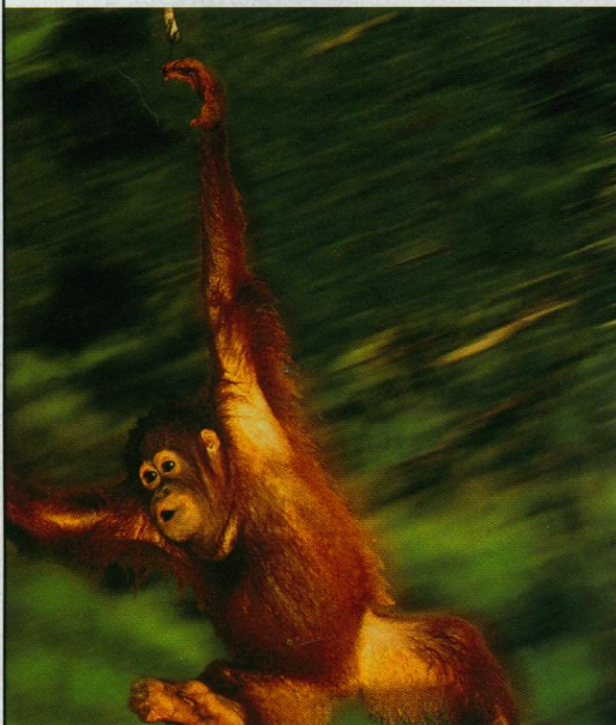
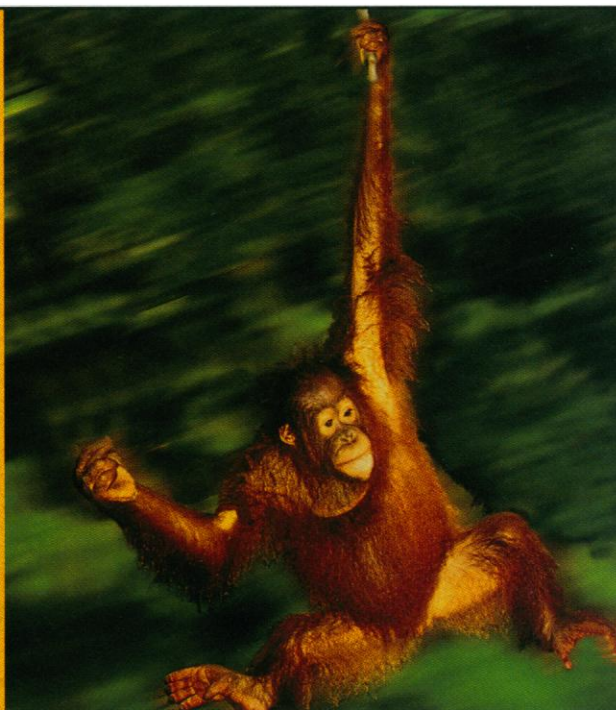


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# Accuracy Makes.



If you haven't been using our DNA sequencing services, you've been missing something. We provide exceptionally accurate DNA sequencing – over 99.995% accurate for genome sequencing. Our sequencing reads for plasmid inserts are typically over 900-1000 bases at greater than 99% accuracy.

At MWG-Biotech, Inc. we offer a variety of DNA sequencing services to fit most needs, from hundreds of base pairs to megabase pairs. Whether it's a cloning project or gap closures in your genome sequencing, we have it covered. Long read sequencing is our specialty, for fast performance at low cost. Accuracy, satisfaction and confidentiality are assured.

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# NEW PRODUCTS

## FASTER IMAGING OF DNA MICROARRAYS

The ChipReader laser confocal system for imaging DNA microarrays offers simultaneous reading of up to five different fluorescent dyes. It includes a high-speed scanning mechanism that gives results up to 10 times faster than previously possible, according to the manufacturer. The modular design provides researchers with flexibility to use any microarray format, including standard microscope slides, stainless steel cartridges, and glass plates. It can read glass, silicon, plastic, and nylon substrates. On glass substrates, ChipReader can read arrays printed on either the top or the bottom of the slide, wet or dry, with or without a cover glass. It features intuitive, icon-driven Windows NT software.

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## IMMUNOSTAINING DETECTION SYSTEMS

EnVision+ Detection Systems feature a labeled polymer technology that provides a rapid, easy-to-use, and biotin-free immunostaining system with superior intensity and accuracy. The patented technology is based on a horseradish peroxidase-labeled dextran polymer to which secondary antibodies are conjugated. Incorporating link and label onto the polymer backbone results in a biotin-free two-step assay. The system eliminates unwanted background from endogenous biotin in tissue to provide cleaner staining in fewer steps than conventional methods. In addition, it can be used for blot and enzyme-linked immunosorbent assay applications.

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## FILTER DISPENSER

The SMART Filter Dispenser, designed to save time for microbiologists who open many sterile packages containing membranes, conveniently releases a new sterile filter that can then be grasped with forceps. A filter box containing the filters on a sequentially numbered tape is inserted into the dis-

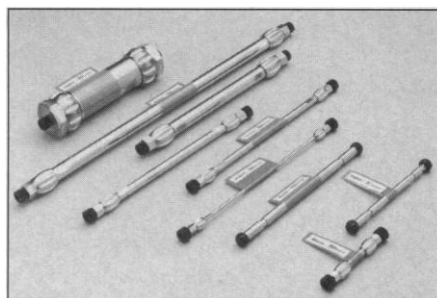
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penser. When the dispenser knob is turned, the cover strip and tape are separated automatically to release a filter. The dispenser's mechanical parts are maintenance-free, and the dispenser is suitable for use in clean rooms.

## HPLC COLUMNS WITH HYBRID PARTICLE TECHNOLOGY

A new line of high-performance liquid chromatography (HPLC) columns, XTerra, features new Hybrid Particle Technology in which the structure of the underlying chromatographic support is a new material, an organic/inorganic hybrid that has the positive attributes of both silica and polymer. The new support can improve HPLC's per-



formance attributes in speed, peak shape, and usable pH range. These performance improvements can accelerate the analytical and purification processes for lead generation and optimization in drug discovery. The columns are available in four particle sizes and in four different chemistries.

## BUBBLE-FREE GEL CASTING

Bubble-Free Solution is a glass plate surface treatment reagent that prevents air bubble formation during thin-layered gel casting. A simple application of the solution to the glass plates makes gel casting air bubble free. This new method eliminates the need for different chemical treatments and multiple rounds of plate washing. The solution is mild, safe, and environmentally friendly. It has no effect on subsequent gel analysis, such as manual or automated DNA sequencing analysis and isotope-labeled DNA or RNA gel analysis.

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Complete Protease Inhibitor Cocktail Tablets contain an optimized mixture of nontoxic protease inhibitors that inhibit a multitude of proteases, including serine-, cysteine-, and metalloproteases. The user simply adds one tablet to all aqueous solutions, including cell lysis buffers, used during the manipulation of proteins. The tablets offer a stable and consistent dose of inhibitors, ensuring optimal and safe protection.

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*CO<sub>2</sub> Incubators with Oxygen and Relative Humidity Control* describes the IG 650 and IG 750 models. The IG 650 IR Incubator is designed to provide rapid recovery from a door opening and humidity control for the advanced cell culture researcher. The IG 750 IR Incubator adds oxygen control to the IG 650 system. *CO<sub>2</sub> Incubators* is a brochure on the IG 150 model, which is designed to be difficult to contaminate and easy to clean. This incubator is available in two models: a standard infrared model and a model with a cooling coil.

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*Apoptosis Through Death Signals* is a colorful chart that shows the relationships between components involved in receptor-mediated apoptosis, including many of the more recently identified enzymes and substrates. The chart shows individual pathways as well as relationships between these pathways. It is organized both by component location within the cell and by function.

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## ADVERTISER DIRECTORY

# Hot Careers

2000

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## Hot Careers

BY PETER GWYNNE

# NEW SKILLS FOR A New Century



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*Hot careers are breaking out all over the spectrum.*

*Here's a selection of job possibilities that offer  
tough challenges and huge potential for life scientists  
prepared to put in the necessary work.*

### WHAT ARE HOT CAREERS?

For life scientists, hot careers are areas of activity so new that they can't be trained for in academic institutions. Instead, one has to pick up the necessary skills and modes of thinking on the job, whether it be in an industrial or academic laboratory.

So rapid is the advance of life sciences that many hot new technologies have resulted in applications before the academic world has got around to formal instruction in them. To benefit from those technologies, biotechnology and pharmaceutical companies must recruit scientists with only a modicum of the necessary skills, and hope to train them effectively in-house.

Scientific skill isn't the only ingredient for hot careers, though. Increasingly, life science companies seek employees who can bridge critical gaps between science and business. Now more than ever they need scientists who can manage the development of basic research findings into real applications, and who can oversee the entire process of transformation of research into marketable products.

The following pages contain reflections on selected hot careers and ways to prepare for them from a variety of specialists. We have talked to scientists, managers, and human resource directors from seven companies; the executive of a search firm; and faculty members from a university that offers courses valuable for entrants to the life science industry.

## RESEARCH AND DEVELOPMENT 2000

*The biotechnology industry is moving into a new stage of development. Having successfully used its research skills to develop several drug products, industry must now embark on the long process of clinical trials and prepare for production of the drugs. Those areas present opportunities for hot careers.*

### RESEARCH AND DEVELOPMENT

The biotechnology industry is moving into a new stage of development. Having successfully used its research skills to develop several drug products, industry must now embark on the long process of clinical trials and prepare for production of the drugs. Those areas present opportunities for hot careers.

#### WAYNE, Pennsylvania

"I certainly see genomics as being a key area of growth," says Steven Hochberg, president



of the search firm Caliber Associates. "The hot new area there will be pharmacogenomics. Key skills typically will be an advanced degree in genetics or the molecular and cellular biology arena." Hochberg identifies two other, related areas that promise to have a strong impact on the pharmaceutical and biotechnology industries in coming years: biostatistics and bioinformatics. "Bioinformatics is extraordinarily competitive," he says. "It's wide open with respect to the demand for talent."

Other hot fields envisioned by Hochberg focus on the later stages of drug development. "As biotechnology product pipelines are maturing through clinical development, we see a number of clinical research opportunities," he explains. Those opportunities are available to life scientists with a range of credentials. Individuals with Ph.D. or M.D. degrees can become clinical project leaders,

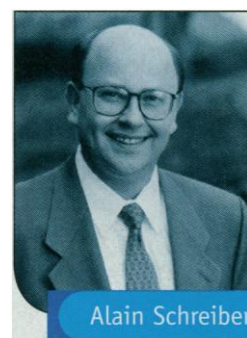
involved in the design and development of study protocols and management of the clinical development process. Team members often come from the ranks of individuals with Bachelor's degrees in nursing, basic sciences, or allied healthcare. The key "is gaining patient exposure," says Hochberg. "There's a whole range of jobs available here."

Clinical trials represent just one facet of a growing industry. "Over the past five years there's been a tremendous swelling of growth in the pharmaceutical services sector, as pharmaceutical and biotech companies outsource their clinical development functions," says Hochberg. "There will be a whole range of jobs available here. People who have outstanding project management skills and a customer focus will have terrific opportunities in this sector over the next decade, as the baby boomers mature." How should life scientists prepare for that type of pursuit? "The best thing to do early is to align yourself with pharmaceutical or biotechnology companies through fellowships or internships during your academic training," advises Hochberg. "Obtaining a summer internship can speak volumes about your interest."

#### SAN DIEGO, California:

"Life scientists and medical students graduating now are, more than ever, presented with a vast area of great opportunities, that go beyond the classical postdoc, assistant professor tenure track," says Alain Schreiber, CEO of Vical Incorporated. "I think that some exposure to or understanding of the conversion of science into practical application, and some modicum of commercial sense in terms of assessing the right types of applications, would not hurt life scientists."

Vical develops gene-based pharmaceutical



Alain Schreiber

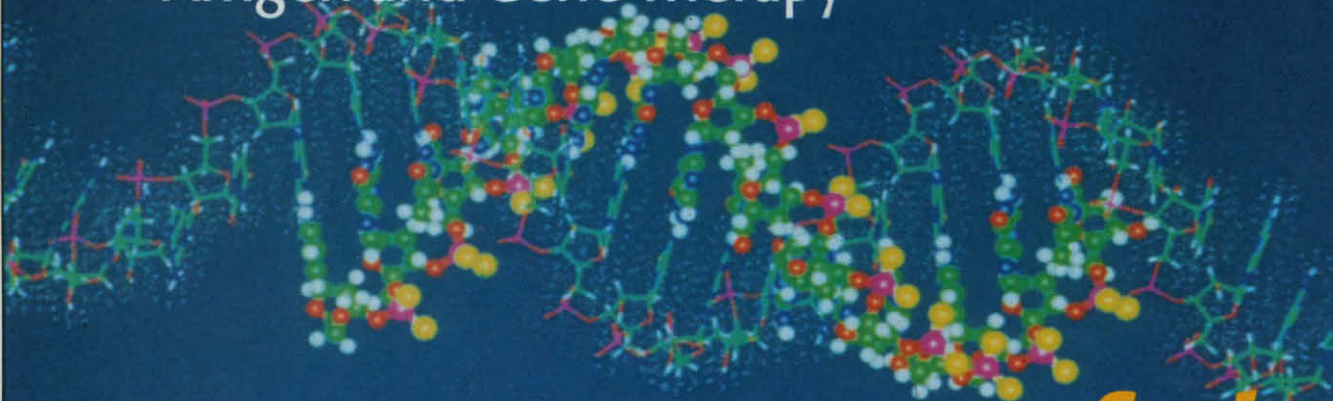
products for human therapy. The company's patented naked DNA gene delivery technology and proprietary lipids are used for vaccines or to deliver selected genes into certain body cells. And while it carries out research, says Schreiber, the company now has more interest in hiring individuals for clinical product and development and regulatory affairs. "Our most recent hire was a biochemical engineer who had worked in fermentation and manufacturing, and then had rotated into corporate development," recalls Schreiber. "We're now hiring people with product management experience, clinical trial experience, and similar backgrounds. Those people may well have started out with Master's degrees in biochemistry, and then have picked up the required skills."

Vical has particular interest in individuals with M.D. degrees and an interest in participating in R&D projects. "Physicians with a good knowledge of basic science are more in demand for clinical trials," Schreiber says. "Good, solid medical product development people are very much in demand." They can also command high salaries — typically over \$200,000. "These jobs are highly paid because of the short supply," continues Schreiber. "Because of the cost of clinical trials and interactions with regulatory agencies, there's so much at stake in terms of putting companies on the map. Salary is a very small percentage of the overall cost of clinical trials."

Continued ➤

The AMGEN logo is displayed in a bold, black, sans-serif font.

## Amgen and Gene Therapy



# A Powerful Combination.

At **AMGEN**, the world's largest biotechnology company, we're very excited about developing our Gene Therapy Program on the East Coast. This research will be centered at a new facility currently being constructed in **Cambridge, MA**, in close proximity to some of the leading researchers in the field.

Our goal is to create an internal research program that will involve leaders from both academia and industry.

This approach will allow us to maximize our chances for improvements and new discoveries.

Success of this exciting new program relies heavily on a highly qualified team of scientists. That's where you come in. If you're ready to achieve both professional and personal growth while playing a major role in the advancement of Gene Therapy, we invite you to consider joining our team.

### Medicinal Chemists

The successful candidates will have a Ph.D. in Organic/Medicinal Chemistry and 3-5 years of post-graduate experience. Experience with small molecule drug development, combinatorial chemistry, SAR and ligand binding drug development is a plus. Familiarity with NMR, MS and structure-based drug design is expected, as is a strong publication and patent history. Knowledge in the areas of nucleic acid binding drugs, natural products and modern synthetic chemistry is preferred. **Ad Code: 368**

### Nucleic Acids Biochemists

Candidates will have a Ph.D. in Biochemistry or Molecular Biology and 3-5 years of post-graduate experience. Experience in the field of nucleic acid enzymology and molecular evolution is a plus. Familiarity with standard molecular biology techniques such as PCR, in vitro transcription and general nucleic acid manipulation is essential. Candidates with a strong publication and patent history will be given the highest priority.

**Ad Code: 369**

### Molecular Biologists

The successful candidates will have a Ph.D. in Biochemistry or Molecular Biology and 3-5 years of post-graduate experience. Background in the fields of virology, vector development and gene regulation is required. Familiarity with standard molecular biology techniques such as PCR, in vitro transcription and general nucleic acid manipulation is essential. Candidates should have a strong publication and patent history. **Ad Code: 371**

### Lab Head, Vector Development Group

This candidate will assume a leadership role in the development of gene transfer vectors. A strong background in virology, vector development, gene regulation and molecular biology is essential, as is 5-10 years of post-graduate experience in industry or academia. The successful candidate will oversee the work of scientists and coordinate the efforts of academic and industrial collaborators working in the field of Gene Therapy. Proven skills in product development, publication, communication and leadership are required. **Ad Code: 372**

### Lab Head, Gene Regulation Group

This candidate will assume a leadership role in the development of regulatable elements that can be used to control therapeutic gene expression. A strong background in nucleic acid biochemistry and molecular biology is essential, as is 5-10 years of post-graduate experience in industry or academia. The successful candidate will lead Amgen scientists and coordinate academic and industrial collaborations, working to develop new methods of gene regulation. Skills in product development, publication, communication and leadership are required. **Ad Code: 370**

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# Shape the future of pharmaceutical innovation.

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## **Principal Scientist/Technical Writer - Drug Metabolism & Pharmacokinetics**

Prepare preclinical documentation for domestic and international submissions of new drugs, summaries for annual IND/NDA reports and responses to questions from worldwide regulatory agencies. Requires a PhD in Pharmaceutical Sciences with at least 3 years of experience including in-depth knowledge of drug metabolism and pharmacokinetics. Excellent communication skills essential; technical writing experience a plus. **Job Code: XHXDD9930Sc**

## **Senior Medical Writers/Managers**

Direct medical writing experience in the pharmaceutical industry (drug company or CRO) including the preparation of clinical documents to support worldwide registrations (i.e., clinical study reports, IBs, integrated summaries of safety and efficacy, application summaries, clinical overviews and expert reports) is required. An advanced degree is preferred, as is a strong background in basic science and/or clinical research. All openings require 3-5 years' relevant experience. **Job Code: XHXM9903PWSc for Writers/XHXM9906PWSc for Managers**

## **Senior Scientist - Pulmonary Research Allergy**

Working on different aspects of lung function with the goal of developing therapeutic agents for airway disease, you will be responsible for performing pharmacology studies emphasizing *in vitro* or *in vivo* measurement of lung function. PhD in Pharmacology or a related area and some postdoctoral training required. Previous experience with animal physiology, pulmonary pharmacology, ion channel measurements, molecular mechanisms of drug action, and/or research in pulmonary inflammation desirable. **Job Code: XHXDD9113Sc**

## **Senior Scientist - Drug Disposition**

Conduct studies involving biodisposition/metabolism of primarily protein and DNA-based drugs in development, as well as provide support for protein binding and gene therapy drug disposition studies. PhD in the Biopharmaceutical Sciences with 1-3 years of postdoctoral or relevant industry experience required, as is significant research experience in biochemical and molecular biology techniques including HPLC and capillary electrophoresis. Experience with CZE, PCR, LC/MS, ELISA, gel electrophoresis, and Northern Blotting desired. Strong communication skills are essential. **Job Code: XHXDD9927Sc**

## **Senior Scientist - Pharmacokinetics**

Conducting pharmacokinetics analysis, your primary responsibilities will include interpreting and presenting results. Additionally, you'll prepare reports for clinical and non-clinical studies; build PK/PD relationships and apply them to the drug development; serve as an application administrator; and act as a liaison between the Research Information System Department and the Pharmacokinetics Department. Qualified candidates will have a PhD in Pharmacokinetics with relevant industry experience. Excellent interpersonal and communication skills are a must. Computer project management experience is desirable. **Job Code: XHXDD8127Sc**

## **Assistant Scientist/Synthetic Organic Chemist - Radiochemistry**

Responsible for synthesizing C-14 and tritium labeled compounds to support discovery and development of new therapeutic agents. BS or MS in Chemistry and 0-3 years of experience in organic synthesis techniques required; experience with radioisotopes is desirable. **Job Code: XHXDD9989PWSc**

### **Infectious Diseases & Oncology Assistant Scientists - High Throughput Screening**

We are seeking several talented biochemists to join our team of scientists involved in automated high throughput screening at the front line of new drug discovery for cancer, asthma, and infectious diseases. Requirements include a BS/MS in Biochemistry or related discipline, knowledge and experience with enzyme and/or receptor binding assays using modern quantitative techniques, and excellent organization and communication skills. Knowledge of laboratory equipment, automation and computers is a plus. **Job Code: XHXDD9138Sc**

### **Systems Analyst - Discovery Informatics and Documentation**

Requires BS or BA in Computer Science, Chemistry or Biology and 3-5 years of software development and support experience with exposure to all phases of the development lifecycle, including requirements gathering, documentation, design, development, testing, training, release and production maintenance. Necessary skills include working knowledge of a major RDBMS (ORACLE preferred), Object-Oriented design and development, GUI development with PowerBuilder, VB, Delphi or C++. Working knowledge of ISIS toolset is a big plus, as is prior experience in a pharmaceutical research environment. Excellent communication skills are essential. **Job Code: XHXDD9135PWSc**

### **GMP Compliance Specialist**

With a focus on meeting standard industry GMP compliance levels in an R&D environment, primary responsibilities include participating in internal GMP/Safety audits, raw data and regulatory documentation audits, and identifying areas for improvement. Additional duties include assisting in the creation and delivery of training programs and maintenance of the document management system for SOPs. MS or equivalent in a scientific discipline, the ability to identify and rectify problems, and a strong knowledge of GMP skills in an R&D environment, supported by 2+ years of pharmaceutical or industrial experience required. Excellent communication and negotiation skills are a must. QC experience in an R&D environment is desirable. **Job Code: XHXSPCSc**

### **Senior Technical Informatics Scientist**

Primary focus is on the management, coordination and preparation of the CMC sections of Domestic and International submissions, including the coordination, establishment and issuance of manufacturing monographs, change authorizations, manufacturing orders, specifications or procedures for raw materials, excipients and finished products, and developing strategy and preparing responses to issues raised by Government Agencies. MS with 7+ years of related experience or a BS with 10+ years of related experience required, as is a knowledge of and experience in: coordinating/preparing/submitting CMC documents to CBER and CDER for human and animal pharmaceuticals; International Health Registration, CPMP, IRB, ICH, etc.; and manufacturing or testing chemical and/or biological drug substances and/or finished dosage forms. **Job Code: XHXSC9908SPCSc**

## **IMMUNOLOGY**

### **Principal Scientist - Pathologist**

You will lead a group providing pathology support for a functional genomics effort. DVM/VMD or equivalent with PhD and board eligibility or certification required. A strong academic record and expertise in murine models of disease are required. **Job Code: XHXDD9118Sc**

### **Associate Scientist**

Will prep and analyze multiple tissue samples by Flow Cytometry. BS/MSc with 2-5 years of experience in Flow Cytometry required. Experience with *in vivo* models and in Molecular Biology techniques is a plus. **Job Code: XHXDD9958Sc**

### **Assistant/Associate Scientist**

Position is responsible for providing genomic cloning, sequencing, targeting vector and transgenic cloning support to the group. BS/MSc with 2-5 years of experience in molecular biology/cloning is needed to join our cloning team. Strong organizational skills as well as extensive experience with cloning and general computer software are required. **Job Code: XHXDD9144Sc**

### **Assistant/Associate Scientist**

BS with extensive experience in management of large transgenic colony required as well as strong organizational skills and database experience. Experience in transgenic cloning, genotyping, RNA and ELISA techniques are a plus. **Job Code: XHXDD9117Sc**

## **CV/CNS**

### **Senior/Associate Principal Scientist - Bioinformatics**

Provide bioinformatics support in the GPRC Group for the orphan G-protein coupled group. You will use homology-based search tools to identify G-protein coupled receptors in our sequence databases, as well as be responsible for assembling sequences, sequence analysis, sequence annotation, phylogenetic analysis and maintaining the GPCR database. Requires a PhD in Molecular Biology or Biochemistry and working knowledge of G-protein coupled receptors. Experience with Purl, Sybase and working in a UNIX environment is a plus. **Job Code: XHXDD9103ASc**

### **Senior/Associate Principal Scientist - Bioinformatics**

As part of the Annotation Group, you will be responsible for the functional annotation of human genes, both at the domain level and the protein family level. Familiarity with basic motif analysis tools such as PSORT, Procite, and HMMs is a must. Requires PhD in Molecular Biology, Biochemistry, or Computer Science, the ability to work in a UNIX environment and familiarity with CGI programming. **Job Code: XHXDD9103BSc**

### **Assistant/Associate Scientist - CV Pharmacology**

Position requires a BS in Biology or a related field and at least 4 years of experience in behavioral pharmacology, or an MS and at least 2 years of experience. Ideal candidate has experience investigating the mechanism of action of CNS drugs. **Job Code: XHXDD9108Sc**

### **Associate Principal/Principal Scientist - CV Pharmacology**

PhD and 2-4 years' experience in CNS *in vivo* pharmacology required. Experience with behavioral assays is a plus. Candidate must demonstrate ability to work independently and collaborate in a team setting. **Job Code: XHXDD9109Sc**

### **Associate Principal Scientist/Senior Scientist - CNS/CV Pharmacology**

Qualified candidate has a PhD and 2+ years of postdoctoral experience in biology, biochemistry, physiology, nutrition or a related field. Experience in *in vivo* models of obesity, diabetes and/or endocrinology is required. Excellent communication skills are a must. **Job Code: XHXDD9110Sc**

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## AN EYE FOR BUSINESS 2000

*Students who graduate with Ph.D's in life science may find an increasingly tight market for their skills. But if those skills include some business background, the life science industry willingly puts out a welcome mat. Individuals trained in both a specialist science subject and business skills have all the ingredients for hot and lucrative careers.*

### AN EYE FOR BUSINESS

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#### ITHACA, New York:

"Cornell has a strong biotechnology program that produces Ph.D's," says David BenDaniel, a professor in Cornell University's Johnson Graduate School of Management. "A lot of them recognize the present logjam in hiring, nationally and internationally. So we have certain courses in entrepreneurship and enterprise in the Johnson School that take a broad look at all opportunities for venturing in the business world."



David BenDaniel

A program that has particular appeal to life scientists is the twelve-month option (TMO) program. "This is an ideal opportunity for people in the life sciences who want to retread themselves to get an MBA degree within the course of a calendar year," says BenDaniel. "To enter it, you have to have a Master's degree or Doctorate in a scientific or engineering subject and work experience. The graduates of this

program with life science backgrounds prove to be very attractive to pharmaceutical and medicine-related companies, as well as consulting firms."

The Johnson School also offers individual courses for scientists interested in acquiring business skills. For example, Peter Sears, who recently retired as the president of SR One, the venture capital arm of SmithKline Beecham, runs a course that focuses on his experience organizing deals between large and small life science companies. Richard Holsten, a long-time employee of DuPont who now heads the New York State Center for Advanced Biotechnology at Cornell, teaches a course in entrepreneurialism. "More and more we see scientists who want to be entrepreneurial but have no background. They don't know what a business plan means," says Holsten. "We introduce them to entrepreneurs who have started something so that our students can hear first-hand the challenges they have faced."



Richard Holsten

The background that students acquire in such courses has value in a variety of business ventures. "In any organization you go to, it would be an advantage to have some background in putting together a business plan," Holsten continues. "The more we can acquaint scientists with some of the fundamentals of business, the more marketable they will become."

#### PHILADELPHIA,

#### Pennsylvania:

With a Bachelor's degree in biology and a Ph.D. in cell and molecular biology, Donna Bauer had a wide variety of career choices when she completed her scientific studies three years ago. But she decided she wanted to leverage her skills in the business world as a consultant — and to do so as soon as possible. So she entered the accelerated MBA program at Cornell's Johnson Graduate School of Management. A year later she landed a job in the life science division of a management consulting company, CSC Healthcare, where she now works on commercialization strategies for product launches.

Bauer represents a new wave of trained scientists with careers in the business side of life science. "Management consulting companies are very interested in Ph.D's who have high analytical skills. The companies need problem-driven solutions," she says. "At the consultant level, I'm in the minority in that we have content-driven experts and people with really good business skills, but it's rare to have people like myself who have both. With clients, you can leverage both sets of skills: you understand business, but you also understand the content of the clients' needs."

Bauer signed up for her accelerated MBA because she realized that she lacked elements of business savvy. "You need people skills, communication skills, and business content to make the leap between a career in science and one in business," she explains. "That was what was refined for me at the Johnson School."

What advice does she offer to other scientists who want to make the same leap? "Have a focus on what you want to do," she

Continued ►

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# Pioneering Breakthroughs Setting the Course for Progress.



Recently, **St. Jude Children's Research Hospital** embraced a 5-year, \$1 billion expansion project to support its continuing advances in the fight against childhood diseases. With this expansion brings new and exciting career opportunities for motivated individuals in the following areas:

- **Biostatistician**  
*Department of Biostatistics & Epidemiology*
- **Flow Cytometer Technician**
- **Vector Production Specialist**  
*Department of Cell & Gene Therapy*
- **Manager of Human Applications Laboratory**  
*Department of Transplantation & Gene Therapy*
- **Research Technologists**  
*Department of Infectious Diseases*
- **Director of GMP Core Facility**
- **Senior Research Technologists**  
*Department of Immunology  
Department of Structural Biology  
Department of Pharmaceutical Sciences  
Department of Pathology & Lab Medicine  
Hartwell Center for Bioinformatics and Biotechnology*
- **Research Lab Specialists**  
*Department of Surgery  
Department of Cell & Gene Therapy*

As one of the great international educational and teaching institutions for pediatric diseases, St. Jude provides regular workshops, seminars and lectures presented by both the St. Jude faculty and distinguished visiting investigators. St. Jude's non-faculty research staff career ladder provides several levels of promotion for technologists to advance in their field. Experienced technologists may assist the principal investigator by performing research experiments, developing new procedures, participating in the publication of research results, managing laboratory operations and training laboratory personnel.

St. Jude is located in Memphis, Tennessee, a city rich in history and culture stretching from the banks of the mighty Mississippi to the rolling green hills of eastern Shelby county. Memphis has something to offer everyone whether it's the dazzling night life along legendary Beale Street, the cultured theaters and museums, breathtaking nature preserves, or walks through historic, picturesque Midtown. Memphis also hosts over 150 festivals and special events each year in addition to many major sporting events. So whatever your interest, Memphis can offer you a world of possibilities!

To be considered, e-mail, fax or mail your resume to:

**St. Jude Children's Research Hospital**  
Human Resources Department  
332 North Lauderdale  
Memphis, TN 38105  
E-mail: [virgil.holder@stjude.org](mailto:virgil.holder@stjude.org)  
Fax: 901-495-3123

*St. Jude Children's Research Hospital is an internationally renowned research and treatment center for children with catastrophic diseases – primarily pediatric cancers. The scientists at St. Jude are committed to biomedical research that seeks to understand the molecular causes of disease, improving diagnosis and treatment, minimizing immediate and long-term side effects, and ultimately – to finding a cure for those diseases. Current basic and clinical research at St. Jude includes work in molecular biology, bioinformatics, chemotherapy, the biochemistry of normal and cancerous cells, radiation treatment, resistance to therapy, blood diseases, viruses, influenza, bone marrow transplantation and cell and gene therapy.*



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## Eli Lilly and Company Obesity Research

### ► **Ph.D. and/or M.D. Molecular Pharmacologist**

We are seeking a senior scientist with broad expertise in molecular pharmacology to expand our effort in drug discovery for the treatment of obesity and diabetes. Projects will be centered on novel therapeutic targets. Successful candidates will have experience in drug discovery and an excellent record of accomplishments in obesity or diabetes. Experience in receptor based systems with the necessary knowledge of receptor binding, reporter gene systems and related techniques is preferred.

### ► **Ph.D. and/or M.D. In vivo Pharmacologist**

We are seeking a senior scientist with in vivo pharmacology expertise to expand our effort in drug discovery for the treatment of obesity. Projects will be centered on novel therapeutic targets. Successful candidates will have a strong record in obesity research and experience in drug discovery. Experience in behavioral psychology and appetite control is required. Previous expertise in other tracks of in vivo pharmacology, as related to obesity, would be preferred.

### ► **Ph.D., M.D., or M.S. Biochemist**

We are seeking a biochemist with expertise in a clinical chemistry laboratory. Successful candidates will set up a core laboratory providing services to the Endocrine Research division and related entities. The core laboratory will be responsible for conducting measurements of hormones, substrates, electrolytes, etc., in samples obtained in pre-clinical models. Successful candidates will have an excellent record in endocrinology, radioimmunoassays, and clinical chemistry. Outstanding work organization, cooperation, precision, accuracy and timeliness in obtaining data are required. Previous expertise in a core laboratory is preferred.

### ► **B.S. and/or M.S. Cell Physiologists/ Molecular Biologists**

We are seeking scientists with expertise in cell physiology and/or molecular biology. Successful candidates will have expertise in techniques related to cell biology, molecular biology, or both. Candidates must be familiar with computers, word processors, graphic software, statistics and robotics. In addition, candidates should be reliable and versatile and have an understanding of endocrine and metabolic problems. Previous experience in the field of obesity and/or diabetes is preferred.

For confidential consideration, please send your resume and cover letter indicating the position of interest to: Eli Lilly and Company, Endocrine Diseases ADSCMBI09, DC1818, Lilly Corporate Center, Indianapolis, IN 46285.

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**E**li Lilly and Company's

Division of Endocrine Research is committed to developing novel drug therapies to effectively treat obesity and diabetes. At Lilly, our delivery of revolutionary pharmaceutical-based health care solutions is inspired and guided by the people we touch.

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## INDUSTRIALIZING BIOLOGY

*In recent years, drug discovery has changed dramatically. No longer do single scientists or small teams struggle long hours to characterize promising compounds using decades-old methods of wet chemistry, and then painstakingly test the actions of those compounds on specific targets. Today, the process is undergoing a laboratory version of the industrial revolution. That provides the basis of new careers.*



Donna Bauer

and solve business issues. Showing that you can manage a few students won't be convincing to the business world."

### INDUSTRIALIZING BIOLOGY

In recent years, drug discovery has changed dramatically. No longer do single scientists or small teams struggle long hours to characterize promising compounds using decades-old methods of wet chemistry, and then painstakingly test the actions of those compounds on specific targets. Today, the process is undergoing a laboratory version of the industrial revolution. That provides the basis of new careers.

