.

RESEARCH ASSOCIATE POSTDOCTORAL FELLOW POSITION

Position to study function of Na-K-2Cl cotransporter protein in cerebral ischemia model. Surgical skills and experience in animal preparation essential. Candidates with knowledge of neuroanatomy, neurohistochemistry, and biochemistry are desirable. Send curriculum vitae and names of three references to: **Dandan Sun, M.D.**, Ph.D., Department of Neurosurgery, University of Wisconsin, 600 Highland Avenue, Madison, WI 53792. Telephone: 608-263-4060; FAX: 608-263-1728; e-mail: sun@neurosurg.wisc.edu.

EUROPEAN OPPORTUNITIES

RhoBio, a joint venture between Rhône-Poulenc Agro and biogemma, has started an ambitious plant functional genomic program. We are seeking to hire highly experienced **MOLECULAR BIOLOGISTS** and **BIOINFORMATICIANS** (scientists and technicians). The successful applicants will participate in a multifaceted integrated program to identify genes useful for crop improvement. Several positions will be available from early 1999 to work in our state-of-the-art facility located at Evry, 25 kilometers south of Paris, in the Génopôle, the French center of excellence for genome analysis.

Interested applicants should send a letter of intent and a curriculum vitae in confidence to: **Ms. Hélène Bordel**, Human Resources, Rhône-Poulenc Agro, 14/20 rue Pierre Baizet, 69263 Lyon cedex 09 France.

POSITIONS OPEN

POSTDOCTORAL POSITIONS (RESEARCH ASSOCIATES) available to study mechanisms of growth factor and oncogene redox intracellular signaling. Applicants must have a Ph.D. or equivalent degree and a background in molecular biology with cellular biology skills. An interest in the control of cell growth and cancer related to redox biochemistry preferred. Cover letter of interest with curriculum vitae should be sent to: **Dr. Garth Powis**, Arizona Cancer Center, SES 3977, 1515 North Campbell Avenue, Tucson, AZ 85724-5024.

Review begins November 16, 1998. *University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer/Minorities/Women/Disabled/Veterans.*

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Date and location: March 14-17, 1999. The R. David Thomas Center at Duke University, Durham, North Carolina.

Deadline for completed applications: January 4, 1999. For information, write:

Ms. Valerie A. Roberts
Course Administrator

Duke University Medical Center, Box 3445
Durham, NC 27710
Telephone: 919-684-2470
FAX: 919-684-2275

E-mail: vroberts@chg.mc.duke.edu

Or access our website: <http://www2.mc.duke.edu/depts/medicine/medgen/course>.

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EUROPEAN OPPORTUNITIES

POSTDOCTORAL POSITION

A Research Postdoctoral position (NIH-supported) is available to develop procedures of microencapsulation of particles in a configuration suitable for *in vivo* applications. Experiments involving pharmaceutical technology, characterization of particles and surfaces, *in vivo* experiments on mice and rats, evaluation of biocompatibility, and magnetic resonance spectroscopy will be conducted. Previous experience in pharmaceutical technology and/or chemical characterization of surfaces is required. This position opened for one or two years (starting immediately). Interested candidates (Ph.D.) should send a curriculum vitae and three letters of recommendation to: **Professor Bernard Gallez**, Laboratory of Medicinal Chemistry and Radiopharmacy, Université Catholique De Louvain, Avenue Mounier 73.40, Brussels B-1200 Belgium. FAX: 32-2-764-73-63; e-mail: gallez@cmfa.ucl.ac.be.

Two **POSTDOCTORAL POSITIONS** in molecular evolutionary genetics at the Max Planck Institute of Chemical Ecology. Population and ecological genetics of *Arabidopsis* and *Anabasis*.

Additional information can be found at website: <http://www.ice.mpg.de/>. Review of applications will begin 25 November 1998. Please send curriculum vitae, statement of research interests, and addresses and telephone numbers of three references to: **Thomas Mitchell-Olds**, Max Planck Institute of Chemical Ecology, Tatzendpromenade 1a, Jena 07745 Germany. Telephone: 49-3641-643657; e-mail: tmo@ice.mpg.de.