#### RESEARCH TRIANGLE PARK, North Carolina:

"We're trying to industrialize biology," says Jeff Wegrzyn, group leader for automation at Sphinx Pharmaceuticals, a division of pharmaceuticals company Eli Lilly and Company. "We're taking what used to be done in test-tubes or a few microliter plates, and doing it more rapidly on thousands of plates and in much more volume." To do so, Sphinx and other companies need individuals who have

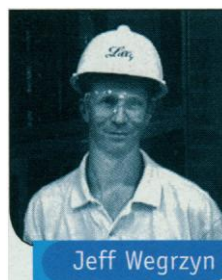
says. "You can develop that in internships, as well as formal business training." Once you start to look for a job, she adds, "you have to demonstrate the ability to understand

skills in both automation and life science.

As the main high-throughput screening facility for Lilly, Sphinx has been in the forefront of laboratory automation. "For many years, screening has been based on the 96-well platform," explains Wegrzyn. "The numbers of compounds tested really did not demand a whole lot of investment in automation and plate handling equipment. You could get by with multichannel pipettes. Then we started to multiply the number of plates per day, and got well beyond manual manipulation capability."

The group responded by introducing automatic handling of plates and multichannel pipetting devices, followed by adding plate handling capabilities to detectors. "It essentially evolved into giving standard laboratory equipment the ability to process stacks of plates. You could walk away and have your results recorded automatically," says Wegrzyn. "As demand for speed and larger compound sets has increased, we've had to build more robust systems. We now have a number of systems based on conveyors and industrial-type robots that did not exist in laboratories one or two years ago. In many ways, the lab is becoming like a manufacturing process plant."

Designing that equipment and customizing it for specific uses demands abilities rarely associated with laboratory work. "The skills required for laboratory systems are more of an engineering and computer software nature than in the past," says



Jeff Wegrzyn

Wegrzyn, who has a Ph.D. in analytical chemistry and experience in industrial process control. "The best way to automate any process is to understand it first. To do that, you need a group of people with chemistry and biology backgrounds. You also need professional engineers who can design processes to improve the existing systems."

What does Wegrzyn expect of recruits to his laboratory automation group? "A background in a science, such as chemistry, is important," he says. "Engineering experience or skill is a definite plus. And computer science skills such as Oracle, Visual Basic, C++, and the ability to write application programmer interfaces are becoming an absolute necessity. Right now, some of the most productive people that we have were in traditional engineering or IT roles before they joined Sphinx. As long as they can understand what the chemists and biologists are telling them about their needs, the process works. But it is also helpful to find people with traditional chemistry or biology backgrounds who have higher levels of computer skills."

#### KING OF PRUSSIA, Pennsylvania:

"One of the big issues in life science today is the completion of the human genome sequence," says Mary Brawner, associate director of gene expression sciences for pharmaceutical company SmithKline Beecham, one of the first health care companies to explore drug discovery through biomedical research back in 1993. "It has the potential to relate a disease to specific gene types, and to help us tailor drug therapy to the genetic make-up of an individual. Today, we treat the symptom rather than the disease mechanism. As a result of human

Continued ►

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## **PhD Scientist - Renal Pharmacology**

Working in our Renal Pharmacology Department you will direct a laboratory involved in the *in vivo* evaluation of novel drug targets, and design and execute experiments to evaluate the renal and cardiovascular effects of various agents. You will work with discovery research teams to identify and progress potential drug candidates, develop new techniques, present results at outside scientific meetings and prepare manuscripts for publication.

You should possess a PhD in Physiology, Pharmacology or related discipline, and at least 2 years of postdoctoral experience in an academic or pharmaceutical research organization. A strong background in conducting *in vivo* studies, and expertise in small animal models of renal and/or cardiovascular disease is required. A strong track record of publication in high-quality, peer-reviewed journals is also necessary. (Ad Code: 991620)

## **BS/MS Scientist - Bone and Cartilage Biology**

Working in our Bone and Cartilage Biology Department you will participate in and contribute to on-going research activities aimed at discovering novel compounds which promote bone and cartilage formation, and perform cloning, expression and functional characterization of novel genes identified through genomic approaches. You will also perform laboratory research towards the understanding of signal transduction mechanisms involved in osteoblast and chondrocyte differentiation and experiments utilizing techniques in molecular and cell biology and mammalian cell culture.

We require a BS/BA degree in Biology, Molecular Biology, Biochemistry, Genetics or related discipline, and 3-5 years of relevant research experience in Molecular Biology, Cell Biology, and Mammalian Cell Culture. Ability to supervise junior laboratory personnel is required. Competency with a variety of computer programs (MS Word, Excel, PowerPoint), and experience in standard molecular and cell biology techniques, as well as some experience in bone/cartilage biology is highly desirable. (Ad Code: 991392)

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## LINEBERGER COMPREHENSIVE CANCER CENTER

### FACULTY POSITIONS

#### CANCER GENETICS & BIOLOGY

The UNC Lineberger Comprehensive Cancer Center at the University of North Carolina at Chapel Hill, is searching for tenure-track faculty with promising or established research programs in the broad areas of cancer genetics or biology. Primary departments and rank for these tenure-track positions will be determined by the applicant's qualifications. Laboratory space in the recently expanded Cancer Center building and start-up funds will be provided. The search will be coordinated by Albert Baldwin, Bernard Weissman, Terry Van Dyke, Yue Xiong, and Channing Der.

\*\*\*\*\*The committee will begin reviewing applications November 15\*\*\*\*\*



## LINEBERGER COMPREHENSIVE CANCER CENTER

### FACULTY POSITIONS

#### VIROLOGY, VIRAL PATHOGENESIS, AND VIRAL ONCOGENESIS

The UNC Lineberger Comprehensive Cancer Center, the Department of Microbiology & Immunology, and the Department of Biochemistry & Biophysics at the University of North Carolina at Chapel Hill are seeking outstanding individuals with promising or established research programs in molecular virology and viral pathogenesis. Two or three tenure track appointments will be available. Primary academic department will be determined by the individual's research program. The department and Cancer Center will provide research

Positions in genetics will emphasize: the genetics of complex traits, genomics, informatics, predisposition to cancer (including the study of human and mouse modifiers), animal models, etc. A liaison to translational research or to population-based molecular epidemiology is anticipated.

Other positions in cancer biology will be available. Areas of interest include but are not limited to: angiogenesis, metastasis, signal transduction, oncogenes, tumor suppressors, DNA recombination and repair, cell cycle, gene expression, steroid hormones and receptors, cancer therapeutics, animal models of cancer and developmental biology.

**Applicants should send a curriculum vitae, a description of research plans, and three letters of reference to:**

Ms. Melissa Stroud, UNC Lineberger  
Comprehensive Cancer Center, CB# 7295,  
University of North Carolina at Chapel Hill,  
Chapel Hill, NC 27599-7295

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space and start-up funds. The search will be coordinated by Dr. Nancy Raab-Traub, chair, and Drs. Joseph S. Pagano, Robert Johnston, Ronald Swanstrom, Albert Baldwin, and Shannon Kenney.

Applications are solicited in all areas of virology with areas of special interest in: (1) human tumor viruses including Kaposi sarcoma herpesvirus, human papilloma viruses, human T cell leukemia virus 1, and hepatitis C virus, (2) animal models of viral oncogenesis, and (3) molecular aspects of viral infection.

**Applicants should send a curriculum vitae, a description of research plans, and three letters of reference to:**

Ms. Danielle Wilson, UNC Lineberger  
Comprehensive Cancer Center, CB#  
7295, University of North Carolina at  
Chapel Hill, Chapel Hill, NC 27599-7295

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\*\*\*\*\*The committee will begin reviewing applications November 15\*\*\*\*\*

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research  
INTO  
solutions

### SCIENTISTS

#### DISCOVERY

Opportunities exist for two scientists to contribute to the characterization and evaluation of novel reagents and drug candidates. As a member of the Angiogenesis Team, you will participate in the development and utilization of in vivo models to assess the efficacy of novel therapeutics in a variety of applications. These positions require previous experience with the development of small animal in vivo models. Experience with cell-based assays, organotypic in vitro models, mammalian cell culture, and knowledge of protein kinase mediated signal transduction a plus. Applicants must have a Ph.D. degree and training in a relevant field, such as oncology, cardiology, reproductive biology, or wound healing. Ability to work effectively in a team environment is essential. **Job Code: JR/SCI-Sci9/17**

#### PROCESS DEVELOPMENT

Senior Scientist / Engineer with Ph.D. in Chemical or Biochemical Engineering will develop purification schemes for recombinant proteins. Experience with biochemical separations (ultrafiltration, ion exchange, size exclusion and affinity-based methods) essential.

■ Position also involves production of clinical-grade protein. Experience with large scale biochemical separations required. **Job Code: KB/ENG1-Sci 9/17**

■ Position also involves chemical optimization of reagents and therapeutics. A strong interest in organic chemistry and biochemical separations required. **Job Code: KB/ENG2-Sci 9/17**

### RESEARCH ASSOCIATES

#### MOLECULAR BIOLOGY

Experience with basic molecular biology techniques (PCR cloning, subcloning, electroporation and transformation of bacterial cells, plasmid miniprep isolation, restriction digest analysis of DNA) essential. Experience with SDS-PAGE and western blotting also required:

■ **BIOMOLECULAR SCIENCE** - minimum BS. Understanding of DNA sequencing, mammalian cell culture/transfection, SDS-PAGE and western blotting helpful. **Job Code: LC/RA-Sci9/17**

■ **MUSCLE** - Experience with RNA and Protein extraction from tissues, Northern, Southern and Western blotting required. Knowledge of immunoprecipitation and kinase assays a plus. BS and 3 years experience required. **Job Code: SB/RA-Sci9/17**

■ **DISCOVERY**-BS/MS in molecular biology with at least 2 years research experience required, to work on projects involving angiogenesis and orphan receptors. **Job Code: SD/RA-Sci9/17**

#### BIOINFORMATICS

Bioinformatics/Molecular biology position. Participate in the identification and development of novel drug candidates. MS and 4 years experience required. Previous bioinformatics, site-directed mutagenesis, and cDNA cloning experience required. Extensive knowledge of signal transduction essential.

**Job Code: DM/RA-Sci9/17**

#### PROTEIN FORMULATION

Participate in the development of stable formulations, execution of stability studies, and development of analytical methods. BS/MS degree in pharmaceuticals, biochemistry, chemistry, or biology and 0-2 years of laboratory experience using HPLC and electrophoresis is preferred. **Job Code: DD/RA- Sci9/17**

### PROGRAM MANAGEMENT

#### TECHNOLOGY TRANSFER ADMINISTRATOR

An opportunity exists for an individual prepared to play an important role in Regeneron's progressive Technology Transfer group. Primary responsibility is for the administration of scientific collaborations with outside investigators. Duties include drafting and negotiating Material Transfer Agreements, Consulting Agreements, License Agreements, and Service Contracts. Preferred candidates will possess an MS in molecular or cell biology, with 0-3 years experience in technology transfer. Excellent interpersonal, writing, and computer skills are essential.

**Job Code: EB/TT-Sci9/17**

#### PROGRAM COORDINATOR

Seeking a dynamic individual for our Research Program Management Group. In this administrative position you will: create, manage and coordinate project timelines; manage resources and budgets; act as liaison between Regeneron's research, preclinical, clinical, and intellectual property groups; interact with Regeneron's corporate partners, academic collaborators, consultants, and service providers; and assess technologies and competition. MS in the biological sciences with program management experience and familiarity with high-throughput screens are required. Strong interpersonal, organizational, writing and computer skills are essential.

**Job Code: EB/PC-Sci9/17**

**Regeneron** offers an outstanding benefits package and salary commensurate with experience. For consideration, please submit a cover letter, along with a resume and salary requirements to: **REGENERON Pharmaceuticals, Inc., Human Resources** (specify Job Code), 777 Old Saw Mill River Road, Tarrytown, New York 10591. Fax: (914) 345-7790 e-mail: [jobs4@regpha.com](mailto:jobs4@regpha.com) (Please provide an electronic version of your resume or C.V. as text or PDF.) EOE M/F/D/V

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## INTERPRETERS OF INFORMATION

*For all its contributions to life science, automated experimentation creates a major problem: making sense of experiments. The keys here are biostatistics and bioinformatics. Biostatistics involves the application of basic statistical training to the evaluation and assessment of clinical data. Bioinformatics takes the process a stage further.*

genome sequencing, we have the possibility of revolutionizing the treatment of human disease."

Getting to that point will require a whole range of scientific expertise. Key among them is automation of laboratory processes. "There's a growing need for people who are experts in automation — who know how to automate the routine technical procedures that we do on a day-to-day basis," explains Brawner. "This is becoming essential to our work at SmithKline. Our automation group performs the automation of laboratory processes, and makes it highly specialized. It's a group of growing importance."

Of course, few life scientists have expertise in automation when they graduate with Bachelor's, Master's, or Doctoral degrees. "It's certainly one of the areas that I was never trained in," admits Brawner, who joined the company 18 years ago. To address this issue, scientists in Brawner's gene expression area work with the automation group to automate routine laboratory procedures, and then the automation group trains the scientists to use the equipment. "It's a case study of teamwork that blends the skills and experiences of different kinds of people," says Brawner.

## INTERPRETERS OF INFORMATION

For all its contributions to life science, automated experimentation creates a major problem: making sense of experiments. The keys here are biostatistics and bioinformatics. Biostatistics involves the application of basic statistical training to the evaluation and assessment of clinical data. Bioinformatics takes the process a stage further. It applies the principles of biostatistics to the design and interpretation of experiments relevant to drug discovery and similar searches. Bioinformatics has become one of the major buzzwords in life science laboratories. In this section we examine two companies' needs of specialists in the field, and the ways in which they use such personnel.

### CAMBRIDGE, Massachusetts:

"We're looking for people who can either write software knowing what they're looking for on the biology side, or use very sophisticated analysis tools and software programs to do data analysis searching of experiments to make sense out of them," says Keith Dionne, program director, technology development and collaboration management for Millennium Pharmaceuticals, Inc. "When you can do experiments with 10,000 operations, the key is making sense of the data."

A drug discovery and development company that uses large-scale genetics, genomics, high-throughput screening, and informatics in an integrated science and technology platform, Millennium offers several opportunities to interpret automatic experimentation. For example, says Dionne, "scientists can't keep up with the 1,500–3,000 mass spectra per day that our automation group has made possible. We have to develop analysis algorithms that enable us to interpret the data. And when we work with transcription profiling, we're looking at an output of 50,000 genes every time we do an experiment. We need to be able both to write the algorithm to do the analysis and, as biologists, to use the algorithms and statistics to tell us what's going on."

## BEYOND BIOINFORMATICS

Bioinformatics may be the flavor of the era in hot careers, but a related field promises to become more prominent in coming years. "Cheminformatics has been an integral part of research for several years, but it is now becoming even more critical as more data becomes available," explains Tony Zaritheny, site HR director for AstraZeneca's laboratory in Cambridge, Massachusetts. The field works on databases that contain information on molecular structures. "Scientists can't possibly go to all databases and search everything," Zaritheny continues. "So they rely on experts in cheminformatics to organize and carry out structured searches. They mine the data in a way that makes the search more efficient." What attributes do scientists need to move into cheminformatics? Given that no universities yet offer courses in the hot field, Zaritheny looks for a strong grounding in chemistry combined with excellent understanding of computing and databases.

Continued ➤

# the new face IN P H A R M A C E U T I C A L S



## **SCIENTISTS**

**Osteoporosis**

**Pathology**

**Protein Purification**

**Pharmacogenomics**

## **INFORMATICS**

**Biostatistician—**  
SAS, Matlab

**Software Architect—**  
CORBA

**Project Manager—**  
Informatics

## **Computational**

**Biologists—**

Pathway analysis,

Genome analysis,

Computational Chemistry

## **Sr. Software Engineers—**

Java, Perl, Smalltalk,  
C++, CGI

## **Bioinformatics**

**Engineers—**

Molecular Biology,  
Object-Oriented/  
Scripted Languages

## **Software Engineer—**

Data Operations

Millennium has a new vision for the future of medicine. That drug development be perfectly precise. That all patient therapies be totally individualized. That all disease be targeted at its core. We will succeed in realizing this vision for eight hundred reasons—our people. Expertise, insight, synergy and, above all, passion unite us in creating a better way to cure disease and allow us to have fun while doing it. The face of the future never looked brighter.

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### **BS/MS Cell Biologist • Position #990496**

The candidate needs to demonstrate working familiarity with basic cell biological techniques: immunoassays, protein separation & detection, cell culture. Some experience with basic molecular biology techniques is a plus. This position involves an analysis of intracellular structural rearrangements involved in neurodegenerative processes. Requires a Master's or Bachelor's degree in Biology or a Neuroscience related discipline with a minimum 2-3 years of relevant laboratory experience.

### **BS/MS Electrophysiologist • Position #990489**

The incumbent will work together with a team of researchers to refine understanding & elucidate the mechanism of action of novel drug candidates & to provide input into new drug discovery directions based on these findings. This work will include *in vitro* electrophysiology in brain slice preparations. The incumbent must have an excellent general understanding in synaptic neurotransmission and neuropharmacology. The ability to write and speak effectively & to communicate research results through oral/poster presentations is a must. Strong computer skills including familiarity with computer-based data acquisition & analysis are strongly desired. Requires a Master's or Bachelor's degree in Biology or a Neuroscience related discipline with a minimum 2-3 years of relevant laboratory experience.

### **BS/MS Pharmacologist • Position #990493**

The incumbent will work together with a team of researchers to refine understanding & elucidate the mechanism of action of novel drug candidates & to provide input into new drug discovery directions based on these findings. This work will involve biological techniques including small animal surgery, electrophysiology, & behavioral pharmacology, in addition to instrumentation & measurement of EEG & ECG biopotentials. An excellent general understanding of biological mechanisms, techniques, & the ability to interface with other team members specializing in aspects of pharmacology & physiologic instrumentation are musts. The ability to write & speak effectively & to communicate research results through oral/poster presentations is essential. Strong computer skills including familiarity with computer-based data acquisition & analysis are strongly desired. Requires a Master's or Bachelor's degree in Biology or a related discipline with a minimum 2-3 years of relevant laboratory experience.

### **Genomics Postdoctoral Scientist • Position #990498**

A postdoctoral position is available within our functional genomics group. We are using model organisms such as *C. elegans* and *Drosophila* as well as the various worm, fly & human DNA sequence databases to discover novel therapeutic targets for Alzheimer's disease (see for example, Ellerbrock et al., 12th International *C. elegans* Meeting, page 291). We have an active program in the area of presenilin biology of which you would be a part. We encourage publication as well as attendance at national & international meetings. Training in worm or fly genetics is required. Applicants should have completed their PhD. Preference is for a start date prior to December 31, 1999.

### **BS/MS Molecular Neurobiologist • Position #990497**

We are looking for MS/BS level scientists with laboratory experience in molecular biology and cell biology preferably, but not essentially, in the neurobiology area. The scientist will work with a group studying GPCRs in the CNS & use genomics approaches to finding therapeutic targets for psychiatric illnesses. Candidate should be innovative & interested in exploring new technologies & have good communication skills. Requires a Master's or Bachelor's degree in Biology, Molecular Biology, Cell Biology or Neuroscience related discipline with a minimum 2-3 years of relevant laboratory experience.

### **PhD Neuroscientist • Position #990494**

We seek neuroscientists to develop an innovative preclinical drug discovery research program focused at treatment of psychiatric diseases. Requires a strong background in integrative neurobiology & molecular neuroscience in order to build a successful discovery research strategy that is based on CNS targets identified by genomic platforms. The ideal candidate will have an in-depth knowledge of the pathophysiology & pharmacotherapy of psychiatric diseases. In addition, a proven track record of designing/implementing a multidisciplinary research program aimed at probing the functions of neural systems associated with psychiatric pathophysiology is desired. Qualified applicants will work in a multidisciplinary team environment that utilizes cutting-edge science & technology to develop novel therapeutic agents for schizophrenia, major depressive disorder, anxiety disorders, & migraine. Our CNS Discovery Program Teams offer an exciting & challenging research environment & provide opportunities to incorporate innovative research paradigms within individual laboratories. Applicants will have a PhD in Neuroscience or a related discipline & minimum 3 years of relevant postdoctoral experience.

### **BS/MS Neurochemical Pharmacology • Position #990393**

Candidate will carry out receptor autoradiography on animal brain sections & receptor binding studies on membranes generated from animal tissue & cell-lines. In addition, this individual will design, set up & run biochemical assays to support drug discovery programs as well as carry out *in vivo* animal pharmacology experiments. Requires a Bachelor's or Master's degree in Biochemistry or closely related science along with proficiency in the use of curve fitting & graphic programs as well as competency in image analysis & liquid scintillation counting.

### **PhD Neuropharmacologist • Position #990396**

Candidate will design, set up & execute novel animal models of psychiatric & neurologic conditions while providing experimental insights into the therapeutic relevance of novel receptor & ion channel targets by carrying out neurochemical, anatomical & behavioral studies. In addition, this individual will support drug discovery programs by identifying & validating surrogate makers of drug efficacy. Requires a PhD in Neuroscience or related field with at least 2 years of relevant postdoctoral experience along with demonstrated knowledge of the influence of psychiatric disease models & drugs on neuronal function at circuitry & behavioral levels.

### **PhD Electrophysiologist • Position #990552**

The scientist we select will evaluate the electrophysiological actions of novel compounds on cardiac cells *in vitro*. The incumbent will also perform action potential duration studies using isolated cardiac cells or heart slices as well as whole cell and single channel patch clamp studies. Experience with performing Purkinje fiber action potential duration measurements, isolating and recording from M cells, and patch clamp techniques is highly desirable. PhD with relevant graduate training or B.S./M.S. degree with 3 or more years of closely related experience required.

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## BACK TO THE BASICS

*Fresh opportunities to make a mark in life science aren't restricted to new areas of interest such as business, lab automation, and bioinformatics. The conventional route through a pharmaceutical or biotechnology laboratory offers several career options, as the following two companies demonstrate.*

Who can carry out that work? Millennium puts a high premium on individuals comfortable with both life science and computation and statistics. "We find that people doing Ph.D.'s in a biology arena who happen to be computer hackers on the side are good in this area, as they're comfortable in both worlds," says Dionne. "Alternatively, we look for people who have switched careers. They started off in the biosciences, and then switched over to the computer side at the graduate level. They speak both languages well."

How does Millennium find its bioinformatics experts? "We get more of our experienced hires by networking," says Shani Stickney, manager of staffing and HR systems. "We also have informal training seminars on software skills." Adds Dionne: "A lot of Ph.D. candidates write computer programs that we use. We contact them and groom them to do the work. We are, in effect, looking for double majors at the Ph.D. level. We're asking for people to develop the bioinformatics tools, not just be at a comfort level with them."

### **PALO ALTO, California:**

Incyte Pharmaceuticals, Inc. focuses on what it calls "biology in silico." It aims to provide quantitative analyses, database comparisons, and computational algorithms that life scientists can use before they step into the wet biology lab to carry out research on drug discovery. "We're providing in silico information across the range, from DNA to RNA to systems," explains Mark Egerton, Incyte's senior director of pharmacogenomics. "We provide databases to our key pharmacological partners. In the coming months and years, we will move more aggressively into the total life science market."

Egerton has the specific task of leading a program to develop two in silico-based products that will contain RNA expression and protein expression data. "They will be focused on target discovery and the lead optimization phases of drug discovery," he says. "I rely heavily on people well trained in informatics and database structures."

Few universities offer formal training in bioinformatics. However, Egerton finds the output of Ph.D.'s and postdoctoral fellows in life science sufficient for his needs. "A high number of life scientists in academia can't get by these days without using the computer," he explains. "We take people from some of the leading academic institutions around the world and help and train them for specific roles." Other recruits come with Bachelor's degrees in life science, and computer literacy. "Once they get to Incyte, they get a heavy dose of computer training," says Egerton.

Incyte has tough requirements when hiring individuals qualified for this hot field. "We want to know if they fit into our corporate culture," continues Egerton. "People coming to Incyte on interviews will give seminars on their projects. We really hope that they've used the computational tools that are available. We also want them to understand the ways in which new computational tools and data analysis will be used in the future."

*"We take people from some of the leading academic institutions around the world and help and train them for specific roles."*

## BACK TO THE BASICS

Fresh opportunities to make a mark in life science aren't restricted to new areas of interest such as business, lab automation, and bioinformatics. The conventional route through a pharmaceutical or biotechnology laboratory offers several career options, as the following two companies demonstrate.

### **SAN DIEGO, California:**

Established in 1994, Desmos, Inc. specializes in tissue engineering — the use of artificial substrates to permit the creation of new tissue. Current areas of interest include growing pancreatic islet cells for treatment of diabetics, and acceleration of wound healing, using materials placed in wounds that produce better, faster integration of cells.

"We have technology based on an extracellular matrix protein, laminin-5, which functions outside cells," explains Mary Harper, Desmos' vice president for research and development. "It is involved in cell adhesion, cell migration, and cell proliferation. It could be used to coat the framework of scaffolds used to make artificial tissues, or to get better integration of cells and better biocompatibility between cells and polymers. We're also growing a variety of different types of cell that have typically been hard to grow, that can then be used to grow alone or as part of a structure."

While several academic researchers focus on tissue engineering, few graduates have specific training in that area. Thus, Desmos seeks broader-spectrum scientists to join the roughly 20 individuals who now work in its R&D department. "We're looking for people with very excellent scientific expertise — people who can move projects forward and are very project- and product-oriented" says

Continued ►

# Solutions for Genomic Research

Incyte Pharmaceuticals is a leading provider of an integrated platform of genomic technologies designed to aid in the understanding of the molecular basis of disease. Our platform includes database products, genomic data management software tools and related reagents and services—information management tools critical to the pharmaceutical and biotechnology industries for drug discovery and development.

The employees of Incyte provide the tremendous energy, talent and expertise that will enable us to help revolutionize the world of healthcare. We're looking for individuals who share our vision and want to play a role in defining a new industry as we build our global organization.

*We would be glad to visit with you at the 11th International Genome Sequencing and Analysis Conference presented by The Institute for Genomic Research in Miami Beach on September 18-21.*

For our main campus in Palo Alto in the San Francisco Bay area, we are recruiting for the following positions. Please reply with resume and letter to: Incyte Pharmaceuticals, Inc., 3174 Porter Dr., Palo Alto, CA 94304, fax 650/845-4176, email [employ@incyte.com](mailto:employ@incyte.com).

**Program Manager/ Director  
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Programmers**

**Bioinformatics Research  
Associates**

**Scientist – Application**

**Scientist – IP Informatics**

**Scientific Programmers**

**Software Engineer (Java,  
C, C++)**

**Senior Directors of  
Client Business**

**Key Account Managers**

**Senior Director of  
Customer Service**

**Product Marketing Managers**

**Product Marketing Director**

**Competitive Strategy Analyst**

**Director of Corporate Development**

At Incyte's advanced laboratory facility across the SF Bay in Fremont, we design, manufacture and process GEM™ microarrays. Consider the following challenging opportunities and then reply with resume and letter to: Incyte Microarray Systems, 6519 Dumbarton Circle, Fremont, CA 94555, fax 510/739-2200, email [microarrayjobs@incyte.com](mailto:microarrayjobs@incyte.com).

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## Analytical Chemistry Scientist

You will develop and apply innovative science and technology in structural and analytical chemistry to drug discovery research, and collaborate with scientists on therapeutic-based discovery programs. You will also be responsible for the analytical characterization and physical property determination of discovery chemical leads. Candidates must possess a Ph.D., 2+ years of management experience in the pharmaceutical industry, and in depth knowledge of HPLC and capillary electrophoresis. Experience with mass spectrometry a plus. Excellent written/verbal communication skills highly desired. (Job Code: 99-067)

## Biochemistry Scientist/Senior Scientist

We are looking for a truly exceptional Scientist to join our Biochemistry team. This person must love science, and exhibit a strong sense of responsibility for identifying new drugs to improve people's lives. This is a real opportunity to work with a great group of people at an organization that someday will be legendary not only for its success, but also for the teamwork and dedication of its members. A Ph.D. in Biochemistry or Microbiology is required. Experience and aptitude for designing and performing in vitro experiments to evaluate anti-infectives is preferred. Postdoctoral experience desired. Both classical assays of in vitro potency and mechanism of action studies will be pursued. (Job Code: 99-029)

## Research Assistants/Associates

As a member of our Biochemistry group, you will analyze the biological activity of our innovative pharmaceuticals and help develop physiologically relevant assays. Candidates must possess a BS in biochemistry or related field, 0-5 years of relevant experience, and excellent analytical and organizational skills. (Job Code: 99-069)



## Medicinal Chemistry

As a member of our Medicinal Chemistry group, you will help design, synthesize, purify, and characterize novel biologically active molecules. You will also contribute to new target evaluation, exploratory research and lead optimization projects, and collaborate closely with colleagues in our Biochemistry and Pharmacology groups on integrated project teams.

## Research Associates/Senior Research Associates

Candidates must possess a BS/MS in chemistry, 2+ years of relevant industrial experience, and demonstrated lab experience in synthetic organic chemistry or purification. (Job Code: 99-041/046)

## Scientist

Candidates must possess a Ph.D. in organic chemistry; 0-2 years of industrial experience; a proven track record of accomplishments that distinguishes you among your peers for both productivity and potential; and excellent analytical and written/verbal communication skills. (Job Code: 99-068)

## Pharmacology Research Associate/Senior Research Associate

You will assist with electrophysiology, pharmacology and bio-assay development. Candidates must possess a BS/MS in Biology or related discipline and at least 1 year of hands-on experience with electrophysiology, including oocyte microinjection and intracellular or patch-clamp recordings. (Job Code: 99-050)

## Safety Research Associates

You will prepare detailed study protocols, conduct studies (i.e. administer compounds, record observations, perform necropsy examinations), and develop/maintain data tables and report summaries. Candidates must possess a BS or equivalent along with 2+ years of toxicology testing experience in a GLP environment. These positions require the ability to perform routine tasks competently and independently, learn/master new experimental techniques, generate reliable/consistent results, and maintain concise/accurate records. Excellent written/verbal communication skills highly desired. (Job Code: 99-063/066)

Beyond attractive compensation and benefits, we will provide you with a scientifically challenging and rewarding environment, a pathway for personal and professional growth, and significant equity participation. Please forward your resume with references and a cover letter to:

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fax (650) 827-8690

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Our partnership with Pfizer addresses pulmonary delivery of insulin. With Biogen, we are working on a non-invasive formulation of its leading multiple sclerosis drug, AVONEX. Inhale's novel system integrates customized formulation and proprietary fine-powder processing, packaging and inhalation device technologies. Now, with our valuable corporate alliances and our broad product portfolio in various stages of development and commercialization, this is an exciting time to join the Inhale team.

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Nov. 14-18, 1999, New Orleans, LA

## QUALITY

### Quality Assurance Specialist

You will be the QA representative on project teams and will interface with pharmaceutical partners on quality and product issues and with FDA during cGMP audits. Requires a BS in Engineering or Science with 5-10 years quality assurance or process development experience in the pharmaceutical or device industry. Job #473SCI

### GMP Training Coordinator

You will coordinate and administer cGMP training at Inhale, including safety, production and other training programs. Requires a Bachelor's degree (preferably in Education or Science) and 3 years experience in a medical manufacturing environment, preferably in QA. Job #390SCI

### QC Research Associate (2 positions)

Perform release and stability testing on clinical drug products, assist in developing analytical methods and provide technical support to ongoing project teams. Experience in HPLC, spectroscopy, calorimetry and particle sizing is essential. This senior position requires a BS/MS in Chemistry or Chemical Engineering or 3+ years industry experience. The junior position requires a BS/MS in Chemistry or related field and 2+ years industry experience. Job #430SCI (senior position). Job #441SCI (junior position).

### QC Methods Research Associate

Responsibilities include developing/optimizing analytical methods for drug stability, documenting/validating methods and writing/reviewing clinical trials documents. Requires a BS/MS in Chemistry, Biochemistry (or related field) and 2+ years pharmaceutical industry experience. Job #432SCI

### QC Stability Coordinator

You will assist in preparing stability protocols and coordinating stability testing for drug products. Additional responsibilities include performing stability testing, reviewing stability data, preparing data reports, and providing support to project teams. Requires a BS/MS in Chemistry, Biology, or related field and 5+ years of industry experience. Job #465SCI

### Quality Assurance Manager

As QA Manager, you will manage senior QA staff and establish and formalize quality assurance policies and activities in support of the drug development process. You will also work with project teams to create a system that will document the development activities and scale-up process to meet current industry standards, regulatory requirements and partner expectations. You must have 15 years or more experience in the pharmaceutical industry in quality assurance, drug development or regulatory affairs. Job #496SCI

### QA Specialist - Auditor

You will initiate and implement an internal auditing schedule for all GMP manufacturing and support areas such as administration, warehousing, document control and facilities. You will also be responsible for developing and implementing a training program for the internal audit team. You must have a BS in a related field or 3 years of QA-related experience. Job #331SCI

## DRUG DEVELOPMENT GROUP

### Technical Leader (3 positions)

You will direct scientists in the development of drug product for delivery via the lung, including ensuring effective utilization of resources, assisting in developing project work-plans/technical reports, and coordinating activities leading to IND, NDA (or BLA). Requires a PhD in Chemistry, Biochemistry, Pharmaceuticals, Chemical Engineering or a related field and 5-10 years pharmaceutical development experience. Job #s 445SCI, 455SCI, 460SCI

## DRUG DEVELOPMENT AND RESEARCH GROUPS

### Scientist/Sr. Scientist

Responsibilities include: characterizing protein/peptide drug substances in solution/solid state, designing and performing pre-formulation/formulation studies and optimizing formulation parameters. Requires a PhD in Chemistry or Chemical Engineering and 2+ years post-PhD industry experience. Experience with HPLC analysis and techniques used to study the solid state is essential. Job #456SCI

### Research Associate/Sr. Research Associate

You will develop analytical methods for characterizing protein and peptide powder formulations, characterize the chemical and physical stability of these formulations, and process solution formulations into fine particle powders for aerosol delivery. Requires a BS/MS in Biochemistry, Chemistry, Biology, Chemical Engineering and 5+ years industrial experience. Job #324SCI

### Scientist (2 positions)

You will lead/coordinate Inhale's research effort to understand the factors which determine bioavailability on inhaled peptides and proteins in the lungs. Requires a PhD and 2+ years experience or a BS/MS and 7+ years experience. You should also have a pharmacology background, and experience working with the absorption, distribution, metabolism, and excretion (ADME) of protein and peptide pharmaceuticals. Job #492SCI

### Scientist

You will conduct formulation research projects to advance technology in the area of solid state stability of dry powder inhalation aerosols containing protein and peptide drugs. Requires a PhD in Physical Chemistry or Physics, at least 1 year of experience in applied research and a strong theoretical understanding in material science and physical chemistry. Job #450SCI

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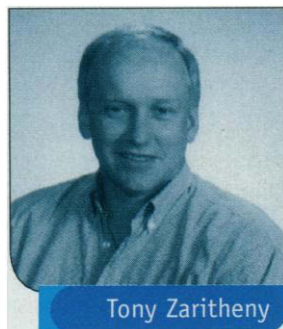
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.....

## BACK TO THE BASICS

Harper. "They need to be flexible enough to shift projects and take on multiple projects." Scientists sought by Desmos include those who have experience with cell culture, molecular biology, biochemistry, bioengineering, protein chemistry, and surface sciences, as well as toxicologists and scientists who have good experience in animal models.

Once recruits come aboard, Harper continues, "we train them in the company technology — those assays and types of experiment that are laminin-5 specific, how we work with this very sticky protein, and specific bioassays that we use, such as migration assays and cell adhesion assays. We might also train them in the variety of different cell types that we work with, and expose them to particular applications, such as animal models and *in vitro* assays.

Tissue engineering requires a broad range of skills that can be applied to a variety of different fields. Academic researchers, for example, are using its principles to develop artificial organs complete with blood vessels. With skills in tissue engineering, "you can move into devices, and probably segue into the diagnostic area," adds Harper. "And you're probably going to be familiar with biologics and biocoatings."



Tony Zaritheny

### CAMBRIDGE, Massachusetts:

AstraZeneca, a global company formed by the April merger of Sweden's Astra AB and the UK's Zeneca Group PLC, offers hot career opportunities across the spectrum. "One very strong area is biochemistry, because of all the genomics work," says Tony Zaritheny, site HR director for the company's Cambridge laboratory. "Biochemists have to investigate proteins that we discover."

AstraZeneca has high expectations of the Ph.D.- and Master's-level biochemists that it seeks. "We're looking at rigorous use of quantitative methods," says Zaritheny. "Candidates need sophisticated laboratory experience, such as a focus on enzymology with a broad life science background."

The merger, which brought together two research organizations with complementary skills to focus on drug discovery, has also sparked a need for combinatorial chemists, who play an increasingly prominent role in the pipeline from basic research to marketable drug. "There's a lot of competition in that area," says Zaritheny. "We're looking for a substantial number."

In selecting its new recruits, AstraZeneca looks for individuals with a very solid background in the foundation sciences, such as chemistry, biology, and biochemistry. "We find that the best scientists have a broad scope, and we have a team approach," says Zaritheny. "The ability to work in teams and to understand subjects outside your own is critical." What do Zaritheny and his colleagues look for in candidates? "Enthusiasm about their research work and the ability to bring that forward is important," he says. "So is the ability to interact with the scientists who interview them. And we expect candidates to have an interdisciplinary team perspective." ■

For further valuable career features, go to [www.scienceonline.org](http://www.scienceonline.org), click on *Science Careers*, then click on *Advice and Perspectives*.

## THE CALL FOR RENAISSANCE PEOPLE

If you have strong qualifications in life science and a yen to manage projects, the business side of the biotechnology and pharmaceuticals industries beckons. "I see a growing demand for people with broad project planning and project management skills," says Steven Hochberg, president of search firm Caliber Associates. "Development of drugs can take years. Someone who can bring a scientific background coupled with sound business judgement is enormously valuable."

According to Alain Schreiber, CEO of biotechnology company Vical Incorporated, some understanding of business is essential to any life scientist who wants to advance in the corporate setting. "To move up and become successful, scientists have to understand product development and business," he says. "They have to be ready to branch out into product development or business development. For that, they need very strong science skills and business knowledge. These renaissance people either have innate business skills or have gone back to business school to acquire them."

Shani Stickney, manager of staffing and HR systems at Millennium Pharmaceuticals, Inc., outlines the capabilities necessary for Ph.D.'s who want to take on business responsibilities. "One of the critical skills is the ability to think more broadly, and to manage across areas that they don't have full control of," she explains. "Influencing skills, team-building skills, and management skills are crucial. These areas are currently not emphasized in college. We feel lucky when we find people with the innate capacity to manage." What does that mean for scientists interested in the management track at Millennium and other life science companies? "They would benefit from working more broadly throughout their laboratories rather than concentrating entirely on their own work," advises Stickney.

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For the Cambridge opportunity only, please forward your resume to: Pfizer Discovery Technology Center, Job Code: SC999-RKB, 620 Memorial Drive, Cambridge, MA 02139; Fax: (617) 551-3111; E-mail: [openings@cambridge.pfizer.com](mailto:openings@cambridge.pfizer.com). Visit us on-line at: [www.pfizerdtc.com](http://www.pfizerdtc.com).

## NEW LEADS BIOLOGY

### SENIOR RESEARCH SCIENTIST, Ph.D.

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

## ASSISTANT SCIENTIST, BS/MS

We have 2 openings for BS/MS level Scientists in the New Leads Biology group. He/she will be involved in developing and running a variety of assays, including enzymatic, receptor-binding and whole cell assays. These assays will be used to discover lead compounds by high-throughput and directed screening and the leads discovered will then be characterized in selectivity and functional assays. General skills needed include common biochemical techniques, use of automated instrumentation and computers. This position also requires excellent communication skills and problem solving ability. Job Code: 9922721SCI

## INFECTIOUS DISEASES

### ASSOCIATE SCIENTIST

We have an immediate opportunity for an MS Scientist in our Infectious Diseases group. The successful applicant will be responsible for conducting research to characterize bacterial genes of unknown function. This effort will involve PCR cloning, overexpression and target protein purification, use of green fluorescent protein to study target protein behavior and the construction and evaluation of gene knock-out/in alleles. Additional studies will include enzymological characterization of target proteins, immunoprecipitation experiment, Western blot analyses and receptor/ligand binding assays. MS degree or the equivalent in biochemistry, cell biology, molecular biology, or microbiology is required. Experience in manipulating bacterial/microbial systems, familiarities with GFP protein technology and fluorescence microscopy are preferred. The ability to multitask and excel in a project team environment is highly desirable. Job Code: 9904161SCI

## BS/MS SCIENTIST, PROTEIN CHEMISTRY

We have an immediate opportunity on our Protein Expression and Structure Team for a highly motivated BS/MS scientist with experience in the purification and biochemical characterization of a variety of proteins. You will work with X-ray and NMR structural biologists to answer challenging biochemical questions, applying bimolecular NMR techniques to the diverse problems of the pharmaceutical industry. Experience in the purification of recombinant proteins in support of X-ray and NMR structural studies and/or high throughput screening is highly desirable. Job Code: 9922380SCI

## IT PROJECT MANAGER

You will be responsible for providing information technology project management services to client business units in Central Research. You will plan tasks, assign resources to the tasks, monitor and track progress against the plan, and coordinate projects. In addition, you will mentor and guide team leaders, assist in the preparation and presentation of IT project proposals, facilitate planning, review and design meetings with team members, and report project progress as well as deviations from plan. MS/MBS or equivalent in computer science or related field along with 9+ years of progressive responsibilities within a project management discipline. Strong leadership, analytical and technical skills as well as current knowledge of computer hardware and software technologies are essential. Demonstrated experience in the planning and management of IT projects along with excellent written, verbal and interpersonal skills are also a key attribute. Experience in the pharmaceutical or biotechnology industry and experience in managing global projects highly desirable. Job Code: 9921640SCI

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Pfizer Inc, Central Research, Job Code: \_\_\_\_\_  
c/o Aon Consulting, P.O. Box 25, Findlay,  
OH 45839, or e-mail to: [Pfizer@aon-hros.com](mailto:Pfizer@aon-hros.com).

Pfizer offers a workplace rich with diversity and potential - an Equal Opportunity Employer.



LIFE IS OUR LIFE'S WORK.



## R&D PROFESSIONALS

# NEW PRODUCTS ARE YOUR LIFEBLOOD. OURS TOO.

When we at Johnson & Johnson ask "what's new?", we're not speaking casually. We're reflecting a belief we all share —innovation is key. Because it is our ongoing innovation of products that help people, like Risperdal and Retin-A, that leads to the ongoing success of Johnson & Johnson, the world's leading health care company.



The R.W. Johnson Pharmaceutical Research Institute, located in Spring House, Pennsylvania, conducts pharmaceutical research in therapeutic areas including anti-infectives, central nervous system, dermatology, oncology and analgesics.

### Senior/Principal Scientist Analgesic Drug Research

PRI has a vacancy for either a Senior or Principal Scientist in the Analgesics Research Team, based in Spring House in suburban Philadelphia. The Analgesics team is a multidisciplinary group searching for novel therapeutic agents for the alleviation of acute and chronic pain. The group uses molecular biological approaches to identify novel analgesic targets, high throughput screening and a variety of in-vitro approaches to select candidates for evaluation in appropriate models.

The successful candidate will have an excellent background in pain and analgesia, along with experience in all aspects of the relevant models of neuropathic pain, including dosing, surgery, etc. To qualify, you should have a Ph.D. in Pharmacology, Neuroscience or a related subject, and several years of experience, preferably in drug research. Excellent communication, inter-personal and computer skills are also very important.

As a valued team member, you'll receive a competitive salary and great benefits including medical/dental, a 401(k), a pension plan and a comprehensive wellness program. Please apply directly on-line at our web site [www.jnj.com](http://www.jnj.com) or forward a scannable resume, noting operating company as **R.W. Johnson Pharmaceutical Research Institute and Req. Code 992873SCI**, to: **Johnson & Johnson Recruiting, P.O. Box 16597, New Brunswick, NJ 08906-6597**. Please note, resumes received electronically are reviewed within 24 hours. Mailed resumes are reviewed within 3 business days after receipt. We are an equal opportunity employer totally committed to diversity.

FOR FURTHER DETAILED INFORMATION REGARDING JOB RESPONSIBILITIES,  
WE HIGHLY RECOMMEND YOU VISIT OUR WEB SITE.

[www.jnj.com](http://www.jnj.com)



*LI-COR, inc., is a growing company that designs and manufactures scientific instruments for biological and environmental sciences. We currently have several full-time positions open in the Biotechnology Division. LI-COR offers a challenging and dynamic working environment and competitive salaries and benefits. For more information, visit our website at [www.licor.com/biohome.htm](http://www.licor.com/biohome.htm). Please send resumes to the Human Resources Dept., LI-COR, inc., P.O. Box 4425, Lincoln, NE 68504. EOE.*

### Senior Applications Scientist

LI-COR's Molecular Biology Department has a position with the following responsibilities: develop new/existing protocols used with LI-COR DNA Sequencers; develop insight into new mkts/competition; draft/review tech publications; give tech presentations/exhibits; provide training in application, reagents, protocols/software; travel to customer sites. REQ: Ph.D. in molecular biology, microbiology, biology, or related; post-doctoral exp preferred; min 4 yrs industrial exp in DNA sequencing or genotyping; team player; self-starter; high ethics.

### Product Manager

Full time opening in LI-COR's Biotechnology Marketing, focusing on positioning/profitability/promotion/improvements; expansion of current mkts; identifying new applications for assigned product lines; draft/review/write materials and sales aids; provide training/mkting support for assigned product lines; be part of new product development teams; give group presentations/meetings. REQ: B.S or M.S. in life sciences with 5 yrs exp in sales, product mgmt and/or applications; field support of molecular biology reagents or instrument systems. MBA and/or sales exp preferred. Requires moderate int'l /domestic travel.

### Field Applications Scientist Eastern U.S. Location

Will provide technical support for LI-COR's DNA analysis products and participate in the sales process through seminars and training. Requires Ph.D. in biological sciences, genotyping, sequencing or molecular biology. Strong communication skills, must enjoy working with customers, and have a demonstrated ability to teach and present technical information. Familiarity with computer software and instrumentation systems desirable. This position involves a moderate amount of travel.

# The transition from theory to practical application transforms molecules to medicines.

At Schering-Plough's Biotechnology Facilities, scientists skillfully develop and perfect innovative methods to bring quality pharmaceutical products to market. In this technologically advanced environment, you will provide the analytical support for the many aspects of the product development process, including clinical trials.

## CHEMICAL ENGINEER

You will be part of a team responsible for developing, optimizing and evaluating processes for the production of biopharmaceutical products. This will include designing and conducting experiments, data analysis and methods development for cell culture processes. A PhD in Chemical Engineering with 0-2 years' industrial or postdoctoral experience is a must. A strong background in methods development and hands-on experience in cell culture preferred; experience in purification is a plus. Excellent oral/written communication skills are essential. **Job Code: XHXB9909BAPSc**

## SENIOR SCIENTIST

The responsibilities of the position include the development of bioanalytical methods suitable for routine laboratory. This will include writing SOPs and documents suitable for regulatory submission. The successful candidate will have a PhD or DSc in Cell Biology, Microbiology, Immunology with as much as 4 years' experience. A working knowledge of GLP and GMP is important but not essential. **Job Code: XHXB9917SWSc**

## SENIOR SCIENTIST

We seek an individual with a background in cell biology to work on engineering of cell lines for protein expression and other protein expression projects for antibodies, receptors, or novel secreted proteins. Position requires PhD (or equivalent) in Cell Biology, Biochemistry or Biotechnology with 1-3 years' experience in mammalian cell culture and protein expression. **Job Code: XHXB9912BAPSc**

## SCIENTIST

You will be part of a team responsible for developing, optimizing and evaluating processes for the production of biopharmaceutical products in microbial and mammalian cell culture systems. To qualify, you will need a BS/MS in Cell Biology, Microbiology or Molecular Biology with 5+ years of related experience. Preferred candidates will have experience with cell line maintenance, and must be well-versed in the development of small-scale prokaryotic/eukaryotic fermentations for the production of recombinant proteins and/or viral vectors. You must also be able to analyze, interpret and communicate experimental results and possess excellent communication skills. **Job Code: XHXB9912Sc**

## SCIENTIST

We seek a molecular biologist to deal with clinicians, study directors and others involved in the preparation and shipping of samples including all sample inventory, handling and tracking. A BS in Biology, Biochemistry, Microbiology, Molecular Biology or related field with 7-10 years' experience or MS degree with 4-8 years' experience required. Experience with cGLP and with LIMS or other data handling systems a must. **Job Code: XHXB9924Sc**

## SCIENTIST/CELL BIOLOGIST

We seek a talented individual to support clinical and non-clinical production of cell culture products. Responsibilities include: providing technical support in assessing cell physiology at various stages of mammalian cell culture fermentations; assisting in methods development for optimum cell propagation and scale-up; and preparing, maintaining and testing cell lines used in production. Position requires BS or MS in Cell Biology or Physiology with at least 8 years' experience with mammalian cell culture or viral vector. **Job Code: XHXB9911BAPSc**

## SCIENTIST

As part of our Immunoassay group, you will develop and validate BIAcore-based assays in support of biotechnology development projects including cytokines, humanized monoclonal antibodies and gene therapy. This will include evaluating and bringing in new technology, characterizing products as to receptor-ligand interactions and affinity for various tissue components, and developing/performing/supervising the performance of immunoassays. A MS in a biological science plus 4-8 years of relevant experience in immunochemistry including the development of assays and extensive experience developing BIAcore-based assays required. You must also possess strong computer skills and have the ability to critically evaluate new methods, analyze/interpret/effectively communicate results and train/supervise laboratory personnel. **Job Code: XHXB995JSWSc**

## ASSOCIATE SCIENTIST

We seek an experienced Cell Biologist to work on engineering of cell lines and protein expression projects for antibodies, receptors, or novel secreted proteins. Requirements include BS/MS in Cell Biology, Biochemistry or Biotechnology with 2-6 years' experience in cell biology including mammalian cell culture and protein expression. **Job Code: XHXB9917Sc**

## ASSOCIATE SCIENTIST

Working with assay development, responsibilities include developing Flow/Laser Scanning Cytometry-based biological assays and cell-based analytical techniques in support of the gene therapy, IL-10, and alpha-interferon projects, in addition to new projects arising from research efforts. Requires a MS in Biology or BS and 6 years' experience with emphasis on cell biology, immunology, histology, or protein chemistry. Experience with flow cytometry, laser scanning cytometry, immunohistochemistry, and assay development preferred. **Job Code: XHXB9916Sc**

## ASSISTANT/ASSOCIATE SCIENTIST

You will contribute to the process development of prokaryotic/eukaryotic expression systems for the production of biopharmaceutical products. To qualify, you will need a BS/MS with 2+ years of experience in cell biology, molecular biology and/or microbiology. Excellent communication skills are a must, as is the ability to work independently. **Job Code: XHXB9914Sc**

## ASSISTANT SCIENTISTS

Openings exist for individuals to work in a state-of-the-art molecular biology facility, utilizing the latest RT-PCR and PCR technologies to analyze clinical samples. These positions require a BS in Biology, Biochemistry, Microbiology, Molecular Biology or related field with 2-4 years' experience in clinical laboratory testing, or MS degree with 0-2 years' experience. Experience with cGLP, and safe handling of biologicals and blood borne pathogens is required. **Job Code: XHXB9925Sc**

## ASSISTANT SCIENTIST

Part of a team responsible for performing and developing biological assays, responsibilities will include the assay of IL-10, p53 gene therapy vector, and alpha-interferon, assisting in the development of Flow Cytometry-based biological assays and cell-based analytical techniques in support of existing projects, in addition to new projects arising from research efforts. Requires MS in Biology or BS and 4 years' experience with emphasis on cell biology, immunology, or gene therapy. Experience with bioassays, mammalian cell culture, and flow cytometry preferred. **Job Code: XHXB9928Sc**

For additional information, or to apply online, visit our website at: [www.sp-research.com](http://www.sp-research.com)

We offer an excellent compensation package including a competitive salary, a cash incentive bonus program, comprehensive benefits, profit sharing and 401(k). Competitive benefits include: group insurance and retirement programs, flexible work arrangements, education assistance, and health and wellness programs.

For prompt, confidential consideration, we invite you to forward your resume which MUST include the Job Code for your position of interest to: **E-mail: [SPRIJobs@isearch.com](mailto:SPRIJobs@isearch.com) or send to: Human Resources-SW, Schering-Plough Research Institute, 1011 Morris Avenue, Union, NJ 07083-7197.** We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



**Schering-Plough  
Research Institute**

Using Science for Human Advantage



**FACULTY POSITIONS**  
**Assistant and Associate Professor**  
**Center for Cell & Molecular Biology**  
**Albany Medical College**

The Center for Cell & Molecular Biology at the Albany Medical College announces the availability of one tenure-track (Assistant Professor) and one tenured (Associate Professor) faculty position. The successful candidate's research will interface with scientific programs within the Center focusing on basic mechanisms of tissue remodeling. Faculty interests include molecular mechanisms that regulate cell adhesion and motility, cell proliferation, angiogenesis, growth factor and matrix dependent signal transduction, and gene therapy of cancer. It is expected that new faculty will participate in the graduate program in Cell & Molecular Biology and in the Postdoctoral Training Program in "Tissue Remodeling and Cancer." The Center for Cell & Molecular Biology is aligned with the Cancer Center at the Albany Medical Center and opportunities exist to develop collaborations with clinical faculty in the Cancer Center as well as in the Centers for Vascular Biology, Neuroscience, and Immunology and Microbial Disease.

The level of appointment will reflect the experience of the candidate selected. Qualifications include a Ph.D. degree and a demonstrated track record of excellence in research. The applicant will be expected to maintain an independent, externally funded research program that emphasizes molecular genetic approaches to problems related to Cancer Biology. The applicants will be expected to participate in the teaching missions of both the Graduate and Medical School.

Full consideration will be given to those applications received by October 1, 1999. A curriculum vitae, description of research interests, and at least three letters of reference are required; providing copies of published papers is strongly encouraged. Application materials should be submitted to:

**Paul J. Higgins, Ph.D.**  
**Cell & Molecular Biology (165)**  
**Albany Medical College**  
**47 New Scotland Avenue**  
**Albany, NY 12208**

*The Albany Medical College is an Equal Opportunity, Affirmative Action Employer*

**IDEC Pharmaceuticals Corporation** is a leader in the development of immunobiologically active monoclonal antibodies and other biologics for therapeutic application to cancer and autoimmune disorders. We pride ourselves in the excellence of our team members and invite a Sr. Research Associate to join our growing team in beautiful San Diego, California.

**SR. RESEARCH ASSOCIATE**  
**Tumor Immunology**

You will support our ongoing vaccine/therapeutic antibody research in prostate cancer and other tumor immunology. Responsibilities will include performing *in vitro* immunobiological assays, designing *in vitro* and *in vivo* models/test systems, and developing murine tumor models. Requires a BS/MS in Immunology or related field, 4+ years related experience, expertise in immunology and assays for human and murine lymphocyte functions, and experience in ELISAs, RIAs, and fluorescent assays.

We offer a competitive compensation package and excellent working conditions. For consideration for this position, please send your resume and salary history to: IDEC Pharmaceuticals Corp., Job Code SRA-599SC, 11011 Torreyana Road, San Diego, CA 92121. Email [mcarpenter@idecpharm.com](mailto:mcarpenter@idecpharm.com). EOE. NASDAQ/IDPH

**IDEC**  
**Pharmaceuticals Corporation**

**Indiana University, Department of Geological Sciences**  
**ROBERT R. SHROCK PROFESSORSHIP IN**  
**SEDIMENTARY GEOLOGY**

The Department of Geological Sciences at Indiana University invites applications and nominations for the newly created Robert R. Shrock Professorship in Sedimentary Geology. As a named professorship in Geological Sciences, the position is expected to be filled at the full-professor level. However, under exceptional circumstances, the position may be filled at a tenured, associate-professor level. The Robert R. Shrock Professor in Sedimentary Geology should be an established scholar with a strong research record that complements our current strengths in water-rock interactions at low temperatures, biogeochemical processes, geobiology, and the relationship between tectonics and facies architecture.

Appointees could teach courses in appropriate specialty at all levels. We encourage collaboration in research across disciplines and teaching within the Department, with the adjoining Indiana Geological Survey, as well as with other departments on campus. A Ph.D. or equivalent degree is required. Applications should include a personal statement of vision for the future of research, a narrative of important research, teaching, and service accomplishments, a detailed curriculum vitae, and names and addresses (including e-mail) of five referees.

Appointment may begin as early as August 2000. Applications should be submitted by November 1, 1999, but the position will remain open until filled. Applications or nominations should be sent to: Shrock Professorship Search Committee, Department of Geological Sciences, Indiana University, 1001 East 10th Street, Bloomington, IN 47405 USA.

This position is one of two newly endowed professorships in the Department of Geological Sciences at Indiana University. Further information about these positions and the Department can be found at: <http://www.indiana.edu/~geosci/>

*Indiana University as an Equal Opportunity/Affirmative Action Employer encourages the candidacies of women and minorities.*

# Predoctoral Fellowships in Biological Sciences

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## 2000 Competition

80 Fellowships will be awarded by the Howard Hughes Medical Institute for study toward a Ph.D. or Sc.D. degree in the biological sciences listed below. Awards, based on an international competition, focus on research directed to understanding basic biological processes or disease mechanisms. Fellowships may be held at academic or research institutions with appropriate degree programs.

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## Fellowship Terms

- Full-time study toward the Ph.D. or Sc.D.
- Up to five years of support possible
- \$16,000 annual stipend
- \$15,000 annual cost-of-education allowance

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## Eligible Fields of Study

biochemistry	epidemiology	molecular biology
bioinformatics	genetics	neuroscience
biophysics	immunology	pharmacology
biostatistics	mathematical and	physiology
cell biology	computational biology	structural biology
developmental biology	microbiology	virology

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## Eligibility

- At early stages of graduate study—college seniors or graduates, first-year graduate students, medical students, or physicians with less than one year of postbaccalaureate graduate study (prior study toward a medical degree does not rule out eligibility; eligibility for those with an M.P.H. will be determined on a case-by-case basis)
- Not in a funded M.D./Ph.D. program
- No citizenship requirements for application; U.S. citizens may study abroad, but others must study in the United States

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## Schedule

Application deadline: November 9, 1999  
Awards announced: early April 2000  
Fellowships start: June 2000–January 2001

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## 2000 Program Announcements, Eligibility Guidelines, and Applications

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](mailto:infofell@nas.edu)  
<http://fellowships.nas.edu>

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.

# Ph.D. Postdoctoral Molecular Biologist

Consider a postdoctoral fellowship to study the molecular mechanisms of angiogenesis as targets for drug discovery. The Procter & Gamble Company has an opening for a Ph.D. postdoctoral molecular biologist in our Pharmaceuticals Division, located in Cincinnati, Ohio.

A postdoctoral position is available to study the role of endothelial cell signaling during angiogenesis. The successful candidate will have the opportunity to use state of the art approaches to characterize novel endothelial signaling pathways and to develop therapeutic approaches to modulate the function of these pathways. Candidates should have strong backgrounds in molecular biology and protein biochemistry. Working knowledge of enzymology and/or receptor pharmacology are desirable. Familiarity with cardiovascular biology/physiology is a plus. Ph.D. in molecular cell biology or pharmacology, with broad experience in molecular and cellular biology. Some exposure to vascular biology and physiology is desirable but not required.

The Procter & Gamble Company is a world leader in the research, development, manufacture and marketing of a wide variety of health care, beauty care, laundry & cleaning, cosmetics & fragrances, food & beverage and paper products. P&G's annual sales exceed \$38 billion and our annual R&D investment is more than \$1.7 billion. P&G offers a competitive salary and benefits package placing us in the top 5% of U.S. firms. The Company's R&D organizations provide excellent opportunities for both personal and professional growth.

**Procter & Gamble**

If you meet the qualifications for this position, please apply on-line at P&G's web site: [www.pg.com/careers/applynow](http://www.pg.com/careers/applynow). Please refer to Ad Code **NAUSRD000029**.

NO phone calls and NO agency referrals. Applicants must be presently authorized to work in the U.S. on a full-time basis.

Procter & Gamble is An Equal Opportunity Employer.



**Bristol-Myers Squibb Company**

Pharmaceutical Research Institute

## Oncology Chemistry Research Investigator

Ph.D. in Organic Chemistry with a minimum of 3-4 years additional training in total synthesis of natural products. Extensive experience in the synthesis and manipulation of oxiranes, as well as experience in the chemistry and biology of the antimicrotubule agents paclitaxel and epothilone is required. Experience in the semi-synthesis of epothilone would be an asset.

Applicants should submit curriculum vitae, brief description of research accomplishments, and names and telephone numbers of three references. Bristol-Myers Squibb uses resume scanning technology. Please submit on plain white bond paper, using standard type and fonts (no italics, graphics or staples please), with Code # to: Bristol-Myers Squibb Company, Pharmaceutical Research Institute, P.O. Box 4000, MailStop A13-02, Code: PRAB113, Princeton, NJ 08543-4000. Equal Opportunity Employer, M/F/D/V.

[www.bms.com](http://www.bms.com)



## MAYO CLINIC RESEARCH FELLOW

A postdoctoral research position is available in the laboratory of Dr. Jeffrey L. Platt of the Transplant Immunology Program at Mayo Clinic in Rochester, Minnesota. Applicant must have a PhD and/or MD and should have experience in the fields of immunology, molecular biology, cellular physiology and either carbohydrate or protein biochemistry. Experience in handling animals would be advantageous. Send a current curriculum vitae, bibliography, a description of research experience and three letters of recommendation to:

**Laurie Dempsey, PhD**  
Transplantation Biology  
Mayo Clinic  
200 First Street SW  
Rochester, MN 55905

*Mayo Foundation is an affirmative  
action and equal opportunity  
employer and educator*

## Postdoctoral Research Opportunities in Microbial Pathogenesis

Center for Microbial Pathogenesis  
State University of New York  
School of Biomedical Sciences  
Buffalo, New York 14214-3000

The Center for Microbial Pathogenesis is an interdepartmental research group housed in the new Biomedical Research Building at SUNY Buffalo.

Positions exist in several laboratories for postdoctoral training in bacterial, parasitic or viral pathogenesis and molecular genetics. Address inquiries to individuals listed below:

**Anthony Campagnari, Ph.D.** Biosynthesis and assembly of the liposaccharides (LOS) synthesized by *Haemophilus ducreyi* and *Moraxella catarrhalis*; role of LOS in the pathogenesis mediated by these bacteria; analysis of bacterial receptors as vaccine candidates.

**John Hay, Ph.D.** Molecular pathogenesis of chickenpox and shingles (varicella zoster virus); vaccine analysis and development. Hepatitis C virus molecular genetics; structure/function relationships of viral gene products.

**V. James Hernandez, Ph.D.** Genetic, biochemical and molecular analyses of stress and adaptive responses in bacteria with emphasis on polyphosphorylated small molecule regulators. Development of "third wave" antibacterial chemotherapeutic strategies.

**Philip LoVerde, Ph.D.** Schistosome host-parasite interactions: antigens that stimulate T cells early in infection as vaccine candidates; the role of human genes in infection; mechanism of drug resistance in schistosomes; role of signal transduction in development (Niles).

**Timothy Murphy, M.D.** Antigenic and molecular characterization of bacterial outer membrane proteins. Vaccine development.

**Edward G. Niles, Ph.D.** Molecular mechanism of vaccinia virus early gene transcription termination; poxvirus mRNA processing; regulation of schistosome female specific gene expression (LoVerde).

**William Ruyechan, Ph.D.** Gene expression and DNA replication in herpesviruses and *Trypanosoma brucei*.

**Thomas Russo, M.D.** Pathogenesis of infections due to extraintestinal strains of *E. coli*; vaccine development.

Further information on the Center for Microbial Pathogenesis, faculty research interests and current publications may be found at [HTTP://www.smbuffalo.edu/cmp](http://www.smbuffalo.edu/cmp). Applications, including a curriculum vitae and the names and e-mail addresses of three references, should be made directly to the faculty of interest.

**Department of Microbiology**  
138 Farber Hall  
SUNY School of Medicine  
3435 Main St.  
Buffalo, NY 14214-3000  
Phone 1-716-829-3262  
Fax 1-716-829-2169

# Fellowships for Biological and Biomedical Sciences

The Howard Hughes Medical Institute announces the 2000 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.

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## **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.*

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## **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.*

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## **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.*

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## **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.*

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## **2000 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](mailto:infofell@nas.edu)  
<http://fellowships.nas.edu>

### *For Other Programs:*

Howard Hughes Medical Institute  
Office of Grants and Special Programs  
Department AN00  
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](mailto:fellows@hhmi.org)  
[www.hhmi.org/fellowships](http://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.

# IOWA STATE UNIVERSITY

*Where you can become your best.*

## Vice Provost for Research and Graduate Studies

Iowa State University invites nominations and applications for the position of Vice Provost for Research and Graduate Studies. The Vice Provost, working closely with the President and Provost, provides leadership for and fosters excellence in Iowa State's research programs. The Vice Provost advances research interests with federal agencies and other sponsors of major research efforts, and is responsible for the coordination and administration of research, graduate programs, technology transfer, and research services. The position has direct responsibility for administering a budget of approximately \$20 million. The Vice Provost works with the deans of the colleges as well as with the directors of the various research centers and institutes to maintain and strengthen the university's research. The Vice Provost is also responsible for the administration of the Graduate College, a responsibility that may be delegated.

Iowa State is a Carnegie Foundation Research I university and AAU member located in Ames, a progressive city of 50,000 recently acknowledged nationally for its exceptional quality of life. The university's 26,000-student population includes over 4,000 graduate students, with a faculty and staff of 6,000. Doctorate degrees are offered in 81 fields and masters degrees in 110. Annual research expenditures approach \$200 million. Over 60 centers and institutes conduct research in specialized areas. Five report to the Vice Provost. The Vice Provost coordinates the technology transfer programs including the Office of Intellectual Property and Technology Transfer, the ISU Research Foundation, the Iowa State Innovation System and the Iowa State University Research Park. Iowa State also operates the Ames Laboratory under contract with the U.S. Department of Energy. Recent research initiatives at Iowa State include efforts in fundamental plant sciences, applications of virtual reality, computational biology, healthy livestock, environmental and large-scale landscape management, and information systems. Iowa State ranks second among universities in the nation for the number of top technologies honored by R&D magazine. For more information about Iowa State, visit our Web site: [www.iastate.edu](http://www.iastate.edu)

Iowa State seeks energetic and creative candidates with a strong record of leadership in research and scholarship. Candidates must demonstrate an understanding of a broad range of university research and the ability to work with the federal government, private foundations, and other external research sponsors. They must have a distinguished record of scholarly activity including proven ability to obtain extramural funding and qualify for a tenured appointment in an academic department. Candidates from underrepresented groups are encouraged to apply.

Nominations should include the name and complete address of the nominee. Applications should include a letter expressing the applicant's interest, relevant experience, and qualifications; a current curriculum vita; and names, addresses, and telephone numbers of five references. Nominations and applications should be sent to Stanley Johnson, Search Committee Chair, Iowa State University, 107 Beardshear Hall, Ames, Iowa 50011 or by fax to (515) 294-8844. E-mail inquiries can be sent to [srjohnso@iastate.edu](mailto:srjohnso@iastate.edu).

Review of applications will begin on October 20, 1999, and continue until the position is filled.

Iowa State University is an equal opportunity/affirmative action employer and encourages the nomination and application of women and minority candidates.



## FACULTY POSITIONS

**Leonard and Madlyn Abramson Family  
Cancer Research Institute at the  
University of Pennsylvania Cancer Center**

The UNIVERSITY OF PENNSYLVANIA seeks outstanding candidates for tenure-track faculty positions in the recently created Abramson Family Cancer Research Institute, which is an integral part of the University of Pennsylvania Cancer Center and the School of Medicine. Faculty appointments will be based in the School of Medicine. Faculty rank will be commensurate with experience and qualifications.

Candidates who have scientific interests and experience in any field of cancer biology, including, but not limited to cell cycle control, tumor suppressor genes, oncogenes, cancer genetics, signal transduction, angiogenesis, apoptosis, and translational research, should send a letter of interest, curriculum vitae and the names of references to:



**Craig Thompson, M.D.**  
Scientific Director  
The Abramson Family Cancer  
Research Institute  
4<sup>th</sup> Floor - BRB II/III  
421 Currie Blvd.  
Philadelphia, PA 19104

THE UNIVERSITY OF PENNSYLVANIA IS AN EQUAL OPPORTUNITY/ AFFIRMATIVE ACTION. EMPLOYER. WOMEN AND MINORITY CANDIDATES ARE ENCOURAGED TO APPLY.