POSITIONS OPEN

Two **POSTDOCTORAL POSITIONS** available immediately. One position concerns the construction and utilization of reporter genes for the study of bacterial endophytes in grasses. The second position is for the genetic analysis of the mechanisms of plant disease suppression conferred by certain bacteria. Published experience in molecular genetics is required for both positions. Salary and benefits are competitive. Please send curriculum vitae and the names and addresses of three references by December 1, 1998, to: **Dr. Eric Triplett**, University of Wisconsin-Madison, e-mail: triplett@facstaff.wisc.edu.

POSTDOCTORAL POSITION AND PH.D. ASSISTANTSHIP available. Postdoctoral research is focused on the neurotoxicity of insecticides using a variety of behavioral and neurochemical endpoints related to Parkinson's disease. Graduate student project is on physiological analysis of insecticide target site resistance in insects. Send curriculum vitae and names of three references to: **Dr. J. R. Bloomquist**, Department of Entomology, Virginia Tech, Blacksburg, VA 24061. E-mail: jrbloom@vt.edu. *Virginia Tech is an Equal Opportunity/Affirmative Action Employer.*

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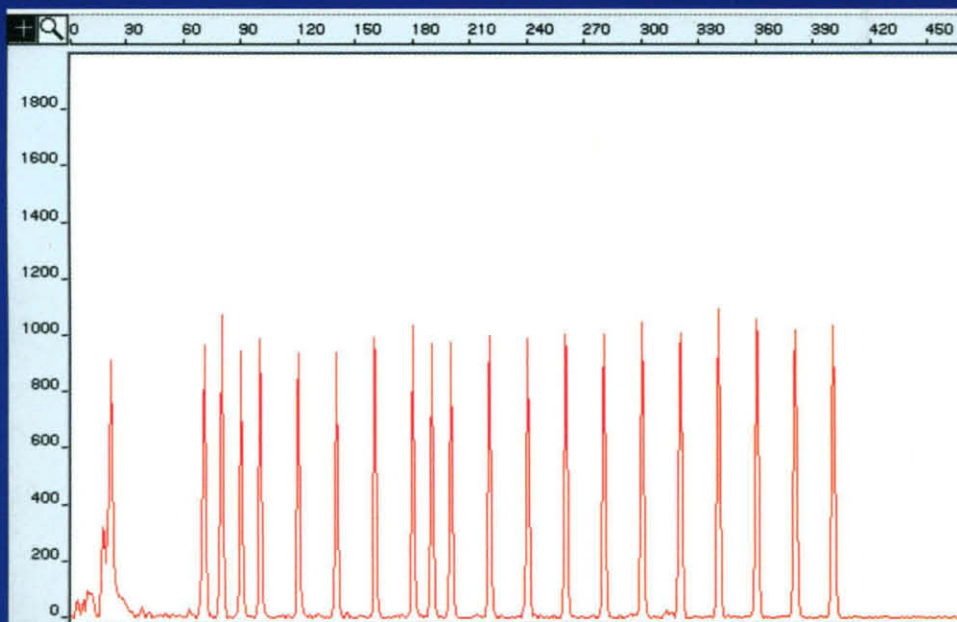
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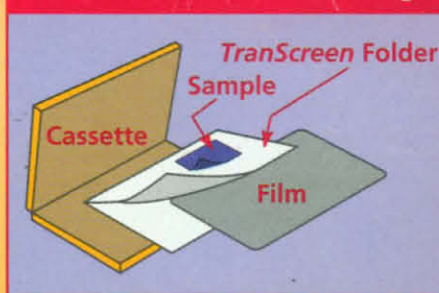
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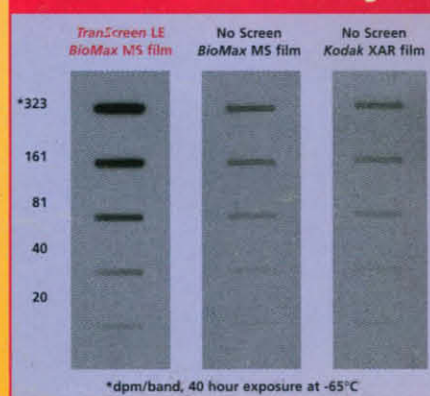
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