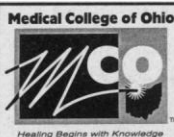
## Assistant or Associate Professors

The Department of Pharmacology, University of Iowa invites applications for tenure-track faculty positions from highly qualified and creative scientists. Up to three highly promising individuals whose research addresses contemporary questions related to signaling by membrane-receptors, fundamental neuroscience, cancer biology, endocrinology or toxicology will be appointed. Successful applicants will be expected to maintain a dynamic extramurally supported research program, excel in teaching, and actively contribute to strong departmental and interdepartmental graduate programs. Excellent start-up packages will be made available to successful candidates.

Candidates with a Ph.D. and/or M.D., post-doctoral experience and an excellent record of research productivity and quality should submit **before 15 December, 1999** a curriculum vitae, summary of research accomplishments (including copies of key publications), description of future research plans, and the names of at least three references to:

**Chair, Search Committee  
Department of Pharmacology  
College of Medicine  
Bowen Science Building  
The University of Iowa  
Iowa City, IA 52242-1109**

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



**Faculty Positions**  
**Department of**  
**Biochemistry and**  
**Molecular Biology**

**Medical College of Ohio**

Applications are invited for tenure-track faculty positions at the Assistant or Associate Professor level. These appointments are part of a continuing expansion of the department. Candidates working in all areas of biochemistry or molecular biology will be considered. Applications are particularly encouraged from individuals using molecular, genetic or bioinformatics approaches to study gene expression, protein structure/function, regulation of cell growth or differentiation, mechanisms of signal transduction in normal and transformed cells, control of the cell cycle or apoptosis, and gene therapy. Excellent research facilities and start-up funds are available. Requirements include a Ph.D. or M.D. with postdoctoral experience and demonstrated research accomplishments. The successful candidate will be expected to establish a vigorous externally funded research program and participate in the teaching of medical and graduate students. Candidates at the Associate Professor level should have current grant support. Applicants should submit a curriculum vitae, description of research plans, selected publications, and names and addresses of three references to:

**William A. Maltese, Ph.D.**  
**Chairman, Department of Biochemistry**  
**and Molecular Biology**  
**Medical College of Ohio**  
**3035 Arlington Avenue**  
**Toledo, OH 43614-5804**  
*EO/AA employer, M/F/D/V*

.....  
*Trimeris, Inc., located in Durham, North Carolina is a biopharmaceutical company focusing on the discovery and development of a new class of anti-viral therapeutics. With recent progress in the development of the company's lead anti-HIV compound, we are seeking to fill the following positions:*

**Director, Regulatory Affairs**

BS/MS or equivalent in a scientific discipline with a minimum of five years' pharmaceutical industry or small biotechnology company experience. Senior level regulatory professional to implement the Regulatory Affairs strategies for the company's HIV program. Manage regulatory projects; oversee the regulatory component of Phase I-IV clinical trial conduct; ensure timely preparation of all regulatory submissions; and maintain strong relationships with regulatory agencies. Candidates who possess experience with international regulatory submissions are highly desired.

**Job Code #: TRMSMA9990001**

**Scientist**

Ph.D. in Biophysics or Physical Chemistry. The qualified candidate will possess strong mathematical skills and experience with protein structure and spectroscopy of biological systems. Background in analytical ultracentrifugation, light scattering analysis of biomolecules and HPLC is preferred. Ability to work in a team environment is expected.

**Job Code #: TRMSRES9990002**

*Trimeris offers a competitive compensation package as well as a pleasant and intellectually stimulating work environment. Qualified candidates should send resumes to: Trimeris, Inc., Attention: H.R. Dept. SCI0917, 4727 University Drive, Durham, NC 27707. EOE. No phone calls please. Visit us online at [www.trimeris.com](http://www.trimeris.com)*



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*Located in South San Francisco, Axys Pharmaceuticals is a leader in the integration of drug discovery technologies from gene identification through clinical development. We are focused on the discovery of small molecule therapeutics, and have several promising research collaborations with world-class pharmaceutical companies. We currently have excellent opportunities for dedicated scientific leaders & researchers to join our extraordinary R&D team.*

**Director of Biochemistry & HTS**

As Director, you will lead the research group which develops, validates, and implements enzyme & receptor-based screens in support of high through-put screening efforts to identify small molecule leads for partnered & internal drug discovery efforts. You will also lead the research group responsible for screening efforts in support of small molecule lead optimization efforts; coordinate drug discovery research activities with corporate partners; and help review drug discovery efforts in Axys' Oncology program & partnered programs. Ideally, you have experience in the development/utilization of a wide variety of biochemical assays. (Job# N99-073-SCI)

**Tumor Biology Leader**

As our Tumor Biology Leader, you will lead the research group which develops and implements new in-vivo tumor and angiogenesis models for profiling drug candidates evolving from ongoing oncology drug discovery programs. You will also lead research project teams focused on the discovery of new drug development candidates and coordinate collaborative studies with corporate partners. Ideally, you have experience in the development, implementation, and utilization of cell & animal oncology models. (Job# N99-002-SCI)

Each of the above positions require a Ph.D. in Pharmacology, Physiology, Biochemistry, Cell Biology or other Biology discipline; 7-10 years' post-Ph.D. experience leading and/or participating in oncology drug discovery programs in a biotechnology or pharmaceutical company; and a significant publication record.

**Research Associate, Pharmacology**

You will be involved in the implementation and running of in-vivo and cell-based assays of cancer for testing potential anti-cancer therapeutic agents. Candidate should be well-versed in performing biochemical analysis of proteins and other tissue and cellular components, including techniques such as immunohistochemistry, immunofluorescence, Western Blotting, immunoprecipitation, flow cytometry, ELISA, and Northern Blotting. Candidate should also possess hands-on experience in mammalian cell culture, running gels, and ELISA; a willingness to work with animals; and computer literacy.

This position requires a BS or MS in Cell Biology, Pharmacology or a relevant discipline along with the ability to work independently and as part of a team. Strong communication skills and team spirit a must. (N99-070-SCI)

**Scientific Programmer**

Supporting our in-house scientists & chemists, you will provide additional functionality to RS3 Discovery, a chemical compound information system; write programs which interface with RS3 Discovery; provide end user support; and generate utility programs to facilitate the import, modification, and export of data. The position requires a BSCS or equivalent; several years of SQL and C programming experience using various database APIs to extract data for scientific research; experience with a chemistry-based database system or with computational chemistry support; and experience with small molecule databases. (N99-044-SCI)

We offer an extremely competitive salary and benefits package within a progressive, growing company. Please forward your cv to:

**Axys Pharmaceuticals**  
**HR Department, Attn: (Job#)**  
**180 Kimball Way**  
**South San Francisco, CA 94080**  
**email: [human\\_resources@axyspharm.com](mailto:human_resources@axyspharm.com)**  
We look forward to hearing from you. EOE

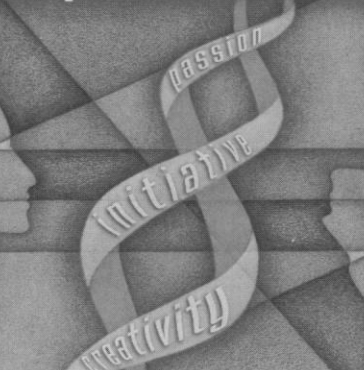


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Participate in the discovery and development of novel products in the areas of oncology and endocrinology, serving as both a consultant and collaborator with other researchers engaged in the study of human disease, disease models and the assessment of morphologic endpoints. You will also support our Development organization in the interpretation of preclinical safety studies for regulatory submissions. Requires an MD or DVM/VMD and Board Certification in Anatomic Pathology or equivalent plus proficiency in the interpretation of immunohistochemistry and molecular pathology. Research training with a PhD and/or experience in experimental pathology and models of human disease desirable.

We offer progressive benefits in the heart of the SF Biotech Bay. Send your resume, indicating Job Code BMJ738, to: Genentech, Inc., Human Resources, PO Box 1950, South San Francisco, CA 94083-1950. Please use plain typefaces. You may email your resume, indicating Job Code BMJ738, to [jobs@gene.com](mailto:jobs@gene.com) (ASCII files only with a maximum line width of 76 characters). We cannot accept faxed resumes. Genentech is an Equal Opportunity Employer.

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## EVOLUTIONARY GENETICIST

### Department of Biological Sciences Dartmouth College

Applications are invited for a tenured or tenure-track position at **open rank** to begin in the fall of 2000. We seek a person using modern molecular techniques to address important questions in evolutionary biology. We are particularly interested in those examining questions concerning molecular evolution, the evolutionary genetics of development, population genetics, or phylogeography. This is the first of four positions in evolutionary biology to be filled over the next few years. The successful candidate will be expected to develop a vigorous, externally funded research program and teach courses at the undergraduate and graduate level.

Ph.D. or equivalent and postdoctoral experience are required. Please submit curriculum vitae, statements of research and teaching interests, recent reprints, and three letters of recommendation to:

**Mark A. McPeck, Chair**  
Evolutionary Genetics Search Committee  
Department of Biological Sciences  
Dartmouth College  
Hanover, New Hampshire 03755-3576 USA

Review of applications will begin on **8 October 1999**. Although applications can be submitted initially by FAX to (603) 646-1347, original documents are also required. For more information on the department, please see <http://www.dartmouth.edu/artsci/biology/index.html>. Women and minority applicants are strongly encouraged to apply.

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### Staff Scientist - Ion Channels

We are seeking a creative Ph.D. level life scientist to develop novel ion channel assays using unique approaches and technologies at our Palo Alto, CA facility. This interdisciplinary position will involve working closely with chemists and engineers to adapt new ion channel assays to screening of combinatorial, chemical libraries. Expertise in calcium imaging, fluorescence detection, membrane potential assays, and patch clamp or two electrode voltage-clamp techniques are desirable. This position requires postdoctoral experience, a high degree of motivation and a proven ability to work both independently and as part of an integrated team.

**Job Code: #LMA002**

We offer an excellent compensation and benefits package. Please forward your resume to:

**Affymax Research Institute**  
HR Dept., Job Code #LMA002  
3410 Central Expressway  
Santa Clara, CA 95051  
Fax: 408-730-1393  
E-mail:  
[ari\\_jobs@affymax.com](mailto:ari_jobs@affymax.com)

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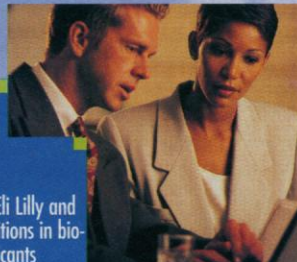
## Biochemical Pharmacology

The NeuroScience Division of Eli Lilly and Company is seeking to fill positions in biochemical pharmacology. Applicants should have a Ph.D. in pharmacology, biochemistry, or a related discipline and a minimum of two years of postdoctoral experience. Lilly NeuroScience is seeking experienced, innovative scientists who can work in a team environment, providing leadership within their disciplines.

Two positions are currently available.

**Position 1:** The primary skill set should include techniques that allow the study of the in vivo actions of drugs. These could include expertise in neurochemical techniques, microdialysis, functional imaging, etc.

**Position 2:** The applicant's expertise should be applicable to the characterization of macromolecular targets for novel drugs. This could include molecular and biochemical techniques for the study and characterization of orphan receptors, peptide receptors, signal transduction systems, and enzymes.



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We make it our business to reward our people with excellent compensation and benefits. For immediate consideration, please send your resume to: **Eli Lilly and Company, Division of Neuroscience, US Recruiting and Staffing, Lilly Corporate Center, DC #1818, Reference Source Code: ADSCMPH09, Indianapolis, IN 46285.**

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### Associate Director for the Development of Research Technologies, NIAID, NIH

The National Institute of Allergy and Infectious Diseases (NIAID), Division of Intramural Research (DIR), NIH seeks a dynamic individual to provide the vision of technology development required to support the future goals of the DIR and to develop plans to ensure the availability of technologies needed to serve the approximately 125 DIR investigators. The individual will be responsible for supervising Division-wide shared research support resources, overseeing and coordinating the implementation of accounting procedures for services provided, overseeing the development, management and monitoring of contracts for the shared technical support services, and serving as the DIR liaison to NIAID and NIH committees and boards concerned with the advancement and delivery of technology support to research groups. Preference will be given to qualified candidates with experience directing and managing an active research technology program for the Federal Government, academic or other research or commercial organization. Salary will depend upon experience and qualifications. Interested persons may contact Dr. Karyl Barron, Deputy Director, DIR, NIAID at [kbarron@nih.gov](mailto:kbarron@nih.gov) for additional information about this position. A curriculum vitae, bibliography, three letters of reference and a statement of qualifications and interests must be submitted by **October 15, 1999** to Ms. Dorothy Mellott, Office of Human Resources Management, NIAID, 31 Center Drive, MSC 2520, Bethesda, MD 20892-2520. Please reference vacancy announcement number AI-99-127. U.S. Citizenship is not required.

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### TOXICOLOGIST

*Toxicology & Pharmacology Branch, DTP, DCTD*  
*National Cancer Institute, National Institutes of Health*  
**GS-0405/415/1320-13; Vacancy Announcement#: NCI-99-2328**

The Toxicology & Pharmacology Branch (T&PB) of the Development Therapeutics Program is seeking candidates for the position of Staff Toxicologist. The T&PB plans and directs a collaborative, contract-supported program to conduct preclinical pharmacology and toxicology studies for anti-cancer and drugs. Candidates must have earned the Ph.D. degree in Toxicology, Pharmacology, Biochemistry, Chemistry or a closely related discipline; possess a working knowledge of modern toxicological/pharmacological methods of drug evaluation; and have at least 2 years of post doctoral experience in evaluating antitumor agents.

The Staff Toxicologist will be responsible for: (1) Planning, implementing, and analyzing contractor performed studies leading to the characterization of toxic effects of new anti-cancer drugs. (2) Reviewing biological, biochemical, and toxicological data prior to designing studies leading to IND submission to the FDA. (3) Summarizing all toxicology data and making recommendations for starting doses, dose escalation schemes and treatment schedules for clinical trial.

To apply for this position, please address the following rating criteria: (1) knowledge of toxicology and pharmacology study design; (2) skill in oral communication; and (3) skill in written communication.

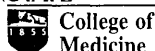
Please submit your application/resume to: **NIH/National Cancer Institute Human Resource Management & Consulting Branch, EPS, Suite 550 6120 Executive Blvd., MSC 7209, Rockville, MD 20852-7209.**

For further information regarding application procedures, you may call the staffing office at 301-402-2789.

The base salary for this position ranges from \$58,027 to \$75,433. Benefits include health and life insurance options, retirement, paid holidays, and vacation leave.

**Applications must be postmarked no later than 10/04/99.** To be considered applicants must be U.S. citizens.

PENNSTATE



## FACULTY POSITIONS

### SIGFRIED AND JANET WEIS CENTER FOR RESEARCH HENRY HOOD RESEARCH PROGRAM

Outstanding scientists are sought for faculty positions in the Weis Center for Research located on the Danville campus of The Pennsylvania State University College of Medicine. The center is adjacent to the Geisinger Medical Center, one of the two major teaching hospitals of the Penn State Geisinger Health System. The Center is a modern research facility that includes 65,000 square feet of laboratories, offices, animal facilities, and research conference areas. It is located in a pleasant, semi-rural living environment with convenient access to the major metropolitan areas of New York and Baltimore.

We are seeking candidates interested in participating in an interactive program focused on Biophysics, Cellular Signaling, and Genetics/Genomics. The successful candidates will participate in the formulation of the new Department of Integrative Molecular Medicine and Genetics that is to be established in Penn State's College of Medicine, and is to be based primarily at the Danville campus.

We seek candidates with an outstanding record of research accomplishments. It is preferred that the candidates' areas of expertise complement existing strengths in cell and molecular biology, and have a genetic component to their research. Substantial resources are available for start-up funds for the new Faculty as well as access to core facilities of the Department.

Interested and qualified individuals are encouraged to send their curriculum vitae, statement of research and teaching interests, and the names, addresses and telephone numbers of four references by October 15, 1999 to: Stephen F. Vatner, M.D., c/o Mrs. Barbara A. Brown, Administrative Assistant, Box S-5198, Sigfried and Janet Weis Center for Research (SFV), 100 North Academy Avenue, Danville, PA 17822-2601.

Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce.

## ASSISTANT PROFESSOR MOLECULAR PHARMACOLOGY

Candidates are invited to apply for the position of Assistant Professor. This position offers the opportunity for tenure. We are seeking individuals with a record of excellence in research who will apply skills in biochemistry, molecular biology and cell biology to solve problems relevant to molecular pharmacology. Essential requirements are: an innovative research program that complements programs within the Department and the Medical School; and a commitment to the training of Fellows and graduate students. Research areas of interest to the Department include: mechanisms of drug, hormone, oncogene, growth factor and neurotransmitter actions; structure, function and regulation of receptors, regulatory enzymes and transporters; signal transduction, second messengers and protein phosphorylation; post-translational modification and intracellular targeting.

Substantial packages will be provided to start up and sustain the laboratories of successful candidates. Submit a curriculum vitae, a statement of research interests, future plans and names of three references to **Dr. Charles S. Rubin or Dr. Susan B. Horwitz, c/o Ms. Anna Cioffi, Administrator, Department of Molecular Pharmacology, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. EOE**



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## FACULTY POSITIONS

As part of a substantial expansion, the Department of Pharmacology & Physiology at New Jersey Medical School (NJMS) of UMDNJ seeks to fill **SEVERAL TENURE-TRACK FACULTY POSITIONS** at the Assistant or Associate Professor levels. Appointment at Full Professor is possible for an outstanding candidate. Research area should extend or complement existing Departmental strengths. Specific area of research is less important than vitality of research program and enhancement of the Departmental/University research environment. It is expected that candidates will have achieved national or international recognition for their research accomplishments. Established investigators should have vigorous, funded research programs. For information about the Department, see [www.umdj.edu/phphweb](http://www.umdj.edu/phphweb).

NJMS is investing heavily in the basic sciences and in a strong research infrastructure. Faculty positions will come with competitive salary, startup packages and research facilities. NJMS is located in the University Heights area of Newark, adjacent to Rutgers University, the New Jersey Institute of Technology and the University Heights Science Park. It is also in close proximity to New York City, which offers extensive scientific and cultural amenities.

Review of applications will begin immediately. Applicants should send a CV, a short description of research interests and future plans, and have three letters of reference sent to:

**Andrew P. Thomas, Ph.D.**  
**Chair, Department of Pharmacology & Physiology**  
**New Jersey Medical School of UMDNJ**  
**185 South Orange Avenue**  
**Newark, NJ 07103**

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## Indiana University, Department of Geological Sciences MALCOLM & SYLVIA BOYCE PROFESSORSHIP OF GEOLOGICAL SCIENCES

The Department of Geological Sciences at Indiana University invites applications and nominations for the newly created Malcolm & Sylvia Boyce Professorship of Geological Sciences in the field of HYDROGEOLOGY. As a named professorship in Geological Sciences, the position is expected to be filled at the full-professor level. However, under exceptional circumstances, the position may be filled at a tenured, associate-professor level. The Malcolm and Sylvia Boyce Professor should have research interests that complement existing programs in chemical and physical aspects of surface and shallow-subsurface hydrology. We are especially interested in an established scholar with a research focus on water and solute transport (including modeling) at the basin scale, although other areas of expertise will be considered. The successful candidate will provide a link between hydrogeology and sedimentary geology as part of an initiative aimed at developing an interdisciplinary program in the geology of sedimentary basins.

Excellent laboratories exist in the Department for chemical and stable-isotope analyses. The current hydrogeology faculty has strong interactions with a complementary program (Water Resources) at Indiana University in the School of Public and Environmental Affairs (SPEA), and with the Center for Geospatial Data Analysis at the Indiana Geological Survey. Many opportunities exist for collaboration with other on-campus researchers in the Department of Chemistry as well as the Indiana Geological Survey. A Ph.D. or equivalent degree is required. Applications should include a personal statement of vision for the future of research, a narrative of important research, teaching, and service accomplishments, a detailed curriculum vitae, and names and addresses (including e-mail) of five references.

Appointment may begin as early as August 2000. Applications should be submitted by November 1, 1999, but the position will remain open until filled. Applications or nominations should be sent to: Boyce Professorship Search Committee, Department of Geological Sciences, Indiana University, 1001 E. 10th Street, Bloomington, IN 47405 USA. This position is one of two newly endowed professorships in The Department of Geological Sciences at Indiana University. Further information about these positions and the Department can be found at: <http://www.indiana.edu/~geosci/>

*Indiana University as an Equal Opportunity/Affirmative Action Employer encourages the candidacies of women and minorities.*

## JOIN A LEADER IN GENE THERAPY

Cell Genesys is focused on the development and commercialization of gene therapies to treat major life-threatening diseases, including cancer and AIDS. We are seeking experienced and highly organized professionals for the following current positions:

### ASSOCIATE SCIENTIST/SCIENTIST I

We seek a scientist interested in gene therapy to work in our Adenovirus Vector program. This person will be responsible for producing new adenovirus vectors. Essential functions include supervising/carrying out adenovirus vector assembly and vector purification; designing/supervising experiments for vector quality analysis; and performing experiments in relevant adenovirus biology. Requires a PhD or MD, 2-3 years postdoctoral training producing adenovirus or studying adenovirus biology. Candidates must have experience either producing DNA viral vectors or in DNA virus biology and be able to perform standard molecular biological techniques. Familiarity with subcloning, PCR, Southern blotting, mRNA analyses, tissue culture, transfection and cell cloning is essential. A strong background in molecular genetics and virology with a working knowledge of gene expression are musts. Good communication and organizational skills are necessary.

### ASSOCIATE SCIENTIST

Work with an established interdisciplinary group of scientist toward *in vivo* clinical applications of HIV-based lentiviral vectors. Research will be focused on safety profiles at scale up vector production; creation of packaging cell lines; maximizing of vector purity; transgenes testing in animal models; enhancement of vector transduction efficiency and transgene expression; development of strategies for transcriptional, cell surface-specific, and physiological vector targeting; and immunological properties of vectors. Requires a PhD in a relevant field and up to 2 years postdoctoral research training. Knowledge of standard molecular biology techniques, including RNA, gene cloning, and cDNA library construction is essential. Experience working with mammalian cell culture is necessary. Background in molecular biology research of HIV or other retroviruses is desirable.

For more information on these positions, please visit our website at [www.cellgenesys.com](http://www.cellgenesys.com).

Cell Genesys is dedicated to developing important human healthcare products in gene therapy. We are equally committed to those who make up our team and provide our employees with excellent salaries and a full benefits package. **To learn more, please forward your CV/resume/written inquiries to: CELL GENESYS, INC., Attention: Human Resources, 342 Lakeside Drive, Foster City, CA 94404. FAX (650) 349-4785. Or e-mail your resume to [HR@cellgenesys.com](mailto:HR@cellgenesys.com). We are an equal opportunity employer.**



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### MICROBIOLOGY

#### Research Associate/Scientist

You will evaluate anti-infective agents using *in vitro* methods and animal models of infection. Qualified candidates will have a BS, MS, or PhD in Microbiology or a related field and 2+ years experience in microbial identification, evaluation of antimicrobial agents, drug resistance studies, and pharmacodynamics.

### BIOANALYSIS & DRUG METABOLISM

#### Research Associate

You will design and validate bioanalytical HPLC assays to evaluate pharmacokinetics of drugs and their metabolites in biological matrices from preclinical models. Additional duties will include performing drug metabolism studies in *ex vivo* or tissue systems. Qualified candidates will have a BS in Biology, Pharmacology, Chemistry, or related science discipline (advanced degree preferred) and 2+ years laboratory experience in analytical methods development and validation for pharmaceutical compounds. Hands-on experience setting up, validating, and performing HPLC assays in biological matrices is required. Familiarity with GLP procedures, small animal handling, analytical instrumentation, data acquisition software, and standard statistical procedures is also necessary. Working knowledge of LC/MS/MS-based assays in biological matrices is preferred.

### MEDICINAL CHEMISTRY

#### Research Chemist/Scientist

You will conduct all design and preparation aspects of new chemical entities for biological testing, as well as supervise one or more research associates. Requires a BS in Organic or Medicinal Chemistry with an emphasis in experimental synthetic organic chemistry. Post-doc experience in an academic or industrial setting is desirable. The ability to solve problems using modern chemical/biochemical principles and laboratory techniques within the organic chemistry field is also essential.

### FUNGAL GENOMICS

#### Research Associate

You will join a multi-disciplinary effort to identify and validate mode of action of novel antifungal compounds. Qualified candidates will have a BS or MS in Molecular Biology or Genetics with 3+ years experience in antimicrobial drug research. Working knowledge of DNA microarrays is preferred.

These exceptional career opportunities are supported by a competitive salary and excellent benefits. If you're an energetic, motivated professional, please send or fax your resume to: Microcide Pharmaceuticals, Inc., Attn: Human Resources, 850 Maude Avenue, Mountain View, CA 94043. Fax (650) 428-3566. E-mail [hr@microcide.com](mailto:hr@microcide.com). EOE.

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PHARMACEUTICALS



## LEUKEMIA RESEARCH FOUNDATION GRANTS

The Leukemia Research Foundation announces funds are available to support leukemia related research. Relatedness to leukemia will be interpreted in the broad sense such that applications in areas as biochemistry, microbiology, virology, molecular biology, genetics and immunology will be acceptable as long as the proposed project relates to some significant aspect of leukemia. The goal of the grant program is to support new investigators; preference will be given to applicants proposing new lines of investigation. Currently two types of Grants are being funded; new investigator research grants, and postdoctoral fellowships. Grants and fellowships are for a one-year period, and may be renewable for a second year. **DEADLINE FOR RECEIPT OF COMPLETED GRANT APPLICATIONS IS FEBRUARY 15, 2000.**

### New Investigator Research Grant Policies:

1. Eligibility is restricted to investigators who are staff members of a university, hospital, or a non-profit research institute. At the proposed starting date of the grant award, the applicant must be less than five years beyond the time of first beginning an independent research/clinical position.
2. Maximum budget request is \$50,000. The funds may not be used for salary support of the principal investigator.

### Postdoctoral Fellowship Policies:

1. Eligibility is restricted to postdoctoral trainees with an M.D. or Ph.D. degree. The fellow must have no greater than three years of postdoctoral training (excluding medical residency) at the time of the proposed starting date of the grant award.
2. Maximum budget request is \$25,000. The funds are used for the fellow's salary support.

For further information and applications, contact:

Hollis R. Brownstein, Chairman  
Medical Advisory Committee  
Leukemia Research Foundation, Inc.  
820 Davis Street, Suite 420  
Evanston, Illinois 60201  
phone: 1-847-424-0600  
fax: 1-847-581-0779  
e-mail: hollis-lrf@worldnet.att.net

If you prefer, our applications and guidelines are available for downloading from our website address: [www.leukemia-research.org](http://www.leukemia-research.org).

## POSTDOC RESEARCH ASSOCIATE

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Refer to Job #6-100 Attn. Carl White, M.D.  
Send cover letter, CV and 3 references to:  
e-mail: [mccolluml@njc.org](mailto:mccolluml@njc.org)  
Fax to (303) 398-1775 or mail to:  
1400 Jackson St., B121  
Denver, CO 80206

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## Tenure Track Faculty Position

As part of our ongoing expansion, the Department of Molecular Genetics, Biochemistry and Microbiology invites applications for tenure track positions at the Assistant/Associate Professor. We are especially interested in candidates with the capability to utilize new technologies in **Genomics, Proteomics or Bioinformatics**, applied to **BACTERIAL PATHOGENESIS or VIROLOGY** and other areas which complement our existing strengths in **STRUCTURAL BIOLOGY (X-RAY CRYSTALLOGRAPHY); MOLECULAR AND CELLULAR IMMUNOLOGY; TRANSCRIPTION; DEVELOPMENTAL AND CANCER BIOLOGY; HUMAN GENETICS; and ION TRANSPORT**. The College is completing a new state-of-the-art BL 3 containment facility for work with pathogenic organisms and we support an active graduate program and maintain core facilities for production of transgenic and knockout mice and DNA synthesis, sequencing and genotyping and mouse physiology and pathology services are available in other departments. The Barrett Cancer Center and the Cardiovascular Center provide a breadth of research opportunities unparalleled at most research institutions. Our program can be visited through our home page <http://ucmg65.med.uc.edu/>. Applicants should submit a curriculum vitae, brief description of research program, and the names of three qualified references to: Jerry B. Lingrel, Ph.D., Professor and Chair, Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, Ohio 45267-0524.

*Affirmative Action/Equal Opportunity Employer*

## Assistant/Associate Professor Faculty Position in Mammalian Molecular Cytogenetics

College of Veterinary Medicine  
Texas A&M University

The Department of Veterinary Anatomy and Public Health and the Program in Veterinary Biotechnology and Comparative Genomics, invites applications for a 75% research/25% teaching tenure track Assistant/Associate professor position in **mammalian molecular cytogenetics**. The candidate is expected to maintain an independently funded research program in molecular cytogenetics that complements the broad scientific areas of other members of the department and the program in veterinary biotechnology and comparative genomics. Investigators with experience and interest in domestic animal cytogenetics are particularly encouraged to apply. Interaction with clinicians at the Veterinary Medical Teaching Hospital will be encouraged. Current areas of interest in the program include bovine, equine, canine, and cervid genome mapping, linkage analysis, comparative genomics, identification and characterization of animal models of human disease, and generation of transgenic animals.

Successful candidate will be expected to contribute to the undergraduate teaching program and develop a graduate course in his/her field of expertise. Candidate should hold a Ph.D. or DVM/Ph.D. and have postdoctoral experience. For Associate rank a previous record of extramural funding and research at the Assistant Professor level is required. A letter of application with curriculum vitae, statement of research objectives, reprints of two or three publications, and contact information for three referees should be sent to Dr. Jorge A. Piedrahita, Chair, Molecular Cytogenetics Search Committee; Department of Veterinary Anatomy and Public Health; College of Veterinary Medicine; Texas A&M University; College Station, TX. 77843-4458. Applications will be received until November 15, 1999 or until position is filled.

*Texas A&M University is an Equal Opportunity/Affirmative Action  
Employer committed to excellence through diversity.*

The University of South Florida invites nominations and applications for the

**Executive Director of the USF Research Foundation**

Reporting directly to the Provost and Executive Vice President of the University, the individual chosen will be expected to play a key leadership role in the continued rapid growth of USF as a research university of distinction. The University of South Florida is among the largest universities in the United States and is located in the scenic, historic and economically thriving Tampa Bay region. USF opened its doors in 1960 to 2,000 students and today serves almost 34,000 students with nearly 200 programs at the undergraduate, master's, specialty, and doctoral levels, including the M.D. In addition to the colleges of Architecture, Arts & Sciences, Business, Education, Engineering, Fine Arts, Medicine, Nursing and Public Health, USF is also home to the nationally recognized H. Lee Moffitt Cancer Center and Research Institute. With sponsored research totaling \$160 million in 1998/99, the Florida Board of Regents recently classified USF, along with the University of Florida and Florida State University, as Research 1 Universities in the State University System.

The USF Research Foundation was established in 1989 to promote, encourage and provide assistance to the research activities of University faculty, staff, and students. Working closely with the Office of the Vice President for Research, the USF Research Foundation, as a not-for-profit corporation provides a means by which discoveries, inventions, processes and work products of USF faculty, staff and students can be transferred from the University laboratory to the public benefit. Funds generated by such discoveries are used to enhance research at the University. To date, almost 400 disclosures have been received with 90 U.S. patents issued, including 15 in the past year. Through the Office of Research / Division of Sponsored Research Programs, the Research Foundation also administers research contracts and grants with the private sector (totaling over \$20 million in 1997/98) and, in addition, manages the University's Research Park.

**POSITION AND QUALIFICATIONS**

The Executive Director of the USF Research Foundation acts as the Chief Executive Officer of the corporation. In this capacity, the Executive Director of the Research Foundation has overall responsibility for all Research Foundation activities. In particular, the individual selected for this position will be expected to provide the dynamic leadership required to ensure that the USF Research Foundation plays an increasingly important role in building a university of even greater distinction and impact on the economic vitality of the region. Candidates should have a strong technical background, ideally with a degree in a technology-related field, and proven financial management skills. Experience in technology assessment, intellectual property protection and technology commercialization is essential. Candidates should have a distinguished record of achievement, either in the academic world or in their chosen field and have demonstrated leadership and communication skills in complex and challenging situations. Salary will be competitive on a national level.

Inquiries, nominations and applications should be directed to Dr. Dale E. Johnson, Chair, Research Foundation Search Committee, Office of the Provost and Executive Vice President, University of South Florida, 4202 E. Fowler Avenue, ADM 226, Tampa, FL 33620. Curriculum vitae and the names and address of five references should accompany letters of application. References will not be contacted until advanced stages of screening, and candidates will receive advance notification.

The State of Florida has a Public Meetings Law and a Public Records Law and all university searches are conducted under the terms thereof. All meetings of the Search Committee are publicly announced and conducted. All documents submitted to the Committee are treated as open material with the exception of evaluative documents specific to the performance of the faculty of the State University System of Florida.

Screening of applications will begin on November 1, 1999. The Search will be continued until the position is filled.

The University of South Florida is an equal opportunity, affirmative action, equal access institution. For disability accommodations contact Ms. Ly Nguyen at (813) 974-8394 or TDD (813) 974-1510 at least five working days in advance of need.

[www.usf.edu](http://www.usf.edu)

**4202 E. Fowler Ave, Tampa, FL 33620**



Director

# UC MEXUS

## University of California Institute for Mexico and the United States

The University of California system seeks a distinguished scholar and visionary director for its multi-campus, interdisciplinary research unit responsible for UC-Mexico programs. The selected candidate will be expected to direct and promote the expansion of UC MEXUS programs by leading the development of new California-Mexico initiatives in higher education and research. The director will assist University faculty and administration in defining and expanding the University's relationships with Mexican institutions and agencies through the planning, organization, and implementation of new and continuing inter-institutional and inter-governmental programs. In addition, the director will design, secure funding for, and administer programs that support and advance collaborative research activities between individual UC and Mexican scholars and scientists. The Director of UC MEXUS reports to the President of the University through the Chancellor of the Riverside campus, where the Institute is headquartered.

Established in 1980, UC MEXUS's mission is to develop and sustain a coordinated, Universitywide approach to Mexico-related studies by promoting and supporting research, education, public service, and other scholarly activities in four principal areas: Mexico studies, United States-Mexico relations, Chicano studies, and collaborative research between U.S. and Mexican scientists and scholars in all disciplines. The director is expected to promote cohesive relationships among the campuses with respect to Mexico-related activities, and to draw from the full range of faculty strengths in order to focus UC resources and expertise on specific topics or themes of importance to the U.S.-Mexico relationship. In addition, the director is responsible for a separate program for the development and support of specific UC Riverside collaborative programs with Mexican institutions.

Candidates must have a record of distinguished scholarly achievement in an area pertinent to the objectives of UC MEXUS and must be eligible for a tenured faculty appointment at the University of California, Riverside. In addition, candidates must possess a successful record of administrative experience in an academic setting and experience in obtaining grants, raising funds, and developing programs. The ability to interact effectively with a wide variety of faculty, administrative, agency, corporate and foundation personnel is critical, as is commitment to the advancement of the scholarly work of others. Fluency in both Spanish and English and direct knowledge and experience of Mexico and its institutions are essential.

Submit application and curriculum vitae to:

**Chair, UC MEXUS Search Committee**  
**c/o Vice Provost for Research, Office of the President**  
**University of California**  
**1111 Franklin Street, 11<sup>th</sup> Floor**  
**Oakland, CA 94607-5200**

*Review of applications will begin on November 15, 1999.*  
*The search will remain open until the position is filled.*

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



## Mayo Clinic Postdoctoral Position

A postdoctoral research position is open immediately in the Division of Experimental Pathology to study interactions of tumor suppressors with cell cycle regulatory proteins and the mitotic spindle apparatus. Candidates should have a PhD in cell biology or related field. Experience with confocal microscopy is required; protein chemistry and molecular biology desired. A highly competitive salary and benefits package is available to the motivated candidate. Send a full curriculum vitae with names and addresses of three references to:

Wilma L. Lingle, PhD  
Division of Experimental Pathology  
Guggenheim 10  
Mayo Clinic  
Rochester, MN 55905  
e-mail: [lingle@mayo.edu](mailto:lingle@mayo.edu)

*Mayo Foundation is an affirmative action and equal opportunity employer and educator.*

## PHYSICIAN / SCIENTIST—UNIVERSITY OF MINNESOTA

The Department of Microbiology in collaboration with the Dean of the Medical School, Divisions of Adult and Pediatric Infectious Diseases, and Centers for Immunology and AIDS Research wish to embark on a program to enhance interactions between basic biomedical and clinical scientists and to further the development of physician scientists. We seek individuals with an M.D./Ph.D. or M.D. degree who wish to pursue careers in basic disease-oriented research in areas related to microbial pathogenesis and pathogenomics, infectious diseases, AIDS, or human immunology. Successful candidates will hold a primary appointment at the Assistant Professor level, and will be physically located in the Department of Microbiology, with a secondary appointment in the department or center appropriate to his or her research interests. Successful candidates will be expected to develop independent extramurally funded research programs, mentor graduate students, and teach in the Department of Microbiology. There will also be limited opportunities for clinical service and teaching in the clinical department in which the candidate holds their secondary appointment.

For more information about the Departments of Microbiology, Medicine, and Pediatrics and the Center for Immunology at the University of Minnesota, please visit the Medical School web site (<http://www.med.umn.edu/main/deptspage.html>).

Minimum Qualifications: M.D./Ph.D. or M.D. degree, plus postdoctoral experience. Position will remain open until a suitable candidate is found. Early applications are encouraged and will be considered promptly. To apply, submit a curriculum vitae, summary of research interests and plans, and arrange to have three letters of recommendation sent to Patrick M. Schlievert, Ph.D., Search Committee Chair, Department of Microbiology, Medical School, University of Minnesota, Box 196, 420 Delaware Street S.E., Minneapolis, MN 55455.

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



**Purdue University Department of Biomedical Engineering** is inviting applications for Assistant and Associate Professor tenure-track faculty positions. This newly formed department represents a major investment by Purdue in this growing field at the interface between engineering and life/medical sciences. Candidates must have a Ph.D. Degree and a strong background in biomedical engineering. We are seeking highly qualified, creative individuals with research interests in implantable devices, tissue engineering, biomaterials, molecular or cellular imaging, or other related areas. The department currently grants master and doctoral degrees. New faculty will have the opportunity to collaborate with numerous faculty involved in biomedical research in the Purdue Schools of Engineering, Science, and Veterinary Medicine, and Indiana University Schools of Medicine and Dentistry. Interdisciplinary biomedical engineering efforts are currently supported through a Special Opportunities Award from the Whitaker Foundation and an Integrative Graduate Education and Research Training (IGERT) award from the National Science Foundation. In addition, new faculty will be expected to teach graduate level biomedical engineering courses, develop a strong (externally-funded) research program, and help foster departmental growth.

Applicants should submit a detailed resume, a description of teaching and research plans, copies of selected publications and a list of four professional references to **Professor George R. Wodicka, Head, Department of Biomedical Engineering, 1296 Potter Engineering Building, Purdue University, West Lafayette, Indiana, 47907-1296**. Screening of candidates will begin October 1, 1999 and will continue until the positions are filled. Qualified women and minority candidates are encouraged to apply. *Purdue University is an equal opportunity/affirmative action employer.*



## Department of Microbiology Faculty Positions in Bacterial Pathogenesis/Molecular Biology

The Department of Microbiology is seeking to expand its program in bacterial pathogenesis and prokaryotic molecular biology and invites applications for tenure-track positions at all levels. Faculty will be expected to develop and/or maintain a dynamic research program and to contribute to the teaching of medical and graduate students. The successful candidate will join a multidisciplinary department focussing on molecular, cellular, and genetic aspects of infectious disease and host-pathogen interactions. The Department of Microbiology offers attractive recruitment packages, new laboratory space, and an interactive environment. Applicants should submit curriculum vitae, description of research accomplishments and future research plans, and three letters of reference by November 1, 1999 to:

Dr. Paul Bates  
Faculty Search Committee Chair  
Department of Microbiology  
University of Pennsylvania School of Medicine  
225 Johnson Pavilion  
Philadelphia, PA 19104-6076  
FAX 215-898-9557

Visit our website @ <http://www.med.upenn.edu/micro/>

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## Functional Genomics at the University of Nevada, Reno

The Nevada Agricultural Experiment Station and College of Agriculture at the University of Nevada, Reno are soliciting applications from outstanding candidates at various levels to fill four new 12 month tenure-track faculty positions (75% research, 25% teaching) in the general area of functional genomics. The successful candidates are expected to work as a team with existing faculty to establish, utilize and integrate genomics-based approaches in the study of plant, insect and animal biology. Areas of interest include plant biochemistry, especially as it relates to primary and secondary pathways producing compounds of importance to human nutrition, insect development/biochemistry and large animal genomics. This effort is supported by a major grant from the National Science Foundation.

### **Positions #1 & #2 Plant Functional Genomics**

Assistant/Associate Professor in the Department of Biochemistry: Candidates are sought whose research uses functional genomics to address fundamental questions in intermediary or secondary plant metabolism. Research directed at elucidating and manipulating pathways responsible for the synthesis of secondary metabolites of importance to human health or agriculture are particularly appropriate. Contribution to undergraduate and/or graduate teaching programs is expected.

Applicants for Positions #1 and #2 should send curriculum vitae, statement of research interests and three letters of recommendation for receipt by 10/31/99 to: Plant Genomics Search Committee, Biochemistry Department/200, University of Nevada, Reno, NV 89557-0014. Attn: Dr. Dean DellaPenna, Phone 775-784-1918, FAX 775-784-1650.

### **Position #3 Insect Functional Genomics**

Assistant/Associate Professor in the Department of Biochemistry: Candidates are sought whose research uses functional genomics to study fundamental processes in insects that are designed or have the potential to lead to new or improved insect control strategies. Contribution to undergraduate and/or graduate teaching programs is expected.

Applicants for Position #3 should send curriculum vitae, statement of research interests and three letters of recommendation for receipt by 10/31/99 to: Insect Genomics Search Committee, Department of Biochemistry/330, University of Nevada, Reno, NV 89557-0014. Attn: Dr. Gary Blomquist, Phone 775-784-4104, FAX 775-784-1419.

### **Position #4 Animal Functional Genomics**

Assistant/Associate/Full Professor in the School of Veterinary Medicine and Department of Biochemistry: Candidates are sought whose research uses functional genomics to address fundamental questions relating to mammalian developmental or resistance traits. Candidates whose research programs focus on large animal genomics are of special interest, however applicants with research interests focused on genomics of other mammals are encouraged to apply. Contribution to undergraduate and/or graduate teaching programs is expected.

Applicants for Position #4 should send curriculum vitae, statement of research interests and three letters of recommendation for receipt by 10/31/99 to: Animal Genomics Search Committee, School of Veterinary Medicine/202, University of Nevada, Reno, NV 89557-0014. Attn: Dr. Mark Hall, Phone 775-784-4122, FAX 775-784-1375

EOE/AA



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### PHARMACEUTICAL PHYSICIAN-DERMATOLOGY

A physician with a background in dermatological research is sought to lead efforts in developing new indications for an immunomodulator currently in clinical development. Candidates should have a strong clinical and experimental background supported by 3-5 years of pharmaceutical industry experience, including managing Phase I-II trials (Phase III experience is a plus). A solid understanding of pharmacology, pharmacokinetics and the drug development process is also essential. Additionally, several years of laboratory/basic science experience in Immunology or Pharmacology and a strong publication record are a must. MDs with specialties in rheumatology, gastroenterology, or other clinical areas where immunological pathology is of major relevance will also be considered. A PhD is a plus. Source Code: PHARMPHYS

### VETERINARY PATHOLOGIST/ MEDICAL PATHOLOGIST

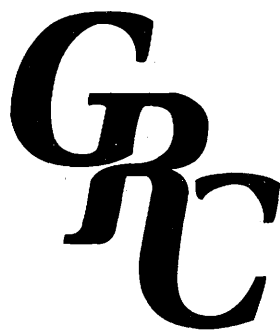
We have an exceptional career opportunity for a talented professional to support our Preclinical Development and Medical Research departments. This unique senior scientific position will participate in a wide variety of scientific collaborations involving animal model development, phenotype evaluation of genetic constructs, and the design and interpretation of toxicologic pathology data from regulatory studies conducted to support Biogen's Research and Development programs. The successful candidate will have a DVM, DVM/PhD, PhD or MD, a publication record indicating strong scientific potential and the ability to perform independently and collaboratively in a matrix environment. Board certification by the American College of Veterinary Pathologists or Board eligibility is desired for DVM degree holders. Source Code: VETPATH

Biogen has an outstanding record of leadership and accomplishment in the biotechnology field. We have one of the strongest financial profiles in the industry and our compensation and benefits package, including equity participation, is unmatched. We've created an environment designed to attract and retain the world's most accomplished talent, and we invite you to forward your resume to: Biogen, Inc., Attn: Human Resources, Source Code: \_\_\_, 14 Cambridge Center, Cambridge, MA 02142; Fax: (617) 679-2546; Email: [resumes@biogen.com](mailto:resumes@biogen.com) (please include Source Code in the subject line). Biogen is an Equal Opportunity Employer. No phone calls, please.

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# GORDON RESEARCH CONFERENCES

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

- The 2000 Winter and International GRC programs will appear in the October 8, 1999 issue of **SCIENCE**.
- The preliminary 2000 Summer GRC schedule will appear in the November 26, 1999 issue of **SCIENCE**.

visit the *frontiers of science* at:

**WWW.GRC.URI.EDU**

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PENNSTATE



College of  
Medicine

## FACULTY POSITION, PATHOLOGY AND IMAGING LABORATORY

A full-time faculty member is sought to direct the Pathology and Imaging Core Facility at the Weis Center for Research. Qualified candidates will have a Ph.D., D.V.M., M.D. or equivalent degree with 3 or more years postdoctoral experience in cell biology, molecular biology and experimental pathology using immunostaining and computer assisted morphometric analysis, confocal microscopy and electron microscopy. Candidates must show clear evidence of academic achievements and competence in pathologic evaluation of cardiovascular tissue. In addition to directing the core laboratory, the individual will carry out independent research and interact with other members of the cardiovascular pathology, physiology, molecular biology and biochemistry programs of the Center.

The Weis Center for Research is a modern research facility located on the Danville campus of The Pennsylvania State University College of Medicine. The Center is adjacent to the Geisinger Medical Center, one of the two major teaching hospitals of the Penn State Geisinger Health System. It is located in a pleasant semi-rural living environment with convenient access to the major metropolitan areas of New York and Baltimore.

Interested and qualified individuals are encouraged to send their curriculum vitae and the names of three references by October 15, 1999 to: Mrs. Barbara A. Brown, Administrative Assistant, Sigfried and Janet Weis Center for Research (SFV), (Box S-5849), 100 North Academy Avenue, Danville, PA 17822-2601.

Penn State is committed to affirmative action, equal opportunity and the diversity of its workplace.



The Picower Institute  
for Medical Research

## PROTEIN CHEMIST, PH.D.

We are a growing, independent, not-for-profit biomedical research institute located on the campus of the North Shore University Hospital in Manhasset, Long Island. We're currently seeking a Ph.D. to join a distinguished, multidisciplinary team, led by Professor David Callaway, constructing and evaluating a molecular model of amyloid fibril formation in Alzheimer's Disease. This project includes the development of assays for evaluating inhibitors of fibril formation and their subsequent use for drug discovery. Expertise in peptide chemistry, HPLC, gel electrophoresis, CD spectroscopy, and fluorescent labeling is required. Work in protein-ligand interaction studies would be helpful.

We offer a competitive salary, excellent benefits including a generous 403(b) plan, and a stimulating collaborative research environment in which to thrive. For strictly confidential consideration, please send your c.v., with salary requirement, to: HR Department-PC/S, THE PICOWER INSTITUTE FOR MEDICAL RESEARCH, 350 Community Drive, Manhasset, NY 11030, U.S.A.; Fax #: (516) 869-0629; e-mail: hr@picower.edu. We are an equal opportunity/affirmative action employer.

# POSTDOCTORAL RESEARCH

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

## **DNA Vaccines/Virus Recombinant Vaccines -**

Two postdoctoral positions are available: one position focusing on improving the immune responses to DNA vaccines by molecular manipulation of the vectors and by testing cytokines/chemokines as genetic adjuvants. This fellowship offers training in immunology and molecular biology. The other position centers on developing mucosal vaccines to HIV; training emphasizes virology and (mucosal) immunology. In addition to laboratory training, postdoctoral fellows receive didactic training in vaccinology under the umbrella of an NIH training grant. **Reply to Dr. Hildegund C.J. Ertl.**

**T-Cells Against Cancer** - T-cell immunologist with strong T-cell background to join our cancer vaccine program. Candidates must have a Ph.D., M.D./Ph.D. or other post-graduate degree. **Reply to Dr. Dorothee Herlyn.**

**Function of Src Family Tyrosine Kinases** using mouse knock-outs/knock-ins as a model. Research focuses on Tcells, keratinocytes, and brain. Highly motivated and independent individuals with experience in molecular biology/biochemistry preferred. **Reply to Dr. Paul Stein.**

**Regulation of Epstein-Barr Virus Latency and Reactivation in B-lymphocytes** - Mechanisms of gene expression and repression; DNA replication and cell cycle coordination of gene expression. Individuals with training in molecular biology, biochemistry, virology, and yeast genetics are encouraged to apply. **Reply to Dr. Paul Lieberman.**

**Regulation of Transcription through Chromatin and DNA repair** - Biochemical and molecular characterization of novel chromatin remodeling complexes in human cells using nucleosome disruption assays and transcription. We are also characterizing the connection of the transcription machinery to that of DNA repair, with specific emphasis on Cockayne Syndrome (CS) and the BRCA1 and BRCA2 proteins. *Nature* 374:283 (1995); *Nature* 381:86 (1996); and *JBC* 274:13162 (1999). 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 Shiekhhattar.**

**HIV-1 Infection and Immunoregulation** - Investigate viral and immunopathology studies centered on HIV-1 infected patient-derived material, and in vitro models of macrophage and T-cell infection by HIV-1 (see *Blood* 94:1003, 1999; *Proc. Natl. Acad. Sci.* 96:5215, 1999; *J. Leukocyte Biol.* 65:552, 1999). **Reply to Dr. L. J. Montaner.**

**Transcriptional Regulation and Cancer** - Investigation of the mechanism of cellular transformation by the oncogenic transcription factor c-Myc. Studies will focus on the role of the essential cofactor TRRAP. An understanding of the function of TRRAP in recruitment of multi-protein transcriptional regulatory complexes will be gained utilizing biochemical and genetic approaches. **Reply to Dr. Steven B. McMahon.**

Successful candidates will have a Ph.D. and/or M.D./Ph.D. in the biological sciences. Please 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.



## **HIV DRUG RESISTANCE PROGRAM**

The National Cancer Institute is paving the way for new programs and discoveries at the Frederick Cancer Research and Development Center (NCI-FCRDC). Under the direction of Dr. John Coffin, we are creating a world-class center for retrovirology research in a highly collaborative environment dedicated purely to research with very strong support services. Our emphasis is on basic and translational research related to genetic diversity and drug resistance.

The NCI-FCRDC is recruiting for two positions, which will be filled by Senior Investigators (Senior Biomedical Service and/or Medical Officer with potential physician special pays) or Tenure-Track Investigators. These individuals must be self-directed scientists with an M.D., Ph.D., or equivalent degree who will undertake independent, investigator-initiated studies in the area of virus populations in patients for the patterns of response to antiviral therapies; genetic structure and evolution of virus populations; development of new paradigms for drug discovery and development; study of the genetics and pathogenesis of HIV in the context of antiviral therapeutic trials; and translation of the basic studies into therapeutic strategies. At least one of the positions will be filled by an investigator qualified to direct clinical studies in HIV-infected patients. There are opportunities for extensive collaboration within and outside of the NCI community.

A fully equipped laboratory will be provided along with technical support, as well as support for clinical studies. Total annual compensation will be commensurate with experience, accomplishments, and education. A detailed description of research interests should be submitted along with five (5) letters of recommendation and curriculum vitae and bibliography to:

Ms. Lori Holliday, Administrative Officer, Office of Management, NCI, NCI-Frederick Cancer Research and Development Center, Building 576, Room 112, Frederick, MD 21702.

The Search Committee will begin reviewing completed applications after December 1, 1999. For consideration, all applications must be postmarked by November 15, 1999. Applications may also be faxed to (301) 846-6053. If you need additional information, please call Ms. Lori Holliday, Search Committee Executive Secretary, at (301) 846-1414.

Selection of these positions will be based on merit, without discrimination for non-merit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, or membership or non-membership in an employee organization.

*THE NATIONAL CANCER INSTITUTE IS AN EQUAL OPPORTUNITY EMPLOYER*

## FACULTY POSITIONS

### Derald H. Ruttenberg Cancer Center

The Derald H. Ruttenberg Cancer Center of the Mount Sinai School of Medicine is seeking 3 to 4 tenure-track faculty at the Assistant or Associate Professor level to expand the cancer biology program of a developing comprehensive cancer center. Emphasis on specific disease and *in vivo* models is encouraged. Areas of particular interest include but are not limited to:

Estrogen or androgen receptor signaling with emphasis on breast or prostate cancer models  
Cell cycle/DNA repair  
Tumor biology with emphasis on metastasis, angiogenesis

The Cancer Center offers state-of-the-art laboratory space and competitive funding and compensation packages. Ph.D.'s, M.D.'s, and M.D./Ph.D.'s should submit curriculum vitae, a brief description of research accomplishments and future directions, and the names of 3 references by October 15, 1999 to:

Search Committee:  
Mount Sinai School of Medicine  
Derald H. Ruttenberg Cancer Center  
Box 1130  
One Gustave Levy Place  
New York, New York 10029  
Fax: (212) 987-2240  
Email: DHRCCSEARCH@mssm.edu

**Mount  
Sinai**

### Geophysical Laboratory Carnegie Institution of Washington

#### Scientific Staff Member—Astrochemistry/Astrobiology

The Geophysical Laboratory of the Carnegie Institution of Washington (CIW) in Washington, DC, is considering a new Research Staff appointment. We are seeking a highly qualified Ph.D. scientist committed to a career in innovative, original research, and who is dedicated to increasing our fundamental knowledge of the physics and chemistry related to the origin and early evolution of biology in the Solar System. Particular fields of interest include, but are not limited to geochemical processes on young planets including Earth, hydrothermal vent chemistry, the evolution of structure and complexity in organic geochemistry, the transition from complex organic geochemical processes to biochemical processes, the early evolution of biological organisms, and the determination of chemical biomarkers.

Research Staff are independent investigators at CIW. Position requirements, salaries and benefits are commensurate with faculty positions at major research universities. Salary and laboratory facilities, along with some research support, are provided by the Carnegie endowment. Research Staff are free to pursue their own chosen path in science, but are required to satisfy the Director and external peer review for continued support at the Laboratory. Research Staff are encouraged to seek Federal and private grant support if additional funds are required to support their research, such as for new equipment and post-doctoral associates. The Geophysical Laboratory also supports a lab-wide post-doctoral Fellowship program.

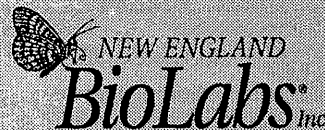
Applications should include a curriculum vitae, a publication list, names and addresses (including email) of at least three references, a summary of the applicant's research, and the program of research the applicant envisions carrying out at the Geophysical Laboratory. Send applications to:

Dr. Wesley T. Huntress, Jr.  
Director, Geophysical Laboratory  
Carnegie Institution of Washington  
5251 Broad Branch Road  
Washington, DC 20015, USA

or by email with attachments to [huntress@gl.ciw.edu](mailto:huntress@gl.ciw.edu). Applications will be accepted and reviewed immediately until January 15, 2000.

*The Carnegie Institution of Washington is an Equal Opportunity/  
Affirmative Action employer.*

New England Biolabs, a  
world leader in the  
manufacture and supply of  
reagents for Molecular and  
Cell Biology, has the  
following positions available.



#### Post Doctoral Position (Plant Molecular Biology)

We seek a motivated molecular/cellular biologist interested in studying transgene expression in plants. Experience in plant cell culture, vector construction, transformation, protein targeting, reporter gene expression and assay is essential. Applicants must have a recent Ph.D. The successful candidate will be expected to publish and collaborate with academic researchers. Attendance at national meetings and interaction with academic institutions is encouraged. Excellent verbal and written communication skills are required.

#### Research Associate (Plant Molecular Biology)

We seek a motivated person experienced in plant cell culture, transformation, molecular, biological and immunological techniques to perform nucleic acid and protein analysis in transformed tissue. Applicants must have a BS or MS with experience in PCR, cloning, sequence analysis, immunohistochemistry, protein expression, purification and analysis. Excellent verbal and written communication skills are required.

Send a resume and three references to: **Dr. Sriharsa Pradhan.**

New England Biolabs, Inc.  
32 Tozer Road  
Beverly, MA 01915

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Rigel is seeking an Associate Director/Director of Molecular Biology committed to excellence in research in this established but growing department. Qualified candidates will have a Ph.D. in biological sciences, a minimum of 6-8 years' industry research experience, and a strong publication record. Candidates must have the ability to lead and participate on teams in a highly collaborative, team oriented environment. Demonstrated scientific excellence and managerial experience in an industry setting is required. (Job Code: DP-DIR)

*A Unique Approach to Drug Discovery*

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### **Molecular/Cellular Immunologist**

Candidates should have 3-5 years' experience beyond postdoctoral fellowship. Industry experience and demonstrated scientific excellence a plus. Solid background in cell biology and assay development preferred. (Job Code: DP-SCI)

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We are looking for experienced Research Associates in molecular and cellular biology. Qualified candidates will have a BS/MS in biological sciences and 5-10 years' experience in research laboratories with an emphasis on molecular biology. The ability to work independently under minimal supervision is essential. Experience with vector construction and cDNA library construction preferred. (Job Code: YH-RA)

Rigel offers competitive salaries & benefits, attractive stock options, and a rare opportunity to actively participate in significant drug discoveries. Please send resumes to: **Rigel, Inc., HR, Attn: (Job Code), 240 East Grand Ave, South San Francisco, CA 94080**, or via email (ASCII format only) to: **jobs@rigel.com**. EOE

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- Manager, Cardiovascular Method Development

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# IOWA STATE UNIVERSITY

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## Plant Sciences

**Iowa State University, a leading land-grant university, announces a major initiative in the plant sciences.** Building upon its traditional strengths in fundamental and applied plant sciences, Iowa State is committed to being a leading plant science research center. Iowa State is seeking to add 25 new faculty positions during the next three years as part of the plant sciences initiative.

Unless otherwise specified: All positions may be filled at the assistant, associate, or full professor level and are tenured or tenure-track with competitive start-up packages. Successful candidates will be expected to develop energetic, internationally recognized, extramurally funded research programs in their area of specialization, and will be expected to effectively train graduate students and participate in teaching programs at the graduate and/or undergraduate levels. Departmental and college affiliations will be determined in consultation with the candidate at the time of hire. Salary and rank will be commensurate with experience. Ph.D. in an appropriate discipline is required. At the associate and full professor levels, preference will be given to applicants with a demonstrated record of competitive extramural funding. To apply, in addition to specific items requested below, submit a letter of application, curriculum vitae, statement of research and teaching interests, and the names, addresses, e-mail addresses, and telephone numbers of at least three references to the address indicated. Applicants for positions at the assistant professor level should arrange for letters of reference to be sent. Review of applications will begin on December 15, 1999, and continue until the positions are filled.

### The following positions are open for application:

**Four positions in Plant Responses to Stress:** Conduct fundamental research at the genetic, molecular, and/or biochemical levels on how plants sense and/or respond to biotic or abiotic stresses. Submit application materials including recent reprints to: Dr. Charlotte R. Bronson, Plant Stress Search Committee, Iowa State University, 351 Bessey Hall, Ames, Iowa 50011-1020.

**One position in Bioinformatics or Biological Statistics:** Conduct fundamental research in computational molecular biology. Submit application materials, including one additional reference who can address applicant's teaching ability and experience to: Dr. James L. Cornette, Bioinformatics Search Committee, Iowa State University, 107 Beardshear Hall, Ames, Iowa 50011-2021.

**Two positions in Statistical Genetics/Computational Molecular Biology:** Conduct a nationally competitive research program on statistical approaches to areas

such as bioinformatics, genomics, functional and post-genomic analysis, molecular evolution, protein structure/function prediction, population genetics. Joint appointment in the Departments of Statistics and Zoology and Genetics. Submit application materials, including selected reprints to: Dr. Kenneth J. Koehler, Search Committee Chair, Iowa State University, 120 Snedecor Hall, Ames, Iowa 50011-1210. Review of applications will begin on January 15, 2000, and continue until the positions are filled. For more information, select the "New Faculty Positions" icon at Web site: <http://www.public.iastate.edu/~stat>

**One position in Computational Molecular Biology/Bioinformatics:** Conduct research in computational molecular biology and teach three to four courses per academic year. Appointment is in the Department of Mathematics. Submit application materials, including one additional reference who can address applicant's teaching ability and experience to: Dr. Max D. Gunzburger, Chair, Department of Mathematics, Iowa State University, 400 Carver Hall, Ames, Iowa 50011-2064.

**One assistant professor position in Physics of Biological Systems:** Appointment is in the Department of Physics and Astronomy. Submit application materials to: Physics of Biological Systems Search Committee, c/o Ms. Erlene Mooney, Iowa State University, 12 Physics Building, Ames, Iowa 50011-3160. Further information about the Department of Physics and Astronomy and the bioinformatics program may be found on the Web at <http://www.physics.iastate.edu> and <http://www.grad-college.iastate.edu/bioinformatics/>.

**One position in Breeding and Molecular Genetics:** Prefer experience in grass breeding for use in the turfgrass industry. Submit application materials to: Dr. Nick Christians, Search Committee Chair, Iowa State University, 106 Horticulture, Ames, Iowa 50011-1100. Position available July 1, 2000.

**One assistant or associate professor position in Food Engineering:** Develop technologies for utilizing value-enhanced plants and grain. Teach food engineering classes in the food science and engineering programs. Submit application materials to: Lawrence Johnson, Department of Food Science and Human Nutrition, Iowa State University, 1041 Food Sciences, Ames, Iowa 50011-1061.

Iowa State University is an equal opportunity/affirmative action employer and encourages nominations of, and applications from, women and minority candidates.

# UofL

## Research Associate and Postdoctoral Fellow Positions MOLECULAR SIGNAL TRANSDUCTION

Applications are being accepted for available positions at the Research Associate or Postdoctoral Fellow level to investigate molecular signal transduction during development. Successful candidates will join a research team active in the investigation of: TGF $\beta$  signaling mechanisms, kinase and transcription factor-mediated gene expression, and molecular genetics of susceptibility to developmental disorders. Strong background in molecular/molecular genetic methodologies, cell and/or developmental biology required. Applicants should submit (1) curriculum vitae, (2) statement of current research activities and (3) names of three references to: Dr. M. Michele Pisano, Department of Molecular, Cellular and Craniofacial Biology, ULSD, 501 S. Preston St., Univ. of Louisville Health Sciences Center, Louisville, KY 40292. *The University of Louisville is an EEO/AA employer. Women and minorities are encouraged to apply.*

## POSTDOCTORAL RESEARCH ASSOCIATE OPPORTUNITIES WAYNE STATE UNIVERSITY DEPARTMENT OF PATHOLOGY

<b>Y.Q. CHEN</b> tumor suppressor genes & prostate cancer	<b>F. SARKAR</b> molecular biology of solid tumors
<b>M.L. CHER</b> prostate cancer & bone metastasis	<b>L. SCHUGER</b> smooth muscle differentiation
<b>R. FRIDMAN</b> metalloproteinases & tumor metastasis	<b>S. SHENG</b> tumor suppressor genes & tumor invasion
<b>H.R. KIM</b> growth factor signaling & apoptosis	<b>A.A.F. SIMA</b> diabetes and dementia neuropathology
<b>T.H. KUO</b> mechanisms of cell death	<b>J.R. TURNER</b> tight junction regulation & GI cell physiology
<b>A. RAZ</b> mechanisms of cancer metastasis	<b>R. VANDERHEIDE</b> cell injury & adaptation cardiac pathology
<b>K.B. REDDY</b> signal transduction & breast cancer	<b>J. VIRGIN</b> chromosomal instability & prostate cancer

Please contact investigators at: Dept. of Pathology, 540 E. Canfield, Detroit, MI 48201  
[www.med.wayne.edu/Pathology/pathresearchers.html](http://www.med.wayne.edu/Pathology/pathresearchers.html)  
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## PROGRAM OF EXCELLENCE IN MOLECULAR BIOLOGY OF THE HEART AND LUNG

### Special Postdoctoral Positions

The University of Cincinnati Program of Excellence in Molecular Biology of the Heart and Lung, funded by the National Heart, Lung and Blood Institute of NIH, has as its goal the application of molecular genetic approaches to study heart and lung function. The Program is open to Ph.D.s, M.D.s or M.D./Ph.D.s with training in molecular biology who wish to apply their skills to significant problems of heart or lung or to individuals with strong backgrounds in heart and lung who wish to develop molecular tools for continued study of these problems. We are particularly interested in recruiting underrepresented individuals to the Program. Stipends begin at \$31,000 per year with an excellent benefit package. The faculty and their interests are described below. The Program is limited to US Citizens and permanent residents.

**Jerry B. Lingrel** *Na,K-ATPase gene regulation, knockout and replacement studies and structure-function studies. Role of transcription factors in lung and erythroid development*

**Jeffrey Whitsett** *Molecular biology of lung development, surfactant homeostasis, host defense and lung specific gene expression*

**Paul Rosevear** *Structure/function relationships in cardiac muscle using NMR and biochemical techniques*

**Gary E. Shull** *Role of ion-transport proteins in cardiac function and control of arterial blood pressure using gene targeting technology*

**Jeffrey Robbins** *Targeted modification of the cardiac contractile proteins and growth and developmental control of cardiac muscle*

**Steven Potter** *Manipulating genes important in heart and lung development by insertional mutagenesis and targeted modification in ES cells*

**Thomas Doetschman** *Role of growth and differentiation factors in the development and function of heart and lung using targeted gene modification in the mouse*

**Anil Menon** *The genetics of human cardiovascular disease*

**Stephen Liggett** *Genetics, molecular biology, and structure/function of cardiopulmonary adrenergic receptors*

Applicants should submit a C.V. and the names of three references to one of the faculty above or to Jerry B. Lingrel, Ph.D., Director, Program of Excellence in Molecular Biology, Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, Ohio 45267-0524. For more information, <http://www.molgen.uc.edu/poe.htm>.

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## GRANTS

**BURROUGHS  
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*Award programs in molecular parasitology, malaria, and molecular pathogenic mycology.*

*Open to U.S. and Canadian science faculty at the scholar and new investigator levels.*

*The application deadline for the 2000 award series is January 18, 2000.*

*The Burroughs Wellcome Fund is an independent private foundation whose mission is to advance the medical sciences by supporting research and other scientific and educational activities.*

Post Office Box 13901  
Research Triangle Park, NC 27709-3901  
Tel (919) 991-5100 Fax (919) 941-5884  
E-mail: [info@bwfund.org](mailto:info@bwfund.org)  
Website: <http://www.bwfund.org>

### 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.

### 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.

### AWARDS IN MOLECULAR PATHOGENIC MYCOLOGY

Awards support scientists who will bring 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.

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

**BIOMEDICAL  
RESEARCH FUNDING**

# THE POWER OF SCIOS

*Is the Empowering Strength of our Knowledge*

SCIOS is a biopharmaceutical company engaged in the discovery, development and commercialization of novel human therapeutics. For the past decade, we have focused our research and development efforts primarily on cardiorenal disorders and Alzheimer's disease. This focus has allowed us to develop an advanced base of knowledge in these fields. We currently seek qualified professionals for the following opportunities.

## SENIOR SCIENTIST *Pharmacology*

Working closely with chemistry and cell biology disciplines, you will help identify and establish acute and chronic models to test small molecule drug candidates. Requires a PhD and a minimum 5 years experience in pharmacology and surgical techniques. Experience evaluating small molecule anti-inflammatory compounds with regard to efficacy and bioavailability is a significant plus. The ability to perform studies in accordance with AAALAC guidelines is a must. Job Code 99-007

## SCIENTIST *Alzheimer's Research*

Join a team of researchers dedicated to the development of novel therapeutics in Alzheimer's disease. Requires a PhD and 1-2 years experience or a BS/MS with 6-10 years of relevant laboratory experience. Candidates should have proven abilities in the purification of soluble and/or membrane-bound protein biochemistry. Experience in the development of enzyme assays and in tissue culture methods is highly desirable. Individuals with a strong background in biochemistry or molecular biology and experience in protein purification and characterization are encouraged to apply. Job Code 99-035

## SCIENTIST/RESEARCH ASSOCIATE *Medicinal Chemistry*

You will design and conduct synthesis of new chemical entities for biological testing from milligram to multigram scale. Requires a PhD with 2+ years postdoctoral experience in an academic or industrial setting. Experience in principles and techniques of combinatorial chemistry and solid phase synthesis is desirable. The ability to solve problems using modern chemical laboratory techniques and principles within organic chemistry is essential. Excellent organizational, communication, analytical and problem solving skills are essential, as is a strong enthusiasm for modern experimental synthetic chemistry. Job Code 99-045

## SENIOR RESEARCH ASSOCIATE *Medicinal Chemistry*

Responsibilities include synthesis of small molecules via multi-step syntheses using modern chemical laboratory techniques for evaluation as potential drug candidates. Requires an MS in Organic Chemistry and knowledge of modern spectroscopic (NMR, IR, MS, UV-VIS) and analytical methods (HPLC, chromatography). Job Code 99-046

Competitive salaries, a superior benefits package, and a very dynamic environment support the SCIOS team. Please respond, indicating Job Code #, to: SCIOS, Human Resources Department, 749 North Mary Avenue, Sunnyvale, CA 94086. Fax (408) 616-8316. Email [jobs@sciosinc.com](mailto:jobs@sciosinc.com). EOE.

# scios

## ASSOCIATE/ASSISTANT/FULL PROFESSORSHIP

### MELANOMA RESEARCH PROGRAM

A new tenure-track faculty position has been created by the University of Michigan Comprehensive Cancer Center and Department of Dermatology. Candidates should possess an MD, PhD, or MD/PhD. The successful applicant will be expected to develop a comprehensive basic research program bearing directly on malignant melanoma, thus complementing the Cancer Center's outstanding clinical, translational, and genetics melanoma research programs. Abundant clinical material will be provided for research purposes, and newly-established laser capture microdissection and expression array cores will be available. The successful applicant will be a member of the Comprehensive Cancer Center and will play a key role in the Cutaneous Oncology Program, which is partially supported by an NIH Core Grant. A generous start-up package will be provided, and joint appointments with basic science departments can be arranged. Interested individuals should send a CV, one-page summary of research interests, and three letters of reference to:

John J. Voorhees, M.D., Professor and Chairman  
Univ. of Michigan Department of Dermatology  
1910 Taubman Center, Ann Arbor, MI 48109-0314

*We encourage applications from candidates who will enrich and contribute to the cultural diversity of our University community.*



## Environmental Scientists

### Five Tenure-Track Positions

#### Great Lakes Institute for Environmental Research

The Great Lakes Institute for Environmental Research (GLIER) is dedicated to the management of the earth's resources to protect and maintain human and environmental health. GLIER is a multi-disciplinary research institute occupying new world-class facilities on the Detroit River. These facilities consist of fully equipped state of the art analytical laboratories for trace organics and metals, a toxicology laboratory specializing in *in vitro* assays, an ecology laboratory with a full-service aqua-research center and an environmental modeling component facility. To further strengthen GLIER's research program, five new tenure-track faculty positions are now available. Positions and entry levels are listed below; further information is at <http://www.uwindsor.ca/GLIER>. All positions will be cross-appointed with appropriate academic units.

Ecotoxicology  
Environmental Analytical Chemistry  
Environmental Mineralogy  
Conservation Genetics  
Environmental Contaminant Modeling

Associate/Full Professor  
Assistant Professor  
Assistant Professor  
Assistant Professor  
Associate/Full Professor

All positions commence July 1, 2000. Letter of application; outline of your proposed research program (5p max); curriculum vitae; and three letters of reference, forwarded by the referees, must be submitted by November 7, 1999 to:

The Director  
Great Lakes Institute for Environmental Research  
University of Windsor

Windsor, ON Canada N9B 3P4

Phone: 519-253-3000, ext 2732, Fax: 519-971-3616, E-mail: [lafor5@uwindsor.ca](mailto:lafor5@uwindsor.ca)

*The University of Windsor is committed to equity and diversity in the workplace and welcomes applications from Aboriginal peoples, persons with disabilities and members of visible minorities. Applications from women are particularly encouraged. In accordance with Canadian immigration standards, this advertisement is directed to Canadian citizens and permanent residents of Canada.*

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- Receiving Clerks

Institute employees enjoy competitive salaries and an excellent benefits package. HHMI is an equal opportunity employer. Please visit our website at [www.hhmi.org/jobs](http://www.hhmi.org/jobs) for a listing of available positions.

## ANNOUNCEMENTS

### CLINICAL RESEARCH



#### THE DORIS DUKE CHARITABLE FOUNDATION

##### announces the recipients of the 1999 Doris Duke Clinical Scientist Awards

#### The Doris Duke Clinical Scientist Award Program

supports junior level physician-scientists as they begin their careers as independent clinical researchers. Recipients receive \$100,000 per year for three years, with a possibility of renewal for another two years. A new group of Clinical Scientist Award grantees will be selected in 2000. The announcement requesting nominations for the next award competition will be distributed in October 1999.

To receive the program announcement for the **Clinical Scientist Award Program 2000**, please email your request to: [ksmall@ddcf.org](mailto:ksmall@ddcf.org)

The mission of the Medical Research Program of the Foundation is to support the prevention and cure of disease by supporting medical research, initially in four disease areas—cardiovascular diseases, cancer, AIDS, and sickle cell anemia and other blood disorders.

**Doris Duke Charitable Foundation**  
650 Fifth Avenue, 19th Floor New York NY 10019

#### FOR RESEARCH IN CARDIOVASCULAR DISEASE

#### FOR CANCER RESEARCH

#### FOR AIDS RESEARCH

#### FOR RESEARCH IN SICKLE CELL DISEASE AND OTHER BLOOD DISORDERS

**Karen P. Alexander, M.D.**  
*Duke University Medical Center*

**Roger J. Hajjar, M.D.**  
*Massachusetts General Hospital*

**Michael V. McConnell, M.D.**  
*Stanford University Medical Center*

**Lisa A. Carey, M.D.**  
*UNC Chapel Hill School of Medicine*

**Theodore L. DeWeese, M.D.**  
*Johns Hopkins Oncology Center*

**James M. Ford, M.D.**  
*Stanford University School of Medicine*

**Nancy L. Keating, M.D., M.P.H.**  
*Harvard Medical School*

**Matthew R. Smith, M.D., Ph.D.**  
*Massachusetts General Hospital*

**Robert H. Vonderheide, M.D., D.Phil.**  
*Dana-Farber Cancer Institute*

**Deborah Persaud, M.D.**  
*Johns Hopkins School of Medicine*

**Peter E. Pertel, M.D.**  
*Northwestern University School of Medicine*

**Eric S. Rosenberg, M.D.**  
*Massachusetts General Hospital*

**David J. Araten, M.D.**  
*Memorial Sloan-Kettering Cancer Center*

**Michael R. DeBaun, M.D., M.P.H.**  
*Washington University School of Medicine*

**Edwin M. Horwitz, M.D., Ph.D.**  
*St. Jude Children's Research Hospital*

**SEARLE**



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### **Research Scientist**

We are expanding our efforts in cardiovascular research and therefore we seek a cardiovascular physiologist with an M.D. or Ph.D. degree plus 2+ years of postdoctoral training to conduct research aimed at identifying novel therapeutic agents to treat hypertension and congestive heart failure. Responsibilities include planning and performing experiments using in vivo animal models of heart failure and hypertension to identify novel approaches to the treatment of these diseases. The successful candidate will be highly self-motivated, independent and possess a strong background in cardiac pathophysiology and a high level of understanding of molecular biology techniques and the application of molecular approaches to cardiac disease. The ability to work with other scientists within an interactive/multidisciplinary team environment and to contribute new ideas to the study of cardiovascular disease across the life sciences effort at Monsanto is essential. Critical thinking, innovation and strong technical and communication skills are all required for this position. A record of prior accomplishments in the area of cardiovascular research is required.

Searle is the pharmaceutical sector of the Monsanto Company. We offer a competitive salary and benefits package including tuition reimbursement and 401(k). For fastest consideration, please submit your resume in scannable format to: **monsanto@aon-hros.com, Ad Code: 99-1865** on your subject line and cover letter for expedited review. Or mail to: **Monsanto-99-1865, PO Box 1262, Findlay, OH 45840.** You will receive a postcard acknowledging receipt of your resume. EEO/AA Employer M/F/D/V.

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# **Scientists Wanted**

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- Immunology
- Medical Services
- Microbiology
- Molecular Biology
- Neuroscience
- Pharmacology
- And other fields...

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PLANT SCIENCE CENTER

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FOR FACULTY AND STAFF POSITIONS.

ROGER N. BEACHY, PH.D.  
PRESIDENT

The Donald Danforth Plant Science Center was established in 1998 as a not-for-profit, independent center for research in the plant sciences. The Mission of the Center is to create knowledge that benefits the sustainable production of sufficient amounts of food and nutrition, fiber, forestry, and fuel for the world's growing population. The Center's state-of-the-art facility will open mid-2001 and is designed to promote research interactions amongst a multidisciplinary faculty. The Danforth Center announces positions for faculty at the Full, Associate, and Assistant Member levels to direct research programs devoted to the solution of fundamental research problems that have potential applications to achieve the Mission of the Center. We seek scientists with proven records of achievement, broad interests and training in at least two disciplines of science, and well-formed research programs that will benefit from interactions with scientists of other disciplines. In addition, staff positions are available for managers of core facilities for plant transformation, imaging and microscopy, and mass spectroscopy. Demonstration of prior or current support, and of interdisciplinary research interactions will be beneficial. Up to 20 faculty appointments will be made in areas that include computational biology and bioinformatics, plant physiology, biochemistry, chemistry, genetics, cell biology, gene regulation and plant development, protein structural biology, root-soil interactions, plant-pest interactions, and biotic and abiotic stress, among other topics. Successful candidates will be expected to develop collaborative research programs within the Center and/or with scientists at partner institutions, including the University of Illinois at Urbana-Champaign, the University of Missouri-Columbia, Purdue University, Washington University in St. Louis, the Missouri Botanical Garden, and Monsanto Company. Adjunct academic appointments are possible. We offer a competitive salary and benefits package, and renewable, multiyear contracts, as well as modest continuing research support.

If you are interested in conducting research with other highly talented scientists, and have a research program that will benefit from multidisciplinary research, you are invited to apply. Send a resume including list of publications, brief description of your research interests, reprints of three publications that best reflect your research strengths, and the names and addresses (including e-mail) of three potential references. Applications will be received until positions are filled—expected by late 2001; up to 6 positions will be filled by December 2000 to join the 3 existing research groups at the Danforth Center. Please visit our website at [www.danforthcenter.org](http://www.danforthcenter.org) for a description of the Danforth Center, including current faculty and research programs.

Send applications to: Ms. Billie Broeker, Human Resources, Donald Danforth Plant Science Center,  
7425 Forsyth Boulevard, Box 1098, St. Louis, Missouri 63105

*The Donald Danforth Plant Science Center is an equal opportunity/affirmative action employer and encourages applications from underrepresented groups, including minorities, women, and people with disabilities.*

## ANNOUNCEMENTS



### FUNDING AVAILABLE

CaP CURE, the Association for the Cure of Cancer of the Prostate, is soliciting proposals for its 1999/2000 funding year. The organization's goal is to find a cure for advanced prostate cancer.

Applications are competitive and accepted from individuals with or without institutional affiliation. Awards range from \$50,000 – \$250,000 for the year. Applications (3-5 pages) can be for clinical investigations, basic research or a combination and must be relevant to the treatment of advanced prostate cancer. We encourage interdisciplinary collaborations between basic scientists and clinicians. (For-profit companies are not eligible.) Applications will be accepted August 15, 1999 through October 30, 1999. Notification of awards is expected by December 31, 1999.

*For consideration, request application guidelines:*

### CaP CURE

1250 Fourth Street, Suite 360  
Santa Monica, CA 90401

Phone: (310) 458-2873 Fax: (310) 458-8074  
(800) 757-2873 E-mail: [capcure@capcure.org](mailto:capcure@capcure.org)

## DOES THIS SOUND LIKE YOU OR SOMEONE YOU KNOW?

*"I have long been interested in science, and in helping people. During my training, I had a number of clinical experiences which convinced me that I wanted to specialize in immunology at the bench, but still have patient contact."*

*"I was always tinkering with my toys, taking them apart, trying to fit the square peg in the round hole. NIH is the only place to be for cutting-edge training, creativity, and pure excitement."*

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

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

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



For more information on the Loan Repayment Program and postdoctoral training, visit our websites at:

<http://www.training.nih.gov> and  
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## POSITIONS OPEN

### SENIOR FACULTY POSITION BIOCHEMISTRY AND MOLECULAR BIOLOGY

An opening for a **FULL PROFESSOR** is now available as part of our Program of Excellence in Molecular Recognition in Biological Systems. Applicants must have a national reputation, a proven ability to attract extramural funds, and a vigorous, productive research program, preferably in the areas of structural biology, macromolecular assemblies, or eukaryotic molecular genetics. Other areas, particularly those involving multidisciplinary research, will also be considered. Applicants should be willing to participate in graduate and undergraduate teaching, having appropriate experience in an academic setting, and be eager to assume a leadership role commensurate with this rank. Generous start-up package and laboratory space are available. Review of applications will begin as soon as complete materials are received and will continue until the position is filled. Interested applicants should send a complete curriculum vitae, research prospectus, three representative publications, and the names and addresses (including e-mail) of four references to: **Dr. Gerald M. Carlson, Head, Division of Molecular Biology and Biochemistry, School of Biological Sciences, University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, MO 64110-2499.** An Affirmative Action/Equal Opportunity Employer.

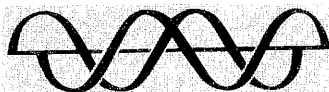
### CHAIR DEPARTMENT OF CHEMISTRY UNIVERSITY OF MISSOURI-ROLLA

Applications and nominations are sought for the position of Chair and Professor of the Chemistry Department at the University of Missouri-Rolla. We seek candidates with an international research reputation, a commitment to excellence in undergraduate and graduate education, and demonstrated leadership skills. The Department has 20 tenure-track faculty, a strong undergraduate program, and a growing graduate program with 70 M.S. and Ph.D. students. Preferred starting date is August 15, 2000. Applications will be accepted until the position is filled. For additional information: **Oliver Manuel, e-mail: om@umr.edu.** Send letter of application, complete vitae, and three letters of reference to: **Human Resource Services, Reference Number R52863, University of Missouri-Rolla, 1201 North Bishop, 1870 Miner Circle, Rolla, MO 65409-1050.** UMR is an Affirmative Action/Equal Employment Opportunity Employer. Females, minorities, and persons with disability are encouraged to apply.

### NEUROSCIENCE

A tenure-track position beginning fall 2000. We seek a Neuroscientist with a strong commitment to liberal arts education, demonstrated excellence in teaching, and the ability to develop an active research program that involves undergraduates. The successful applicant will participate in an interdisciplinary neuroscience program funded by the Howard Hughes Medical Institute. Teaching duties include a core course for neuroscience majors, a team-taught introductory biology course, an upper-level course in animal physiology, a junior seminar in some aspect of neuroscience, and participation in college-wide freshman/sophomore seminars that emphasize writing and speaking. Excellent research and technical facilities are available, as are start-up funds. Send curriculum vitae, statements of teaching and research interests, and three letters of recommendation to: **Dr. Scott Wissinger, Department of Biology, Allegheny College, Meadville, PA 16335.** Review of applications will begin October 15, 1999. Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.

## POSITIONS OPEN



The Boston Biomedical Research Institute, an independent, nonprofit research institute (see website: <http://www.bbri.org>), invites applications for two **JUNIOR or SENIOR RESEARCH FACULTY** positions from scientists with postdoctoral experience and significant research accomplishments. The successful candidates will complement the research of other Investigators at the Institute with interests in various aspects of contractility, signal transduction, and regulation of cell growth and will establish independent, externally funded research programs. Generous start-up packages are available. In February 2000, the Institute, which provides a highly interactive research environment, will relocate to its new state-of-the-art research facility in Watertown, Massachusetts, an attractive 60,000-square foot building less than two miles from Harvard Square in Cambridge. Applicants should submit by mail a curriculum vitae, a brief statement of research plans, and arrange to have letters from three references sent to: **Dr. Henry Paulus, Chair, Search Committee, Boston Biomedical Research Institute, 20 Staniford Street, Boston, MA 02114.** Screening of applications will begin on November 1, 1999, and will continue until the positions are filled.

### SCIENTIST/FACULTY POSITIONS IN PATHOGENS AND HOST IMMUNITY

Applications are invited for Staff or Senior Scientist positions at Seattle Biomedical Research Institute (SBRI) with parallel Regular or Research Assistant, Associate, or Full Professor appointments in the Department of Pathobiology, University of Washington (UW). SBRI is a highly interactive, Investigator-driven research institute with a focus on human pathogens of global importance (website: <http://www.sbri.org>). We seek to recruit scientists studying host-pathogen interactions, particularly from an immunological or functional genomics perspective. Candidates studying intracellular pathogens, including malaria and HIV, are especially encouraged to apply. Applicants must have a Ph.D. in a laboratory-based discipline and an established, independently funded research program. Participation in graduate student training will be expected. Please send curriculum vitae, statement of proposed research, and four letters of reference to: **Search Committee, Seattle Biomedical Research Institute, 4 Nickerson Street, Seattle, WA 98109-1651.** Closing date: 1 November 1999. The UW is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. SBRI and UW are Equal Opportunity/Affirmative Action Employers.

### DIRECTOR, CORE FACILITY TRANSGENIC/KNOCKOUT MOUSE PROGRAM

The Department of Pharmacology, University of Illinois College of Medicine (Chicago), is seeking a Core Director to manage the transgenic/knockout mouse program. The ideal candidate should have demonstrated experience in production of knockout/transgenic mice including DNA/ES cell injection, maintenance of mouse colonies, and breeding. Candidates experienced in embryo freezing, ES culture, and generation of conditional knockouts (such as with Cre-lox P System) are preferred. Participation in research projects will be encouraged. The individual should have excellent organizational and communication skills. Ph.D. (preferred) or B.S. in a health science with three years of training and experience. All qualified candidates will be considered. Position available November 1, 1999. Salary will be highly competitive and commensurate with experience. Applications should be submitted to: **Search Committee (DCF001) Department of Pharmacology, University of Illinois at Chicago, 835 South Wolcott, Room E403, Chicago, IL 60612.** UIC is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### DIRECTOR, CENTER FOR SCIENCE, MATHEMATICS, AND TECHNOLOGY EDUCATION

Colorado State University

Colorado State University seeks a Director of the Center for Science, Mathematics, and Technology Education (CSMATE). CSMATE is tasked with improving teaching and learning in science, mathematics, and technology. This 12-month administrative professional position has the possibility of a tenure-track faculty appointment. Salary commensurate with experience. The Director: manages all educational programs, budgets, and space of CSMATE; represents the University to a variety of educational groups; and obtains extramural funding to support Center programs. Qualifications: earned Doctorate in a scientific discipline; 10 years of experience in teaching/research in university-level science, mathematics, or technology education; success in obtaining and managing extramural funding for education programs and in working with diverse constituencies. To apply send a letter indicating interest in the position and how your experience/background fits the roles and responsibilities described above; current curriculum vitae; and names, postal and e-mail addresses, and telephone numbers of three professional references. For full consideration, applications must be received by 5:00 p.m. MDT October 27, 1999; however, applications will be reviewed until a suitable candidate is found. Application materials can be sent by postal service, FAX transmission, or by e-mail to:

**Thomas W. Sneider, Associate Dean  
Center for Science, Mathematics, and Technology  
Education Director Search Committee  
College of Natural Sciences  
Colorado State University  
Fort Collins, CO 80523-1801  
Telephone: 970-491-6864  
FAX: 970-491-6639  
E-mail: [tsneider@lamar.colostate.edu](mailto:tsneider@lamar.colostate.edu)**

CSU is an Equal Employment Opportunity/Affirmative Action Employer.

### BIOPSYCHOLOGIST/BEHAVIORAL NEUROSCIENTIST DEPARTMENT OF PSYCHOLOGY The Johns Hopkins University

Applications are invited for a **TENURE-TRACK POSITION** (any rank) in the Psychology Department. Applicants are sought who adopt an integrative approach to the study of the biological bases of behavior (see website: <http://www.psy.jhu.edu/faculty.html>). Send curriculum vitae (including statement on research and teaching interests), selected reprints, and at least three letters of recommendation to: **Biopsychology Search Committee, Department of Psychology, Johns Hopkins University, Baltimore, MD 21218-2686.** Review of applications will begin immediately and will continue until a candidate is selected. Women and members of underrepresented groups are especially encouraged to apply. The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.

### MARINE INVERTEBRATE ECOLOGIST.

Eckerd College seeks a Marine Invertebrate Ecologist to fill a **TENURE-TRACK POSITION** in our marine science and biology programs to begin fall 2000. Applicants must have a Ph.D., preferably with postdoctoral and teaching experience. The successful candidate should be prepared to teach marine invertebrate biology and ecology, as well as develop a research program that involves undergraduates. Periodic participation in environmental studies and the college's interdisciplinary general education program is also expected. Send curriculum vitae, statement of teaching and research interests, transcripts, relevant teaching evaluations, and three letters of reference to: **Dr. David Scholnick, Chair, Marine Invertebrate Ecology Search Committee, Galbraith Marine Science Laboratory, Eckerd College, 4200 54th Avenue South, St. Petersburg, FL 33711** by October 24, 1999. Equal Opportunity Employer. Women and minorities are encouraged to apply.

# The Jackson Laboratory



The Jackson Laboratory is an independent, not-for-profit mammalian genetics research institution, a major resource for the research community and a center for training in mammalian genetics. Designated a Basic Cancer Center by the National Cancer Institute, the Laboratory offers its more than 30 principal investigators the opportunity to conduct basic research in an interactive environment with excellent collaborative opportunities, unparalleled mouse and genetic resources, and an outstanding shared scientific services program.

## STAFF SCIENTISTS

The Jackson Laboratory is currently recruiting faculty members in Cancer-genetics, Developmental-genetics, Neuro-genetics, and Bioinformatics/ Computational Biology. The successful applicant should have a Ph.D., M.D., or D.V.M., Postdoctoral Training, a record of research excellence, and be able to initiate a competitive independent research program. **Applicants for Staff positions should cite ad S-09 and send a curriculum vitae, statement of research interests and the names of at least three references to The Director's Office: The Jackson Laboratory, 600 Main Street, Bar Harbor, Maine 04609 or e-mail: [rsp@jax.org](mailto:rsp@jax.org).**

## DATABASE INFORMATICS: BIOLOGISTS

Professional positions are available in the expanding Bioinformatics Programs at The Jackson Laboratory working with the Mouse Genome Database, Gene Expression Database, and a new genomic sequence oriented database for mouse. Successful candidates will be primarily responsible for data acquisition (electronic or literature based) and analyzing, evaluating and annotating data to be incorporated into the databases. In addition, they will contribute to database and interface design work by contributing biological perspectives to new database content and displays. Applicants should have experience with molecular biology or mammalian systems and be versed in genomics, genetics, developmental biology, or cellular biology. Other desirable attributes include excellent writing/communication skills and experience using multiple computing platforms. Ph.D. or M.S. degree in Life Sciences required. **FOR THESE POSITIONS, qualified candidates should send their curriculum vitae to: Human Resources, The Jackson Laboratory, 600 Main St, Bar Harbor, ME 04609 Fax 207-288-6106 or email: [jobs@jax.org](mailto:jobs@jax.org)**

## POSTDOCTORAL TRAINING

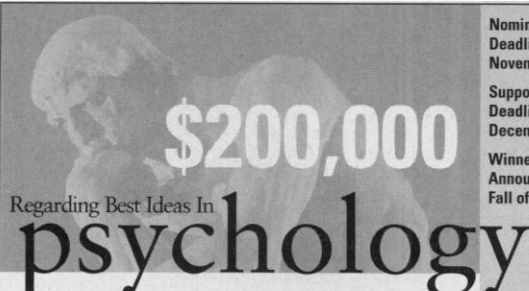
The Jackson Laboratory has a coordinated training program that provides broad experience in the skills necessary to fulfill the emerging and growing needs of academic and industrial programs in mammalian genetics and genomics. In addition to carrying on independent research projects and improving their oral and written presentation skills, participants gain wider experience in the principles and practices of mammalian genetics, analysis of complex traits, genomics and positional cloning, bioinformatics, and the essentials of animal husbandry through a series of on-site courses, workshops, seminars, and laboratory programs. **Applicants for Postdoctoral Training positions should cite ad PD-09 and send a curriculum vitae, statement of research interests and the names of at least three references to The Training Office, The Jackson Laboratory, 600 Main Street, Bar Harbor, Maine 04609 or e-mail: [sbs@jax.org](mailto:sbs@jax.org).**

**THE JACKSON LABORATORY** is one of the world's foremost centers for mammalian genetics research. Located in Bar Harbor, Maine, the lab is adjacent to Acadia National Park. Mountains, oceans, forest, lakes, and trails are all within walking distance.

The Jackson Laboratory is an EOE/AA Employer

<http://www.jax.org>

## AWARDS



**The Louisville Grawemeyer Awards** are proud to announce an annual award in Psychology. The purpose of this award is to acknowledge outstanding ideas in the science of Psychology and make them available to a wide audience. Submissions may address a wide range of topics in Psychology. Nominations will be judged on the basis of originality, creativity, scientific merit, and scope of potential applicability in the field of Psychology.

### The Nomination Process

The University invites nominations from throughout the world by individuals, professional associations, university presidents and administrators, or publishers or editors of journals and books in Psychology.

### The Nominator Must Submit The Following:

- A one to two page letter of nomination in English identifying the specific idea or achievement being nominated and delineating the reasons why the entry merits the award. Please provide complete bibliographic references if possible.
- A current mailing address, telephone number, fax number and e-mail address for the nominee.

### The Selection Process

Upon receipt of a letter of nomination, the nominee will be notified of his or her nomination and sent a Nominee Form explaining the award conditions and detailing the support materials needed to complete the nomination. An outline of the selection process will also be sent.

UNIVERSITY OF LOUISVILLE  
*Grawemeyer Award*

**Nominations  
Deadline:**  
November 1, 1999  
**Supporting Materials  
Deadline:**  
December 1, 1999  
**Winner  
Announcement:**  
Fall of 2000

### Send Submissions To:

Director, Psychology  
Grawemeyer  
Committee,  
Department of  
Psychological and  
Brain Sciences,  
University of Louisville,  
Louisville, KY 40292,  
U.S.A.

### Telephone:

502 852-6775

### Fax:

502 852-8904

### E-Mail:

[jfapon01@athena.louisville.edu](mailto:jfapon01@athena.louisville.edu)

### Website:

[www.grawemeyer.org](http://www.grawemeyer.org)

## TRAINING



## Medical Informatics Training at the Lister Hill National Center for Biomedical Communications National Library of Medicine (NLM)

The Medical Informatics Training Program at the Lister Hill National Center for Biomedical Communications provides opportunities for students and visiting scientists to participate in collaborative research in a variety of areas of medical informatics. Research participation at the Center for postdoctoral fellows, graduate and medical students, college students, and visiting faculty can range from a few months to one or more years. Current activities of the Center include:

- Digital library research
- Automated indexing techniques
- Vocabulary and thesaurus research
- Medical language processing
- Image processing
- Document analysis
- Belief networks
- Wide area network technology
- Client server design
- Database design
- Machine learning
- Expert systems
- Computer-based learning

The NLM is one of the National Institutes of Health, the government's primary agency for support and conduct of biomedical research. More details can be seen at our Web site at <http://lhncbc.nlm.nih.gov>

If you are interested in one of our training programs, contact:  
May Cheh; National Library of Medicine;  
8600 Rockville Pike, Mail Stop 54;  
Bethesda, MD 20894-6075 (Email: [cheh@nlm.nih.gov](mailto:cheh@nlm.nih.gov))

## POSITIONS OPEN

**DEPARTMENT HEAD.** The Department of Anatomy, Physiological Sciences, and Radiology (APR) in the College of Veterinary Medicine at North Carolina State University invites applications and nominations for the position of Department Head. The Head provides leadership to a department of 35 faculty with major research programs in environmental and molecular pathogenetic mechanisms (cutaneous, gastrointestinal, neural, ocular, pulmonary, reproductive); pharmacokinetics; oncology and carcinogenesis; and cell signaling. This person will be responsible for administration of departmental instructional programs and research, as well as clinical service to the Veterinary Teaching Hospital in the disciplines of anesthesiology, pharmacology, and radiology. Required qualifications include a Ph.D. (or equivalent) degree, an outstanding record in extramurally funded research, a strong commitment to teaching and service, demonstrated leadership skills, and eligibility for appointment as a Full Professor. Desired credentials include the D.V.M. (or equivalent) degree. Screening of applications will begin November 15, 1999, and will continue until the position is filled. Send curriculum vitae, and the names, addresses, telephone numbers, and e-mail addresses of three individuals who may be contacted by the Search Committee to provide references. Direct applications and questions to: **Dr. Lance E. Perryman, Chair of the Search Committee, College of Veterinary Medicine, North Carolina State University, 4700 Hillsborough Street, Raleigh, NC 27606. E-mail: lance\_perryman@ncsu.edu.**

Individuals with disability desiring reasonable accommodations in the application process should contact: **Dr. Lance Perryman, Telephone: 919-513-6250; FAX: 919-513-6455; TDD: 919-515-9617.** North Carolina State University is an Affirmative Action/Equal Opportunity Employer.

## TENURE-TRACK POSITION NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

A tenure-track position is available in the Laboratory of Allergic Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, for a M.D., M.D.-Ph.D., or Ph.D. scientist to develop an independent research program related to the exploration of the mechanisms of allergic inflammation and their treatment. Experience in the application of the techniques of cellular and molecular biology and/or clinical research is desirable. Resources include salary support for the tenure-track position, a support position, and one to two Fellows. Space and supply budget are committed. Applicants must be U.S. citizens or permanent residents. A curriculum vitae, bibliography, three letters of reference, a detailed statement of research interests, and selected publications must be submitted by October 31, 1999, to: **Dr. Thomas Fleisher, Chairperson, c/o Lakasha Mingo, NIH/NIAD/LAD, Building 10, Room 4A26, 10 Center Drive, Bethesda, MD 20892-1356.**

The NIH is an Equal Opportunity Employer.

Tenure-track **ASSISTANT PROFESSOR** in developmental neuroscience, Department of Neurobiology and Anatomy, University of Utah School of Medicine. Applicants must have a Ph.D. or M.D. or equivalent degree and postdoctoral research experience. The ability to develop a very strong independent research program in nervous system development is of paramount importance. A strong commitment to teaching medical and graduate students is also required. Send a curriculum vitae, a statement of research interests, and names and addresses of three references to: **Dr. T. N. Parks, Chair, Department of Neurobiology and Anatomy, University of Utah School of Medicine, 50 North Medical Drive, Salt Lake City, UT 84132. E-mail: najobbapp@mailman.med.utah.edu.** Deadline is January 14, 2000, or until a suitable candidate is found. Visit our department's website: <http://www-na.med.utah.edu>. Equal Opportunity Employer/Affirmative Action. We strongly encourage applications from women and minorities.

## POSITIONS OPEN



## DIRECTOR DIVISION OF LABORATORY ANIMAL RESOURCES University of Pittsburgh

The University of Pittsburgh is seeking a qualified, motivated, and experienced candidate to serve as the Director of the Division of Laboratory Animal Resources (DLAR). The successful applicant will provide leadership as the Director of a very large, modern, diverse, research resource accredited by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC).

The Director will assure compliance with all federal, state, and local animal welfare statutes and regulations. Responsibilities include operation of the DLAR, maintenance of accredited standards, development and implementation of policies regarding the humane care and use of laboratory animals, space management, resource allocation, and budget oversight. The DLAR has an operating budget of \$2.5 million and supports approximately \$40 million in animal-related research. The University of Pittsburgh ranks 12<sup>th</sup> in the country in NIH funding.

Candidate successful candidate must possess a graduate degree such as M.D., Ph.D., or D.V.M. (ACLAM Board-certified or -eligible) from an accredited institution and also possess comprehensive knowledge of federal regulations governing the care and use of animals in research, excellent leadership ability, strong interpersonal and communication skills, and a track record of excellence as an administrator in laboratory animal science. Demonstrated ability to work effectively with faculty, DLAR staff, academic administrators, and affiliated constituencies in a culturally diverse climate is essential.

The University of Pittsburgh provides excellent tuition benefits for employees and dependents and attractive medical benefits and retirement package. Salary is competitive and commensurate with qualifications and experience.

Applicants are invited to send a letter of interest, curriculum vitae, and the names, addresses, and telephone numbers of five references to: **Dr. Ronald B. Herberman, Chair, Search Committee, 3471 Fifth Avenue, Suite 201, Pittsburgh, PA 15213.** Review of applications by the Search Committee will begin immediately and continue until a suitable candidate is identified and the position filled. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

## COMPUTATIONAL MOLECULAR BIOLOGY/FUNCTIONAL GENOMICS

The Department of Biological Sciences at Carnegie Mellon University seeks an outstanding candidate for a tenure-track appointment at the intersection of computer science and molecular biology. Successful candidates will have strong credentials in both areas, and will be prepared to take advantage of the University's world-class strength in computer science and the strong tradition of interdisciplinary research in the Department of Biological Sciences. Applicants pursuing purely theoretical or mixed experimental/theoretical approaches to genomic and proteomic questions will be considered. Appointment will be made at a level commensurate with the experience of the applicant. Interested applicants should send curriculum vitae, statement of research interests, and three letters of recommendation to: **Dr. Robert F. Murphy, Department of Biological Sciences, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213.** Review of applications will begin on November 1, 1999, and will continue until a suitable candidate is recruited. Our department is eager to diversify its faculty: we encourage women and minorities to apply. Carnegie Mellon University is an Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### PARASITOLOGY

The University of Notre Dame Department of Biological Sciences invites applications for a **TENURE-TRACK FACULTY POSITION** in the Parasitology/Vector Biology Research Group. Qualified persons should have a strong research history in the area of host-pathogen interactions. Individuals from any research area are encouraged to apply, but preference will be given to candidates with interdisciplinary research interests in the areas of immunology, microbial pathogenesis, vaccine development, or other areas that complement existing research programs of the group. Parasitology programs include molecular cell biology of the *Apicomplexa* (Adams), immunology and cell biology of *Mycobacterium* (Schorey), and biochemistry of animal parasites (Saz). Vector biology programs include molecular evolutionary genetics of mosquitoes (Besansky), genetics of arthropod vectors of human pathogens (Collins), molecular biology and genetics of viruses (Fraser), vector-borne disease ecology and epidemiology (Grimstad), and quantitative and population genetics of mosquito vectors (Severson). Successful candidates are expected to develop an extramurally funded research program and participate in the interdisciplinary training program. Normal teaching duties are one course a semester, usually one graduate and one undergraduate course per year. Additional information is available at website: <http://www.science.nd.edu/biology>.

Applications should include a curriculum vitae, copies of up to three representative publications, letters from three references, a statement of research interests, and a statement of teaching interests. Deadline for applications is October 15, 1999. Appointment will commence August 2000. Send applications to: **Parasitology Search Committee, Department of Biological Sciences, P.O. Box 369, University of Notre Dame, Notre Dame, IN 46556-0369.** For further information contact: **Dr. John Adams, e-mail: adams.20@nd.edu.**

The University of Notre Dame is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

## ASSISTANT/ASSOCIATE/ FULL PROFESSORS TWO POSITIONS Cancer Research

As part of an expansion in cancer research, Creighton University invites applications for two tenure-track positions. The areas of interest are molecular genetics/molecular biology and medical genetics/medical oncology. Applicants will have the opportunity to collaborate with **Henry T. Lynch, M.D.** on his ongoing projects in hereditary cancer research. Individuals recruited will have the following qualifications: Ph.D., M.D., or M.D.-Ph.D. degrees; postdoctoral training, evidence of research accomplishment, and promise to become a leader in the area of cancer research. Preference will be given to candidates demonstrating success in securing peer-reviewed funding for their research. Successful candidates will be expected to conduct vigorous, independent research programs and to participate in teaching and training students and Fellows. Appointments in one or more departments are possible. Rank will be determined by the qualifications of the applicant. Laboratory space with equipment and generous start-up funding will be available. Ongoing funding is possible through an institutional grant from the State of Nebraska Cancer and Smoking Disease Research Program. Applicants should send a curriculum vitae, a brief outline of their research program and future research plans, a statement of teaching interests, and three letters of reference to:

**Search Committee Chair c/o Ms. K. Taggart  
Creighton University  
2500 California Plaza  
Omaha, NE 68178**

Applications will be screened immediately and will continue to be accepted until the position is filled. Creighton University is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL FELLOW POSITIONS  
IN MOLECULAR AND CELLULAR BIOLOGY**  
Laboratory of Biological Chemistry  
National Institute on Aging  
National Institutes of Health

Several Postdoctoral Fellow positions are available within the Laboratory of Biological Chemistry, at the National Institute on Aging, for highly motivated individuals interested in joining an expanding research program. Specific project areas include:

- Physiological role of the amyloid precursor protein and presenilins; Their pathological role in Alzheimer's Disease; Signal transduction pathways in apoptotic neuronal cell death.  
John W. Kusiak, Ph.D.; [kusiak@vax.grc.nia.nih.gov](mailto:kusiak@vax.grc.nia.nih.gov)
- Function and regulation of stress signaling pathways in mammalian cells. Emphasis on roles for novel protein and lipid phosphatases.  
Yusen Liu, Ph.D.; [liuy@grc.nia.nih.gov](mailto:liuy@grc.nia.nih.gov)
- Gene expression in ovarian cancer using Serial Analysis of Gene Expression (SAGE) and cDNA arrays. Identification of novel genes involved in ovarian tumorigenesis. Regulation and targets of the TCF/beta-catenin pathway in human cancer.  
Pat J. Morin, Ph.D.; [morinp@grc.nia.nih.gov](mailto:morinp@grc.nia.nih.gov)
- Function of the von Hippel-Lindau tumor suppressor gene. Regulation of cell cycle progression during the mammalian stress response and influence of cell cycle alterations on cell survival. Emphasis on post-transcriptional events governing expression of cyclins, cdk's and cdk inhibitors.  
Myriam Gorospe, Ph.D.; [myriam-gorospe@nih.gov](mailto:myriam-gorospe@nih.gov)
- Role of tyrosine kinases and phosphatases in controlling T cell fate (proliferation, anergy or apoptosis) in response to T cell receptor engagement. Use of novel techniques to identify true *in vivo* kinase/substrate pairs. Involvement of TCR-associated signaling molecules in HIV infection.  
Ronald Wange, Ph.D.; [wanger@grc.nia.nih.gov](mailto:wanger@grc.nia.nih.gov)
- Cellular responses to genotoxic/oxidative stress and perturbations of the endoplasmic reticulum: Use of SAGE and cDNA array analysis to investigate critical signaling components, stress-regulated genes, and other factors influencing cell survival.  
Nikki J Holbrook, Ph.D.; [holbrook@grc.nia.nih.gov](mailto:holbrook@grc.nia.nih.gov)

Candidates must have a Ph.D. or M.D. degree, must have less than 5 years of postdoc experience, strong background in molecular biology, cell biology, and/or biochemistry, and demonstrated record of productivity. Applicants should direct correspondence about specific project areas to the specified P.I. via email or surface mail at the following address:

Laboratory of Biological Chemistry, Box 12, Gerontology Research Center, 5600 Nathan Shock Drive, NIA, National Institutes of Health, Baltimore, MD 21224-6825.

**NIH is an Equal Opportunity Employer**



Division of Cancer Treatment and Diagnosis  
Diagnostic Research Branch

**Opening Date: 8/30/99**

**Closing Date: 9/30/99**

**Announcement Number: NCI-99-2320**

Extramural Scientist Administrator (Interdisciplinary)  
GS-0601/0602/0401/0403/1320-13/14

**The Diagnostics Research Branch of the Cancer Diagnosis Program (CDP)** is accepting applications for a position in an exciting and expanding program responsible for translating new understanding of cancer biology and new technologies into clinically useful diagnostic and predictive tests. The successful candidate will be responsible for a program which supports research focused on the application and evaluation of new technologies, including comprehensive molecular analysis technologies, directed to cancer diagnosis, prognosis, and prediction of response to particular therapies. Although many of the responsibilities are administrative, successful performance is critically dependent on a substantial level of scientific knowledge in the areas of cancer biology, molecular genetics, laboratory medicine, study design and/or related disciplines. The Program Director will evaluate research needs and stimulate increased research efforts in the broad area related to development of new diagnostics and predictive tools for cancer patient management.

Salary - Ranges from **\$58,027 to \$89,142** per annum. Physicians may be eligible for an added allowance of up to \$20,000 per annum. Benefits include health and life insurance options, retirement, paid holidays, vacation and sick leave.

U.S. citizenship is required. In order to validate your qualifications, it is necessary to **describe your proficiency** in the following knowledge, skills, and/or abilities (KSAs): **1)** Knowledge required to manage a program aimed at application and evaluation of new technologies, including comprehensive molecular analysis technologies, directed to cancer diagnosis, prognosis, and prediction of response to particular therapies; **2)** Ability to plan, develop, and implement research grant and contract programs, including the formulation of program objectives, goals and initiatives; and **3)** Ability to establish and maintain professional relationships with scientists in academia, industry and Government.

To obtain the mandatory course requirements and other necessary application information, please visit: <http://careerhere.nih.gov>, vacancy announcement, NCI-99-2320. You may also call (301) 402-2789 to request a fax copy of the vacancy announcement, (Fax ID: 1914).  
**Send application to:**

**NIH/NCI/HRMCB, Executive Plaza South, Suite 550,  
6120 Executive Blvd., MSC 7209, Rockville, MD 20852-  
7209 by the closing date of 9-30-99.**

For more information, contact **Sheila E. Taube, Ph.D.**,  
at (301) 496-8639.

**NIH/NCI is an Equal Opportunity Employer**

## POSITIONS OPEN

### BIOCHEMISTRY FACULTY POSITIONS GEORGIA STATE UNIVERSITY

Applications for two anticipated **TENURE-TRACK POSITIONS** in protein structure/function and enzymology are invited. Appointments will be jointly held in Departments of Biology and Chemistry. One position will be in protein function by means of X-ray structural biology as part of a broad program to understand enzyme/protein function and will complement our current NMR-based structural research at the Georgia State University (GSU) NMR Center. GSU is part of a consortium that has access to the synchrotron-radiation source at the Argonne National Laboratory. The other position will be in enzymology/proteins. Applicants (Ph.D. and postdoctoral experience) at the Assistant Professor level will be expected to establish independent, vigorous, externally funded research programs. Applicants at more senior levels should have well-established, externally funded research programs. We are particularly interested in individuals whose research complements existing strengths. Successful candidates will participate in instruction and research at the undergraduate and graduate M.S.-Ph.D. levels. The Departments have excellent core research facilities. More detailed information can be found at **websites: www.gsu.edu/ABC, www.chemistry.gsu.edu, and www.biology.gsu.edu**. Review of applications will commence on October 1, 1999. Applications including curriculum vitae, reprints, statement of research plans, and three letters of recommendation should be sent to: **Chair of Search Committee** (specify area), **P.O. Box 4010, Georgia State University, Atlanta, GA 30302-4010**. *Georgia State University, a unit of the University System of Georgia, is an Equal Employment Opportunity/Affirmative Action Employer.*

### DEVELOPMENTAL BIOLOGY

The Department of Biological Sciences at the University of Notre Dame invites applications for two **TENURE-TRACK FACULTY POSITIONS** in developmental biology. We seek to expand our Cell and Molecular Biology Program by recruiting junior or senior-level scientists studying molecular biology of development. Current research strengths within the department include cancer biology, apoptosis, cellular trafficking, cytoskeletal structure, photoreceptor biology, reproductive biology, and parasitology. An excellent research environment includes optical imaging, flow cytometry, animal care, zebrafish, and transgenic facilities. Teaching responsibilities will include an undergraduate course in developmental biology. The University of Notre Dame offers competitive salary and generous start-up package money. Additional information is available at <http://www.science.nd.edu/biology>. Applicants should submit curriculum vitae, a statement of research and teaching interests, and have letters sent by three references by October 15, 1999, to: **Developmental Biology Search, Department of Biological Sciences, University of Notre Dame, P.O. Box 369, Notre Dame, IN 46556-0369**. For further information contact: **Dr. Joseph O'Tousa, e-mail: o'tousa.1@nd.edu**.

*The University of Notre Dame is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.*

### FACULTY POSITION IN EXPERIMENTAL THERAPEUTICS

Tenure-track position for a Ph.D. or equivalent with experience in antibody engineering or molecular biology with a research interest in antibody-based medications. Candidates will be expected to establish a strong independent research program, but there are significant opportunities for collaboration with well-funded Investigators in multidisciplinary programs. Applicants must have postdoctoral experience along with a proven record of innovative research and a commitment to the teaching of medical students and graduate students. Please send résumé and a list of references to: **D. E. McMillan, Professor and Chairman, Department of Pharmacology and Toxicology, College of Medicine, Slot 611, 4301 West Markham Street, Little Rock, AR 72205**.

## POSITIONS OPEN



**MOLECULAR MICROBIOLOGIST.** The Department of Biology at Saint Louis University, a Catholic, Jesuit institution dedicated to education, research, and health care, is seeking applicants for a **TENURE-TRACK POSITION** in the area of molecular microbiology beginning fall semester 2000. Applicants should have postdoctoral experience and record of research productivity. The candidate is expected to develop an independent, extramurally funded research program involving M.S., Ph.D., and undergraduate students, and to teach general microbiology, and courses in his/her area of expertise. Submit a statement of teaching and research goals, representative reprints, curriculum vitae, and three letters of recommendation to: **Robert I. Boll, Ph.D., Chair, Department of Biology, Saint Louis University, 3507 Laclede Avenue, St. Louis, MO 63103-2010. E-mail: bollari@slu.edu**. For more information visit our **website: www.slu.edu**. Review of candidates will begin immediately and continue until the position is filled. *Saint Louis University is an Affirmative Action/Equal Opportunity Employer.*

### THE UNIVERSITY OF CHICAGO DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

In keeping with its strong commitment to excellence in structural biology, the Department of Biochemistry and Molecular Biology at The University of Chicago invites applications and nominations for two **TENURE-TRACK FACULTY POSITIONS** in NMR spectroscopy. We seek candidates at all levels with outstanding research programs or potential in the application of NMR to the analysis to protein structure, function, and dynamics, including protein design. Our NMR facility currently offers the services of four high-resolution Varian NMR spectrometers (400 MHz, 500 MHz, and two 600 MHz). As with all of our faculty appointments, these will be full-time (12-month) guaranteed positions; a commitment to teaching is expected. Applications should include a curriculum vitae, list of publications, summary of past work, research plan, and letters of reference from at least three individuals who know the candidate's work well. Please submit completed applications and nominations by December 15, 1999, to: **Faculty Search Committee, Department of Biochemistry and Molecular Biology, The University of Chicago, 920 East 58th Street, Chicago, IL 60637**. *The University of Chicago is an Affirmative Action/Equal Opportunity Employer.*

### RESEARCH FACULTY

The Department of Physiology and Cell Biology at University of Nevada School of Medicine is seeking Research Faculty to conduct investigations supported by federally funded and/or agency-funded grants into the ionic basis of rhythmicity in smooth muscles, neural regulation of smooth muscles, endothelium-dependent regulation of vascular smooth muscles, biochemical and molecular biological studies of phosphatases and their substrates, ionic mechanisms in cardiac muscles, development of excitation and contraction mechanisms in smooth and cardiac muscles, or developmental neurobiology. Various molecular, biochemical, electrophysiological, and imaging techniques are utilized in these studies. Requires Ph.D., M.D., or equivalent degree in medical sciences. Experience with smooth muscle physiology, molecular biology, biochemistry, biophysics, electrophysiology, or morphological techniques required.

Send curriculum vitae and three references to: **Kenton Sanders, Ph.D., Department of Physiology and Cell Biology/352, University of Nevada School of Medicine, Reno, NV 89557**. Review of applications will begin October 1, 1999. Applications will be accepted until July 1, 2000. *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### BIOCHEMIST ORGANISMAL BIOLOGIST ASSOCIATE DIRECTOR Ordway Natural History Area

The Biology Department, Macalester College invites applications for two tenure-track faculty positions, rank open, beginning September 1, 2000. The Organismal Biologist will teach physiology and comparative physiology; the Biochemist, who must have additional expertise in cell and/or molecular biology, will teach biochemistry in the newly designed, interdisciplinary Biochemistry Program. These faculty positions include teaching advanced courses in one's specialty and interdisciplinary and/or non-majors courses. We also invite applications for a full-time, 12-month staff position as Associate Director of the College field station, which includes teaching laboratories in ecology, and requires residence at the field station. A relevant Master's and experience in plant ecology and habitat management is required. The successful applicants will be strongly committed to teaching undergraduates in a liberal arts setting and will be expected to establish active research programs involving undergraduates. Send curriculum vitae, a statement of research interests and teaching philosophy, and contact information for three references by November 1, 1999, to: **Dr. Jan Serie, Chair, Department of Biology, Macalester College, 1600 Grand Avenue, St. Paul, MN 55105-1899**. *Macalester College is an Affirmative Action/Equal Opportunity Employer, and welcomes and encourages applications from underrepresented minorities.*

### MIT FELLOW IN BIOINFORMATICS OR COMPUTATIONAL BIOLOGY

The Department of Biology at MIT seeks applicants for a Fellow position in the area of bioinformatics or computational biology. This position will be similar to Fellow positions in the Whitehead Institute. The term of the position is five years with a salary range of \$50,000 to \$60,000 per year. The Fellow will receive Principal Investigator status, office and laboratory space, and start-up support to help establish an independent research program. Applications from Postdoctorals or graduate students expecting to graduate before January 1, 2000, are welcomed. The potential to carry out cutting-edge research and to interact actively with colleagues at MIT will be important criteria for the successful applicant.

Applicants should submit a cover letter, an up-to-date curriculum vitae, and arrange to have three letters of recommendation sent to:

**Prof. Robert T. Sauer  
Head, Department of Biology  
MIT 68-132  
77 Massachusetts Avenue  
Cambridge, MA 02139-4307**

The application deadline is November 1, 1999, but completed applications will be considered when received.

*MIT is an Equal Opportunity/Affirmative Action Employer. Qualified women and minorities are encouraged to apply.*

**ASSISTANT PROFESSOR** of physiology and biophysics. The Department of Physiology and Biophysics at the Albert Einstein College of Medicine invites applications for a tenure-track appointment at the Assistant Professor level. All areas in molecular and cellular biophysics and all areas in physiology will be considered. The successful candidate will be expected to develop an outstanding extramurally funded research program. In addition all faculty are expected to participate where appropriate in the teaching of students in the College of Medicine and its Sue Golding Graduate Division. Review of candidates will begin on November 1, 1999, and continue until the position is filled. Applicant should send a curriculum vitae, a brief statement of research interests, and arrange for three letters of reference to be sent to: **Professor Steven Schwartz, Chair Search Committee, Department of Physiology and Biophysics, Albert Einstein College of Medicine, Jack & Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461**. *Equal Opportunity Employer.*

### Tenure-Track Assistant Professor Positions

The newly formed Department of Neuroscience at the University of Minnesota-Twin Cities is seeking faculty to strengthen its existing programs in cellular, molecular and behavioral neuroscience. Candidates are sought whose research addresses fundamental questions on the structure, function, and development of the nervous system using contemporary cellular, molecular or behavioral approaches. Areas of interest include, but are not limited to, ion channels and synaptic function, signal transduction, neuronal growth and development, and cognitive neuroscience. Ideal candidates will complement existing departmental strengths in systems neuroscience. For more information see <http://www.neurosci.umn.edu>.

Candidates must have a Ph.D. and/or M.D. degree. Desired experience includes at least two years of postdoctoral or equivalent experience, and a strong publication record. Successful candidates must be able to secure permanent resident status or be U.S. citizens. Candidates will be expected to develop a vigorous, independent research program that will lead to external funding. The ability to interact collaboratively among a variety of disciplines will be strongly encouraged, and teaching of undergraduate, graduate, and/or professional students will be expected. Please send a curriculum vitae, a statement of research interests, and three letters of recommendation that consider both research and teaching potential to:

Search Committee  
c/o Ms. Barbara Swanson  
University of Minnesota  
Department of Neuroscience  
Jackson Hall Room 6-145  
321 Church St., S.E.  
Minneapolis, MN 55455 USA  
or [werrb001@tc.umn.edu](mailto:werrb001@tc.umn.edu)

Electronic versions of the required information may be e-mailed but must be followed with a hard-copy for the official search files. Applications received by November 15, 1999 will be reviewed in this round.

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

### NATIONAL INSTITUTES OF HEALTH

#### POSTDOCTORAL FELLOWSHIPS AT NIH IN GENE VARIATION RESEARCH

Two postdoctoral positions are immediately available for molecular studies involving the isolation of functional human polymorphisms involved in human diseases of the central nervous system. Research projects include development of high throughput screening methodologies, functional analysis of gene variants and positional cloning of behavior-related genes.

Applicants should have less than five years postdoctoral experience and a strong background in molecular biology, nucleic acid biochemistry, and/or genetics. Please send a curriculum vitae, bibliography and the names and addresses of at least three references to:

DAVID GOLDMAN, M.D.  
LABORATORY OF NEUROGENETICS, NIAAA, NIH  
12420 PARKLAWN DRIVE  
PARK BUILDING, ROOM 451  
ROCKVILLE, MD 20852

FAX: (301) 443-8579

E-MAIL: [dgneuro@box-d.nih.gov](mailto:dgneuro@box-d.nih.gov)

*NIH is an equal opportunity employer.*

## Opportunities

Children's  
Hospital  
Medical  
Center  
Cincinnati

### Developmental Biology Assistant/Associate/Full Professor

The Developmental Biology Division of the Cincinnati Children's Hospital Research Foundation is undertaking a major expansion under the future direction of Dr. Christopher Wylie. It is anticipated that at least eight tenured or tenure track faculty positions will be filled over the next five years. Applicants at all levels will be considered. Organogenesis, stem cell differentiation, and pattern formation are major interests, but innovative, high quality research in all aspects of developmental biology will be the prime consideration. Attractions include outstanding start up packages, new research facilities, an excellent graduate program and modest teaching responsibilities. This search will continue until all positions have been filled.

Please provide curriculum vitae, names and addresses of three references, and a description of research interests to:

Dr. Steven Potter, Chair, Search Committee  
Division of Developmental Biology  
Children's Hospital Research Foundation  
TCHRF 2013 • 3333 Burnet Avenue  
Cincinnati, OH 45229

Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution.  
Women and minorities are encouraged to apply.



Virginia Commonwealth University

### MOLECULAR BIOLOGIST IN DNA REPAIR AND SIGNAL TRANSDUCTION

The Departments of Radiation Oncology (<http://views.vcu.edu/mcvro>), Pharmacology and Toxicology, and the Massey Cancer Center at the Medical College of Virginia, Virginia Commonwealth University, invite outstanding applications for a tenure-track faculty position as Assistant/Associate Professor. The successful applicant, with a Ph.D. and/or M.D. degree and several years of postdoctoral experience, is expected to develop an independent and extramurally funded research program, to develop research collaborations with other members of the program and to teach postdocs, medical residents, and graduate students. The successful applicant is expected to complement a highly interactive, multidisciplinary program that investigates the molecular mechanisms of signal transduction, cell proliferation, and apoptosis underlying tumor radioresistance, and applies novel approaches to radiation treatment using drugs and gene therapeutic tools. Applicants with interests in DNA repair, signal transduction, and cellular redox effects are particularly encouraged to apply. Applications should include a CV, reprints of publications, a statement of research plans, and three letters of recommendation. This material should be sent by October 15, 1999, to: Kristoffer Valerie, Ph.D., Department of Radiation Oncology, Medical College of Virginia, Virginia Commonwealth University, P.O. Box 980058, Richmond, VA 23298-0058.

*VCU is an Equal Opportunity / Affirmative Action Employer.*

## POSITIONS OPEN

### MOLECULAR BIOCHEMICAL GENETICIST HUMAN GENETICS

University of Oklahoma Health Sciences Center

The Department of Biochemistry and Molecular Biology and the growing Program in Human Genetics of the University of Oklahoma Health Sciences Center, Oklahoma City seek a full-time, tenure-track **ASSISTANT PROFESSOR**. Our preferred, but not exclusive, area of emphasis is on molecular and biochemical mechanisms directly or indirectly relevant to human disease. Applicants should have a Ph.D. and several years of postdoctoral research experience. The successful candidate is expected to develop and lead an independent research program, to participate in graduate and professional teaching programs, and to interact with colleagues in multiple disciplines. The University of Oklahoma has over \$130 million in annual research support and the Health Sciences Center comprises six professional schools located on a 200-acre modern campus, with over 2,900 professional students and 950 faculty. In the last four years, seven new buildings have been added to the campus, including a 100,000-square foot Biomedical Research Center. For additional information, see [website: w3.ouhsc.edu/biochem/](http://w3.ouhsc.edu/biochem/). Review of applications will begin in mid-November 1999. A letter of application, curriculum vitae, outline of current research activities and future plans, selected reprints if appropriate, and the names of four references should be sent to: **Dr. John J. Mulvihill, Co-Chair of the Search Committee, c/o Department of Biochemistry and Molecular Biology, College of Medicine, BMSB 853, Oklahoma City, OK 73190. E-mail: john-mulvihill@ouhsc.edu or paul-weigel@ouhsc.edu.** OUHSC is an Equal Employment Opportunity/Affirmative Action/ADA Employer; women and minorities are encouraged to apply.

The Department of Anatomy at the University of Mississippi Medical Center ([website: http://fiona.umsmed.edu/~anatomy](http://fiona.umsmed.edu/~anatomy)) has an opening for a tenure-track faculty position at the rank of **ASSISTANT PROFESSOR** or **HIGHER**. Teaching will be required and preference will be given to applicants with experience teaching gross anatomy. The applicant will be expected to engage in research or other scholarly activity. Significant opportunities also exist for collaboration with existing programs in motor systems neuroscience, cellular neurobiology, and cardiovascular cell biology, as described on the website. Applicants should send a curriculum vitae, a description of teaching qualifications and scholarly or research interests to: **Chair, Anatomy Department Search Committee, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505.** Also, applicants should arrange to have three letters of recommendation sent to the address above. Review of applications will begin November 1, 1999. *The University of Mississippi Medical Center is an Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.*

The Department of Psychology is accepting applications for an **ASSISTANT PROFESSOR** position in the area of behavioral neuroscience. We seek an outstanding researcher and teacher with an interest in the neurobiology of learning and memory and/or related areas. Successful candidates will be expected to teach undergraduate and graduate courses, develop a strong research program, and direct graduate research. A Ph.D. or satisfactory progress toward completion of requirements for a Doctoral degree is required. Applicants must have a demonstrated record of publications and well-developed plans for future research.

Review of applications will begin immediately. Application deadline is November 15, 1999. Applicants should send a cover letter, curriculum vitae, reprints, and three letters of recommendation to: **The Chair of Behavioral Neuroscience Search Committee, Department of Psychology, The University of Texas at Austin, Austin, TX 78712.** *The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN



### SENIOR SCIENTIST POSITION REPRODUCTIVE CELL BIOLOGIST

The Department of Obstetrics and Gynecology and the Department of Cell Biology and Physiology are jointly recruiting a Senior Scientist to expand basic research in reproductive and developmental biology in the scientifically rich environment of the Washington University School of Medicine. Successful candidates will assume a tenure-track position as **ASSOCIATE PROFESSOR** or **PROFESSOR** with a dual appointment in both departments. A resource package includes junior faculty recruitment, abundant laboratory space, and financial underwriting commensurate to the position. New programs will complement the ongoing research in cancer genetics, placental biology, signal transduction systems, and cytoskeletal function. Successful candidates will be expected to maintain externally funded programs and to contribute to graduate education.

Send curriculum vitae, a one-page summary of research accomplishments and research plans, and three letters of support to: **Dr. Nelson and Dr. Stahl, co-Chairs, Reproductive Cell Biologist Search Committee: D. Michael Nelson, M.D., Ph.D., Vice-Chairman, Obstetrics and Gynecology, Washington University School of Medicine, 4911 Barnes-Jewish Hospital Plaza, St. Louis, MO 63110-1094 USA. Or: Philip D. Stahl, Ph.D., Head, Department of Cell Biology and Physiology, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110 USA.**

*WUOSM is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT/ASSOCIATE PROFESSOR BRAIN MICRO-TUMOR RESEARCH PROGRAM

The Division of Neurosurgery at Harvard Medical School and Brigham and Women's Hospital invites applications for tenure-track faculty positions in a new Micro-tumor Research Program. We seek applicants who will take a creative approach to the attack of microscopic brain tumor (any kind of residual or disseminated tumor in the brain, including any tumor that is too small to be imaged or accessed by conventional means). Applicants from a variety of disciplines will be considered. Productivity, NIH funding history (or strong potential), and teaching experience are important. To apply, please briefly describe previous research interests and approach you would take to brain micro-tumor research, and send with curriculum vitae, up to three reprints, and names of three references to: **Dr. Lois Lampson, Division of Neurosurgery, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.**

California Institute of Technology invites applications for a tenure-track position as **ASSISTANT PROFESSOR** in the field of organic chemistry. The initial appointment will be for four years. Exceptionally well-qualified applicants may also be considered at the **ASSOCIATE** or **FULL PROFESSOR** level. Outstanding candidates who have completed their Ph.D. and have a strong commitment to research and teaching excellence are encouraged to apply. Submit curriculum vitae, publication list, a description of proposed research, and three letters of recommendation to: **Professor Robert H. Grubbs, Organic Chemistry Search Committee, M/C 164-30CR, California Institute of Technology, Pasadena, CA 91125.** Applications should be received by November 15, 1999. *The California Institute of Technology is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.*

## POSITIONS OPEN

### ASSISTANT/ASSOCIATE PROFESSOR POSITIONS IN IMMUNOGENETICS AND EPIDEMIOLOGY

The Washington State University Animal Health Research Center invites applications for three full-time, tenure-track appointments at the level of Assistant or Associate Professor starting July 1, 2000. The successful applicants for these faculty positions will be expected to develop and maintain independent, extramurally funded research programs that interface with active research programs within the College of Veterinary Medicine and the College of Agriculture and Home Economics. Active USDA-, FDA-, and NIH-funded research groups are focused on the immunology and pathogenesis of emerging, infectious diseases of livestock, and on the epidemiology of zoonotic and food-borne pathogens.

**Immunogeneticist:** The primary appointment will be in the Department of Veterinary Microbiology and Pathology and will involve effective teaching in the Veterinary Medical and Graduate programs. This position requires a Ph.D. degree and a minimum of two years of postdoctoral training in the molecular biology of disease resistance or vaccine efficacy as related to the major histocompatibility complex.

**Infectious Disease Epidemiologist:** The primary appointment will be in the Field Disease Investigation Unit of the Department of Veterinary Clinical Sciences. The position requires a D.V.M. or equivalent degree, and advanced training or experience in infectious disease and/or food safety epidemiological research.

**Molecular Epidemiologist:** The primary appointment will be in the Department of Veterinary Microbiology and Pathology. This position requires a Ph.D. degree and a motivation to apply innovative molecular biology methods to hypothesis-based research on the ecology and preharvest epidemiology of emerging zoonotic and food safety pathogens.

These research programs are enhanced by an NIH-funded graduate training program and are located in the newly constructed Animal Disease Biotechnology Facility. Applicants at the Associate Professor level must have strong publication records and current extramural funding. Applications will be accepted until November 1, 1999, or until suitable candidates have been identified. For complete position descriptions and application information, contact: **Nancy Malcolm, Telephone: 509-335-3064.** *Washington State University is an Affirmative Action/Equal Opportunity Educator and Employer. Protected group members are encouraged to apply.*

### FACULTY POSITION IN CANCER BIOLOGY

The Center for Cancer Research and Department of Biology at the Massachusetts Institute of Technology seek applicants for an appointment at the level of **ASSISTANT PROFESSOR** (tenure track) in the area of cancer biology. Areas of emphasis include, but are not limited to, oncogene and tumor suppressor gene function; signal transduction; intercellular communication; control of genome stability; cell cycle regulation and checkpoint function; cancer genetics and genomics; cell adhesion, migration, and metastasis; angiogenesis; and stem cell biology and differentiation in vertebrate systems. The appointment will require supervision of an active research program as well as undergraduate and graduate teaching.

Applicants should include a curriculum vitae, brief summaries of past accomplishments, and future research plans. Letters of recommendation should be sent separately from three scientists who can provide an evaluation of the candidate's accomplishments and future potential for both research and teaching.

Applications and letters should be sent to:  
**Cancer Biology Search Committee  
E17-110, Center for Cancer Research  
Massachusetts Institute of Technology  
Cambridge, MA 02139**

Deadline for receipt of applications and support materials: November 15, 1999.

*MIT is an Equal Opportunity/Affirmative Action Employer.*

**DIRECTOR**  
**Cornell University**  
**Institute for Biotechnology and Life Science Technologies**

Cornell University invites applications or nominations for the position of Director of the Institute for Biotechnology and Life Science Technologies. The program, established in 1983 as the Biotechnology Institute, is funded by state, federal, industry, and Cornell sources. The Institute promotes and supports research, education, and technology transfer activities in the colleges of Agriculture and Life Sciences, Arts and Sciences, Engineering, Human Ecology, and Veterinary Medicine, the Boyce Thompson Institute for Plant Research, and the Weill Medical College.

The Director must be internationally recognized in an area related to biotechnology or life science technologies and qualify for a tenured position in a Cornell academic department consistent with his/her expertise and research interests. The directorship is a half-time administrative appointment, and the Director is expected to maintain a research program. Demonstrated administrative, management, and leadership skills are essential.

The duties of the Director include:

1. Serving as the major faculty spokesperson for biotechnology and life science technologies across campus, and with external agencies, the alumni, and the public.
2. Administration of the Institute for Biotechnology and Life Science Technologies and oversight for the New York State Center for Advanced Technology (Biotechnology), with a current annual operating budget of \$2 million. Current programs include central resource facilities, program project grants, interdisciplinary starter grants, symposia, workshops, and various other educational and technology transfer projects.
3. Collaboration with the Scientific Administrative Board (which the Director chairs) and the Executive Board, to determine program goals and focus, specific projects, and allocation of funds.
4. Interaction with faculty and administrators across the University to promote interdisciplinary research and education in areas related to biotechnology and life science technologies.
5. Working closely with industry, the New York State Office of Science, Technology, and Academic Research, and other funding sources.

A competitive salary with fringe benefits will be offered. Applications should include a complete CV and recent reprints. These, as well as nominations and requests for further information, will be held confidential and should be directed to:

**Biotechnology Director Search**  
**Cornell University**  
**130 Biotechnology Building**  
**Ithaca, New York 14853-2703**  
**Email: [nyscat@cornell.edu](mailto:nyscat@cornell.edu)**

Applications will be evaluated starting October 1, 1999 and will continue until a suitable candidate is appointed. The position is expected to be available July 1, 2000. The Institute's web page can be consulted at: <http://www.research.cornell.edu/Biotech/Biotech.html>

*Cornell Is An Equal Opportunity / Affirmative Action Employer*



**CREIGHTON UNIVERSITY SCHOOL OF MEDICINE:  
HEALTH FUTURE FOUNDATION PROFESSORS PROGRAM**

Creighton University School of Medicine announces a program to enhance research in the sciences basic to medicine. With support from the Health Future Foundation we are recruiting outstanding investigators in the areas of cell and molecular biology, molecular genetics (particularly as related to human disease), and neuroscience. Individuals recruited will have the following qualifications: Ph.D., M.D. or M.D./Ph.D degrees; at least two years of post-doctoral training, and evidence of significant research accomplishment and scholarly promise. Appointees will be expected to establish vigorous independent research programs, and to have an interest and aptitude for teaching and training. Laboratory space with equipment and start-up funding will be available. Primary department affiliation and tenure-track rank will be determined by the qualifications of the applicant. Preference will be to make appointments at the Assistant Professor or Associate Professor levels.

Applicants should send a curriculum vitae, a brief summary of their research program and future research plans, an outline of their teaching interests, and three letters of support to:

**Roderick Nairn, Ph.D. c/o Ms. L. McCloskey**  
**Creighton University School of Medicine**  
**Office of Academic Affairs**  
**2500 California Plaza**  
**Omaha, NE 68178**

Applications will be screened immediately and will continue to be accepted until the positions are filled.

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

**GLOBAL OPPORTUNITIES**

**STA Fellowship  
Program  
Postdoctoral Research  
in Japan**

in a scientific, technological,  
engineering or medical field  
at national research institutes.

Details are available on web site:  
<http://stafellow.jst.go.jp/index.html>

**or**

**Dept. of International Affairs**  
**Japan Science and Technology**  
**Corporation (JST)**  
**Fax: 81-48-226-5751**

## POSITIONS OPEN

### NEUROSCIENTIST

Collaboration On Repair Discoveries (CORD) at the University of British Columbia (UBC) is seeking an outstanding candidate (holding a Ph.D. or M.D.) with experience in vertebrate central nervous system regeneration for a tenure-track appointment at the starting **ASSISTANT PROFESSOR** level to begin January 1, 2000. This position is offered through the support of the BC Neurotrauma Fund and with the participation of the Departments of Surgery (Division of Neurosurgery) and Zoology at UBC. The salary will be commensurate with experience and the appointment is subject to final budgetary approval.

We encourage applications from persons with a strong record of achievement in cellular and/or systems biology directed toward facilitating central nervous system axonal regeneration and/or functional recovery. The appointment will complement and strengthen current CORD research programs. Information about CORD and some of the CORD research programs is available at **website: <http://cord.ubc.ca>**.

Applicants should send a current curriculum vitae, including a list of publications, a statement of research interests, and arrange for three letters of recommendation to be sent directly to:

**Dr. John Steeves**  
**Professor and Director of CORD**  
**University of British Columbia**  
**Department of Zoology, Biosciences Building**  
**6270 University Boulevard**  
**Vancouver, British Columbia V6T 1Z4 Canada**  
**FAX: 604-822-2924**

Applications should be received before October 15, 1999.

*In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents. The University of British Columbia hires on the basis of merit and is committed to Employment Equity. We encourage all qualified persons to apply.*

### CARDIOVASCULAR PHARMACOLOGIST DARTMOUTH MEDICAL SCHOOL

The Department of Pharmacology and Toxicology seeks applicants for a tenure-track position at the level of **ASSISTANT/ASSOCIATE PROFESSOR**. We are interested in candidates with an exciting research program in all areas of cardiovascular pharmacology, although preference will be given to individuals whose work emphasizes mechanisms of signal transduction in vascular development, disease, or angiogenesis. The successful candidate will join a department with research expertise in many areas of cellular and molecular pharmacology and toxicology. Please visit our **website: <http://www.dartmouth.edu/dms/pharmtox>** for further details. Candidates should have a Ph.D. and/or M.D. degree(s) and a productive academic record. Review of applicants will begin October 1, 1999.

Submit curriculum vitae, a statement of research interests and accomplishments, and names of at least three references to:

**Dr. Alan Eastman**  
**Department of Pharmacology and Toxicology**  
**Dartmouth Medical School**  
**7650 Remsen**  
**Hanover, NH 03755**

*Dartmouth, an Equal Opportunity/Affirmative Action Employer, strongly encourages applications from women and minority candidates.*

**COGNITIVE NEUROSCIENTIST.** Tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** at Purdue University, beginning August 2000. Ph.D. required. Preference given to applicants who use scanning, electrophysiology, or computational techniques to study cognitive processes, particularly those related to speech and hearing. Research and teaching interests, curriculum vitae, and letters from three references to: **The Cognitive Neuroscience Search Committee, 389 Peirce Hall, Purdue University, West Lafayette, IN 47907-1364.** Application review begins November 15, 1999. *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### UNIVERSITY OF CALIFORNIA, DAVIS DEPARTMENT OF CHEMISTRY

The Department invites applications for a tenure-track faculty position in the area of inorganic chemistry at the **ASSISTANT PROFESSOR** level, beginning on or after July 1, 2000. We seek outstanding candidates with a strong commitment to research and teaching, a Ph.D. or equivalent degree, and expertise that complements present faculty (**website: [www-chem.ucdavis.edu](http://www-chem.ucdavis.edu)**) in areas such as chemical synthesis, chemical biology, or materials science. Applicants should provide a curriculum vitae (including a list of publications), a summary of research objectives, and the names, addresses, and FAX and telephone numbers of three references, to be sent to: **Inorganic Recruitment Committee, Chemistry Department, Room 108, University of California, One Shields Avenue, Davis, CA 95616-5295.** The position is open until filled, but to assure consideration applications should be received by October 15, 1999. *The University of California is an Affirmative Action/Equal Opportunity Employer. The University undertakes Affirmative Action to assure Equal Employment Opportunity for minorities and women, for persons with disability, and for special disabled veterans, Vietnam-era veterans, and any other veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized.*

### CRYSTALLOGRAPHER

The Department of Biochemistry and Biophysics at the University of Rochester Medical Center is searching for a tenure-track faculty member with strong expertise in macromolecular crystallography. The appointment will be made at the **ASSISTANT PROFESSOR** level. The new hire will join a growing structural biology group providing state-of-the-art diffraction and magnetic resonance facilities and will have excellent opportunities for collaboration. For additional information, see **website: <http://www.urmc.rochester.edu/smd/bcbp>**. If interested, please arrange to have at least three letters of recommendation, as well as a curriculum vitae, an outline of proposed research, and relevant reprints or preprints sent to:

**Crystallography Search Committee**  
**Department of Biochemistry and Biophysics**  
**University of Rochester Medical Center**  
**601 Elmwood Avenue**  
**Rochester, NY 14642**

*Receipt of all applications will be acknowledged promptly. The University of Rochester is an Equal Opportunity/Affirmative Action Educator and Employer.*

The Department of Biology at Boston University invites applications for a tenure-track **ASSISTANT** or **ASSOCIATE PROFESSOR** in population ecology. The successful candidate will be expected to have a strong background in organismal biology, and address questions in one or more of the following research areas: experimental ecology, plant-animal interactions, tropical ecology, conservation biology. Teaching responsibilities include an introductory course in ecology and an upper-division course in population ecology. Applicants should have a Ph.D. with postdoctoral experience, an active research program, and a commitment to excellence in teaching. Applicants should send a curriculum vitae, statements of research and teaching interests, copies of publications, and three letters of reference by December 1, 1999, to: **Dr. Thomas Kunz, Chair, Population Ecology Search Committee, Department of Biology, Boston University, 5 Cunningham Street, Boston, MA 02215. Telephone: 617-353-2432; FAX: 617-358-0760; e-mail: [mhart@bio.bu.edu](mailto:mhart@bio.bu.edu).** *Boston University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### TENURE-TRACK FACULTY POSITION DEPARTMENT OF MOLECULAR AND CELLULAR PHYSIOLOGY University of Cincinnati

Tenure-track **ASSISTANT** or **ASSOCIATE PROFESSOR** position to begin in spring 2000 is available in the Department of Molecular and Cellular Physiology at the University of Cincinnati. This search is oriented toward expanding ongoing research in the Department in (1) molecular, cellular, or developmental neuroscience; (2) molecular and cellular mechanisms of cell adaptation to environmental stressors; (3) regulation of vasculogenesis/angiogenesis. The applicant's research should employ modern biochemical, molecular, and/or cellular techniques and be of biomedical relevance. The successful candidate will be expected to establish and maintain a vigorous, externally funded research program, and participate in medical and graduate teaching. Applicants should have a Ph.D. and/or M.D. degree and at least two years of postdoctoral experience. Applicants at the Associate Professor level must currently be directing a successful, well-funded research program. For more information about the department check our **website: <http://blues.fdl.uc.edu/www/physiology/index.html>**.

Applicants should submit curriculum vitae, a one-page summary of research description, including future goals, as well as names of at least three individuals willing to provide letters of reference to the Search Committee. Send applications to:

**Maria F. Czyzyk-Krzeska, M.D., Ph.D., Chair**  
**Faculty Search Committee**  
**c/o Rhonda Hentz**  
**Department of Molecular and Cellular Physiology**  
**P.O. Box 670576**  
**University of Cincinnati**  
**Cincinnati, OH 45267-0576**

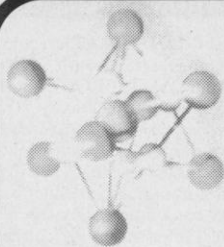
*University of Cincinnati is an Equal Opportunity/Affirmative Action Employer.*

### CELL/ORGANISMAL PHYSIOLOGY

The Biology Department at Santa Clara University invites applications for an **ASSISTANT PROFESSOR** tenure-track position in cellular or organismal physiology starting September 2000. A Ph.D., demonstrated teaching ability, and postdoctoral experience are required. We are seeking a dynamic teacher-scholar with expertise in metabolic or systems physiology, with a strong preference for candidates using biochemical and molecular techniques to examine cellular or animal systems. Teaching responsibilities will include lower-division lecture and laboratory courses for majors and non-majors, as well as upper-division lecture and laboratory courses for majors in the candidate's area(s) of expertise. The successful candidate will be expected to develop and maintain an active research program that includes undergraduate participation. Interested persons should refer to the Biology Department website for more information about our programs and faculty, **website: <http://www.scu.edu/SCU/Departments/BIOL/home.html>**.

Applicants should submit (1) curriculum vitae, (2) statement of current and future research interests, (3) statement of teaching experience and philosophy, and (4) three letters of recommendation to: **Chair, Physiology Search Committee, Biology Department, Santa Clara University, Santa Clara, CA 95053.** The deadline for application is November 1, 1999. *Santa Clara University, a Jesuit institution, is an Equal/Affirmative Action Employer and welcomes applications from women, persons of color, and members of other historically underrepresented U.S. ethnic groups.*

The University of Illinois at Urbana-Champaign, Department of Anthropology seeks to hire a Bioanthropologist for a tenure-track **ASSISTANT PROFESSOR** position beginning August 21, 2000. Application deadline November 19, 1999. We are particularly interested in specializations in anthropological genetics or hominid evolution, but consideration will be given to candidates with research expertise in other areas. For a complete description see **website: <http://www.anthro.uiuc.edu/>**.



## GENOMICS-DRIVEN DISCOVERY OF THERAPEUTIC PROTEINS: THE CHALLENGE IS BIOLOGY

ZymoGenetics, Inc. is a biotechnology company located in Seattle's historic Lake Union Steam Plant. As a subsidiary of NOVO NORDISK, the world's largest producer of industrial enzymes, ZymoGenetic's mission is to identify protein therapeutic opportunities and to take selected projects as far as clinical proof-of-concept studies. We offer intellectual challenge, state-of-the-art facilities and a generous benefits package. We are currently seeking qualified candidates for the following positions:

### SCIENTIST/SR. SCIENTIST — #32N199

Our Protein Expression group is seeking a Scientist/Sr. Scientist to form a team responsible for the expression of therapeutic proteins in *E. coli*. Responsibilities include development and analysis of vectors and strains, optimization of expression levels for production of material for clinical trials. The successful candidate will have 5+ years of experience in protein expression in microbes. Good supervisory, communication and project management skills as well as good interpersonal and team-building skills required. A Ph.D. in Molecular Biology/Bio-Chemistry or related field or equivalent industrial experience required.

### SCIENTIST/SR. SCIENTIST — #32R299

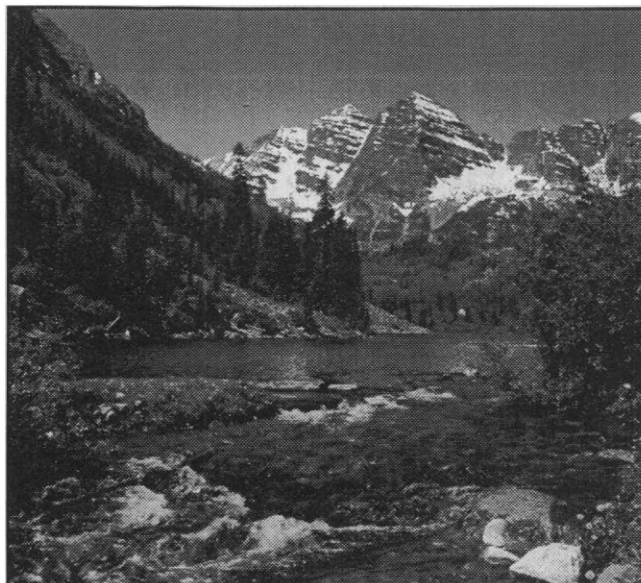
Our Protein Expression group is seeking a Scientist/Sr. Scientist to join a team responsible for the management of CHO line development for expression of proteins for clinical use. Responsibilities include development and analysis of clonal protein expressing cell lines. The successful candidate will have 5 + years of experience in mammalian cell culture and protein expression techniques. A Ph.D. in Molecular Biology/Bio-Chemistry or related field or equivalent industrial experience required.

### SCIENTIST/SR. SCIENTIST — #35N599

We are seeking a pathologist to join our Experimental Pathology group at the Scientist/Sr. Scientist level. The successful candidate will aid in the design and microscopic evaluation of animal studies for the elucidation of the biology and therapeutic uses of novel proteins. Strong interpersonal, verbal and written communication skills are required. Must have a DVM or equivalent degree, a Ph.D. in pathology or related field and experience in rodent pathology, including the pathology of genetically engineered mice. Board certification and experience in immunohisto-chemistry are highly desirable.

Job description and salary are commensurate upon experience. For confidential consideration, forward your resume and cover letter noting Job Reference # to: ZymoGenetics, Inc., Attn: Human Resources, 1201 Eastlake Avenue East, Seattle, WA 98102. Fax: (206) 442-6658. E-mail: [jobs@zgi.com](mailto:jobs@zgi.com). Equal Opportunity Employer.

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### Process Development Purification Scientist

This position develops, rational, scaleable, cost-effective and robust protein purification processes, ensures timely transfer of processes to manufacturing and trouble-shoots clinical and commercial manufacturing processes. Qualified candidates will have a PhD in Biochemistry or related field and 0-4 years of experience in the biotechnology or pharmaceutical industry. Excellent problem-solving, communication and laboratory work skills required. Experience in recombinant protein purification and scale-up, including large scale chromatography, ultrafiltration, and other separation techniques such as centrifugation and microfiltration also required. Expertise with glycoproteins is a plus.

### Process Development Analytical Scientist

While providing analytical support to enable rational development of protein manufacturing processes, this position develops, validates and applies methods for characterization of recombinant proteins and associated processes. Qualified candidates will have a PhD in Analytical Chemistry or related field and 0-2 years of experience in the biotechnology or pharmaceutical industry. Excellent problem-solving and laboratory work skills required. Experience in protein analytical methods, immunoassays, carbohydrate analysis, HPLC, HPCE, and/or other quantitative instrumental analysis necessary. Experience with glycoproteins is a plus.

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## POSITIONS OPEN

**FACULTY POSITIONS.** Molecular pathogenesis of bacteria, protozoa, fungi, or viruses. The Department of Microbiology at the University of Colorado Health Sciences Center in Denver invites applications for tenure-track appointments at the level of **ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR, or PROFESSOR.** All applications are welcome, but preference may be given to candidates whose research focuses on molecular analysis of pathogenic mechanisms of bacteria, protozoa, or fungi. The faculty teaches microbiology for medical students and participates in graduate programs in microbiology, molecular biology, and biomedical sciences for Ph.D. and M.D.-Ph.D. students. Assistant Professor candidates are expected to develop independent, externally funded research programs. Associate Professor or Professor candidates must have established research programs and external funding. Academic environment, research facilities, and start-up support are excellent. Rank and salary are commensurate with training and experience. Requirements include a Ph.D., M.D., or equivalent degree in microbiology or a related field plus at least two years of postdoctoral experience. Submit curriculum vitae, description of proposed research, and names, mailing addresses, telephone numbers, and e-mail addresses of three professional references. Associate Professor or Professor candidates must also submit a summary of their active research grants and pending grant applications. Send correspondence to: **Faculty Search Committee Chair, Department of Microbiology, Campus Box B-175, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262.** Review of applications will begin immediately and continue until appointments are made or the search is terminated. *The University of Colorado Health Sciences Center is committed to Equal Employment/Affirmative Action.*

### TENURE-TRACK ASSISTANT PROFESSOR

The Department of Physiology, University of Florida College of Medicine, invites applications for a full-time tenure-track Assistant Professor position. The successful candidate will be a Mammalian Physiologist who will develop an extramurally funded independent research program and participate in departmental teaching and educational programs. Initial support will be provided by the Howard Hughes Medical Research Program for Medical Schools. Applicants must have a Ph.D., M.D., or equivalent degree, as well as postdoctoral experience. The successful applicant will complement current departmental and college strengths in the areas of gene therapy for hypertension, signal transduction, fetal/maternal physiology, neuroendocrinology, membrane transport and ion channels, developmental genetics, and other interests described at our website: <http://www.med.ufl.edu/phys/index.html>. Submit a curriculum vitae, including a statement of research plans, and have three letters of reference sent to: **Dr. Bruce R. Stevens, Search Committee Chair, Department of Physiology, College of Medicine, University of Florida, P.O. Box 100274, Gainesville, FL 32610-0274.** Salary is negotiable. Application deadline is October 15, 1999. Anticipated start date is April 1, 2000. *The University of Florida is an Equal Employment Opportunity/Affirmative Action Employer.*

### CONSERVATION BIOLOGIST

We are seeking an outstanding animal-oriented Conservation Biologist interested in influencing policy through research, teaching, and outreach. The position is open at all levels, from **ASSISTANT to FULL PROFESSOR.** A full description of the position can be found at website: <http://wfcb.ucdavis.edu>. Applicants should submit a letter of application describing how they fit the position, a curriculum vitae, representative publications, and the names and addresses of three references to: **Peter B. Moyle, Chair, Conservation Biology Search Committee, Department of Wildlife, Fish, and Conservation Biology, University of California, One Shields Avenue, Davis, CA 95616.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN



### TENURE-TRACK FACULTY POSITION PLANT MOLECULAR GENETICIST

University of Maryland Biotechnology Institute

The Center for Agricultural Biotechnology (CAB) invites applications for a tenure-track faculty position in plant molecular genetics. The position will be available by fall 2000. The rank will be **ASSISTANT PROFESSOR.** CAB is one of five research centers of the University of Maryland Biotechnology Institute (website: <http://www.umbi.umd.edu/~index.html>) and is located on the campus of the University of Maryland, College Park in a newly constructed and equipped research building. CAB's research emphasizes plant defense mechanisms, insect molecular genetics and evolution, poultry viruses and vaccines, and biochemical engineering.

Applicants should have basic research programs that address problems relating to biotechnology. Attractive areas of research include, but are not limited to, the study of plant responses to pathogens and/or pests, the effects of abiotic environmental stress on plant health, and the improvement of plant productivity.

The applicant's research program must be sustainable in a competitive function environment. The Investigator is expected to build a dynamic research group within the setting of an interdisciplinary research institute. For full consideration submit current curriculum vitae (including e-mail address), selected reprints, summary of research interests, and three letters of recommendation by November 15, 1999, to:

**Faculty Search Committee  
Center for Agricultural Biotechnology  
University of Maryland Biotechnology Institute  
Plant Sciences Building, Room 5115  
College Park, MD 20742-4450**

If additional information is required contact: **The Chair of the Search Committee, e-mail: regier@glue.umd.edu.** *UMBI is an Affirmative Action/Equal Opportunity Employer.*

### COMPARATIVE VETERINARY PATHOLOGIST TENURE-TRACK ASSISTANT/ ASSOCIATE PROFESSOR

University of Michigan Medical School

The Unit for Laboratory Animal Medicine (ULAM) invites applications for a full-time faculty position. The faculty member will have a primary appointment in ULAM and a joint appointment in the Department of Pathology. Duties will include veterinary pathology support for a large and diverse research animal population, active involvement in independent or collaborative research; and participation in training graduate students and veterinary Postdoctoral Fellows. ULAM provides clinical care, diagnostic services, and animal husbandry, for research animals campus-wide; conducts externally funded research and has an NIH-funded training program in biomedical research and laboratory animal medicine. The Pathologist will have a primary role in the ULAM's diagnostic, research, and training activities. Qualifications include a D.V.M./V.M.D. from an AVMA-accredited institution plus two to four years of pathology training; ACVP-certification is preferred; Board-eligible Pathologists will also be considered; a Ph.D. degree and research experience are also preferred. Research interests and activities should include development or use of animal models of human biology or investigation of diseases of laboratory animals. Candidates should send cover letter, curriculum vitae, and names of at least three references to: **Daniel H. Ringler, D.V.M., Director, Unit for Laboratory Animal Medicine, 1150 West Medical Center Drive, University of Michigan Medical School, Ann Arbor, MI 48109-0614.** Telephone: 734-764-0277; e-mail: [dringler@umich.edu](mailto:dringler@umich.edu).

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

## POSITIONS OPEN

**FACULTY POSITION** in wildlife ecology/restoration ecology. This is a 12-month, tenure-track position at the **ASSISTANT PROFESSOR** level. The appointment will be approximately 70 percent research and 30 percent teaching. Qualifications include a Ph.D. in wildlife ecology or closely related field, with specific training and experience in restoration ecology. Good communication skills are desirable, with the ability to interact effectively with students, public agencies, landowners, agricultural interests, special interest groups, and other researchers. Responsibilities include developing 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 the effective management of arid lands, and the training of students in the management of arid lands, particularly of the southwestern United States and Mexico. A substantial commitment is required for quality classroom teaching at the undergraduate and graduate levels.

Applications should include a curriculum vitae detailing education, professional experience, qualifications, and research support. Include statements 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 November 1999 with an anticipated starting date on or about 1 July 2000. For additional information contact: **Don Caccamise, Telephone: 505-646-7051; FAX: 505-646-1281; e-mail: [natres@nmsu.edu](mailto:natres@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.*

### ASSISTANT PROFESSOR GENETICS

Vanderbilt University School of Medicine invites applications for tenure-track positions in human and 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) population genetics and genetic epidemiology; (2) gene mapping, identification of disease loci, and mutational analysis; (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 November 15, 1999, a curriculum vitae, three letters of reference, and a concise description of research plans to: **Genetics Search Committee, c/o Jeannine Courtney, CCC-3322 Medical Center North, Vanderbilt University Medical Center, Nashville, TN 37232-2103.**

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

### BIOCHEMISTRY FACULTY POSITION

The Chemistry and Biochemistry Department at San Francisco State University invites applications for a tenure-track position as an **ASSISTANT PROFESSOR** in biochemistry beginning fall 2000. Applicants should have a Ph.D. in biochemistry and postdoctoral experience, be committed to excellence in teaching, and are expected to develop an externally funded research program that will involve both undergraduate and Master's degree students. Applicants should send a curriculum vitae, a detailed research proposal, a statement of teaching philosophy, and three letters of recommendation by October 31, 1999, to: **Biochemistry Search Committee, Department of Chemistry and Biochemistry, San Francisco State University, San Francisco, CA 94132-4163.** *SFSU is an Equal Opportunity/Affirmative Action Employer.*



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We are currently seeking qualified individuals to fill a position as a Scientific Communications Writer within the Strategic Communications Group. Strategic Communications is responsible for worldwide market development activities that support product introductions and lifecycle optimization.

Scientific Communications Writers are responsible for communicating the findings of clinical and developmental research studies to the medical and scientific community. They write research and review articles for publication in the peer review literature, and prepare slide and poster presentations for professional meetings. They also write product monographs, professional education materials, and product backgrounders for use both by the medical community and their colleagues within Allergan.

Scientific Communications Writers also develop and maintain scientific expertise in targeted therapeutic areas and function as important liaisons between scientific and marketing professionals.

The position requires an advanced degree in biological science or medicine (eg, PhD, PharmD, MD). Excellent written and oral communication skills and the ability to communicate technical material to both technical and non-technical audiences is also required. The qualified candidate should demonstrate strong planning and organizational skills, high energy, and the ability to take initiative within a team framework.

With sales of approximately 1.2 billion, Allergan is a technology driven, global health-care company focused on specialty pharmaceutical products that satisfy unmet medical needs and improve patient's lives. Allergan offers a competitive salary, excellent benefits, and a stimulating working environment.

FOR CONSIDERATION send your resume, two writing samples demonstrating the breadth of your skills, and a cover letter describing your career objectives to: Amy Lindsay, Manager, Program Development, Strategic Communications, 575 Anton Blvd, Suite 900, Costa Mesa, CA 92626.



### POSTDOCTORAL POSITIONS IN HOST-PATHOGEN INTERACTIONS

The Biosciences Division is seeking 3-4 candidates for immediate openings to perform research in structural, molecular, and cellular biology of Host-Pathogen Interactions. Applicants should have a strong background in structural, molecular, and cellular biology. Expertise is required in one or more of the following techniques: phage display, including peptide and single chain antibody technologies, high throughput recognition ligand selection and characterization, protein expression and purification, analysis of proteins and protein-protein interactions using surface plasmon resonance, HPLC, 2-D gel electrophoresis, mass spectrometry (MALDI-ToF MS, Nanoelectrospray MS), IR, multi-dimensional NMR, and computational structural biology. For further technical information, contact Dr. Goutam Gupta, at (505) 665-2587, fax: (505) 665-3493, or by e-mail: [gxg@lanl.gov](mailto:gxg@lanl.gov).

A Ph.D. completed within the last three years or soon to be completed is required. The ability to obtain a DOE "Q" Clearance is preferred, which normally requires U.S. citizenship. Further details about the Postdoctoral Program may be found at: <http://www.hr.lanl.gov/postdoc/>.

For consideration, submit a resume and publications list along with a cover letter outlining current research interests, undergraduate and graduate transcripts, and three letters of recommendation to [postdoc-jobs@lanl.gov](mailto:postdoc-jobs@lanl.gov), referencing Job #SCIENCE-PD995218, OR submit two copies to Postdoc Program Office, MS P290, Los Alamos National Laboratory, Los Alamos, NM 87545. AA/EOE

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## POSITIONS OPEN

### TENURE-TRACK APPOINTMENT EXPERIMENTAL PHYSICAL CHEMISTRY UNIVERSITY OF FLORIDA

The Department of Chemistry at the University of Florida invites applications for a tenure-track Assistant Professor position in experimental physical chemistry to start in the summer of 2000. A higher-level position may be offered in special cases. Applicants should possess a Ph.D. in chemistry, physics, or a related field, a strong academic background, and an excellent research record in any area of experimental physical chemistry, including those overlapping with other fields (e.g., biophysical chemistry). The Department (see [website: www.chem.ufl.edu](http://www.chem.ufl.edu)) offers excellent technical and spectroscopic facilities, and possible association with the following major centers and facilities: QTP, [website: www.qtp.ufl.edu](http://www.qtp.ufl.edu); The Brain Institute, [website: www.uflbi.ufl.edu](http://www.uflbi.ufl.edu); NHMFL, [website: www.magnet.fsu.edu](http://www.magnet.fsu.edu); and APS, [website: www.csrri.iit.edu/mrcat](http://www.csrri.iit.edu/mrcat). The successful candidate should develop an outstanding, internationally recognized research program in his/her field and demonstrate effective teaching in physical and general chemistry. Applicants should submit curriculum vitae, description of research plans (less than three pages), statement of teaching philosophy (maximum one page), and arrange for three letters of recommendation to be sent to: A. Angerhofer, Chair, Physical Chemistry Search Committee, Department of Chemistry, University of Florida, Box 117200, Gainesville, FL 32611-7200 USA. The application deadline is October 31, 1999. Women and minorities are encouraged to apply. Anyone requiring special assistance in completing the application should contact the Search Committee Chair. Equal Opportunity/Affirmative Action Employer.

The Department of Chemistry and Biochemistry, University of Maryland at College Park invites applications for two tenure-track or tenured positions in biochemistry. Candidates at all levels will be considered (ASSISTANT, ASSOCIATE, or FULL PROFESSOR). Research areas of particular interest include, but are not limited to, membrane biochemistry, including macromolecular trafficking; structure/function of DNA or RNA; approaches that take advantage of recent advances in genomics; and new methods for genome-wide transcription and protein analysis. Candidates will also have the opportunity to participate in the campuswide Molecular and Cell Biology Program and the newly established Center for Biomolecular Structure and Organization. Submit a curriculum vitae, a three-page description of research plans, and arrange for three letters of reference to be sent to: Prof. Douglas A. Julin, Biochemistry Search Committee, Department of Chemistry and Biochemistry, University of Maryland, College Park, MD 20742-2021. Applications will be considered until the positions are filled, but for best consideration should be received by October 15, 1999. UMCP encourages applications from women and members of minority groups and is an Equal Opportunity/Affirmative Action Employer.

### FACULTY POSITIONS IN DEVELOPMENTAL BIOLOGY AND NEUROSCIENCE

Two faculty positions are available at the ASSISTANT to FULL PROFESSOR level, Department of Cell Biology and Anatomy, Louisiana State University Health Sciences Center, New Orleans. A Ph.D. and three years of postdoctoral experience required with additional experience commensurate with rank. Applicants should have an extramural funding record or strong potential. One position is for a Developmental Biologist with a genetic or molecular background, the other for a Neuroscientist with a broad understanding of nervous system function. Send curriculum vitae, research interests, and names of three references to: Dr. R. Ranney Mize, Department of Cell Biology and Anatomy, Louisiana State University Health Sciences Center, 1901 Perdido Street, New Orleans, LA 70112-1393. LSUHSC is an Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### FACULTY POSITION CANCER PHARMACOLOGY OR EXPERIMENTAL THERAPEUTICS Cancer Research Center of Hawaii University of Hawaii

The Cancer Research Center of Hawaii, an organized research unit of the University of Hawaii at Mānoa, invites applications for a tenurable position at the ASSISTANT, ASSOCIATE, or FULL PROFESSOR (RESEARCHER) level. An individual with research interests in cancer pharmacology or experimental therapeutics is sought to join the Natural Products Program, a multidisciplinary drug discovery group aimed at discovery and characterization of new anticancer agents. The successful applicant is expected to contribute to the ongoing drug discovery program as well as to establish an independent research program that will complement the existing program in natural products. Minimum requirements: M.D. or Ph.D. degree and a record of published research. Salary commensurate with qualifications and experience. To apply, send letter of application, curriculum vitae, statement of current and future research interests, and the names and addresses of three references to: Gregory M. L. Patterson, Ph.D., Cancer Research Center of Hawaii, 1236 Lauhala Street, Honolulu, HI 96813. Inquiries: Telephone: 808-956-6031; e-mail: [greg@crch.hawaii.edu](mailto:greg@crch.hawaii.edu). Closing date: Position will remain open until filled; however, first review of applications will begin November 15, 1999. Equal Employment Opportunity/Affirmative Action Employer.

### ASSISTANT/ASSOCIATE PROFESSOR VIROLOGY

As part of an ongoing expansion in basic research, Creighton University School of Medicine's Department of Medical Microbiology and Immunology invites applications for a tenure-track position. The appointee is expected to conduct a vigorous independent research program, and to have an interest and aptitude for teaching graduate students as well as medical, dental, and other allied health profession students. Laboratory space with equipment and start-up funding will be available. Individuals recruited should have the following qualifications: Ph.D., M.D., or M.D.-Ph.D. degrees; two years minimum of postdoctoral training, and evidence of significant research accomplishments and scholarly promise. Applicants should send a curriculum vitae, a brief summary of their research plans and teaching interests, and three letters of recommendation to: Roderick Nairn, Ph.D., Search Committee Chair, Department of Medical Microbiology and Immunology, Creighton University, 2500 California Plaza, Omaha, NE 68178. Applications will begin to be screened immediately and will continue to be accepted until the position is filled. Creighton University is an Affirmative Action/Equal Opportunity Employer.

### DIRECTOR OF CENTER FOR NEUROSCIENCE RESEARCH CHILDREN'S RESEARCH INSTITUTE Children's National Medical Center

Children's Research Institute (CRI) seeks an M.D. or Ph.D. Neuroscientist with credentials appropriate for an appointment to an Endowed Chair as well as a professional position at the George Washington University School of Medicine. Principal areas of interest should include developmental neurobiology, neurogenetics, or neurochemistry. The goal of the Center is to integrate basic science and clinical research in the areas of brain development and function.

Interested individuals should send a letter of application, curriculum vitae, and a one to three-page summary of current and future research goals and plans to:

Stephan Ladisch, M.D., Scientific Director  
Chair, Neuroscience Search Committee  
Children's Research Institute  
111 Michigan Avenue N.W.  
Washington, DC 20010-2970  
Telephone: 202-884-2898  
FAX: 202-884-3929  
E-mail: [sladisch@cnmc.org](mailto:sladisch@cnmc.org)

## POSITIONS OPEN

### ASSISTANT PROFESSOR BIOCHEMISTRY/MOLECULAR BIOPHYSICS

The Johns Hopkins University

The Department of Biology, The Johns Hopkins University invites applications for a tenure-track faculty appointment in the field of biochemistry/molecular biophysics. Regardless of area of research, we are only interested in applicants of the very highest caliber with a demonstrated outstanding record of research. The successful candidate will be expected to establish a vigorous research program and to participate in graduate and undergraduate teaching.

Information about the Department's faculty, research interests and resources may be obtained at the Department's homepage, [website: http://www.bio.jhu.edu/](http://www.bio.jhu.edu/).

Applicants should submit a curriculum vitae (including the names and addresses of three referees) together with a statement of current and planned research, and arrange to have three letters of recommendation sent to:

Chair, Search Committee  
in Biochemistry/Molecular Biophysics  
Department of Biology  
The Johns Hopkins University  
3400 North Charles Street  
Baltimore, MD 21218

Deadline for receipt of applications is October 31, 1999.

The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are especially encouraged to apply.

ASSISTANT PROFESSOR of biology. Applications are invited for a full-time tenure-track faculty position, beginning August 1999. Applicants must have a Ph.D. degree in biology or a related area (expertise in animal ecology or zoology with conservation biology emphasis preferred). Successful candidate will conduct research and teach introductory biology (evolution, systematics, and ecology) for majors, environmental biology for non-majors, and upper-level courses in area of specialization.

Purdue University Calumet, a campus of the Purdue system, enrolls over 9,000 students in more than 80 Associate, Bachelor's, and Master's degree programs in 16 academic departments. The 12-building, commuter campus is situated on 180 wooded acres in northwest Indiana, less than one hour by car or train from Chicago. The Department of Biological Sciences offers programs leading to a B.S. degree and a M.S. degree in biology.

To apply, send a statement of teaching and research experience and interest, curriculum vitae, copies of transcripts, and three letters of recommendation to: Search Committee, Biological Sciences, Purdue University Calumet, Hammond, IN 46323. Reviewing process begins November 15, 1999; applications will be accepted until position is filled. Purdue University Calumet is an Equal Opportunity/Affirmative Action Employer.

Luther College invites applications for two tenure-track appointments at ASSISTANT PROFESSOR rank beginning September 2000. One position requires primary competence in microbiology; the other position requires primary competence in physiology. Both positions require participation in a team-taught principles of biology course. Ph.D. required; teaching and postdoctoral experience desirable. Candidate will be expected to direct undergraduate students in research appropriate to their area and to seek external funding for research. Commitment to undergraduate teaching and research in the context of a liberal arts college essential; visit our department homepage for more information ([website: www.luther.edu/~biodept](http://www.luther.edu/~biodept)). Review of applications will be completed by October 15, 1999. Send letter of application, curriculum vitae, three letters of recommendation, and transcripts of undergraduate and graduate work to: Dr. Jim Eckblad, Head, Department of Biology, Luther College, Decorah, IA 52101-1045. E-mail: [eckblad@luther.edu](mailto:eckblad@luther.edu). An Equal Employment Opportunity Employer.

## COLLEGE OF NATURAL AND AGRICULTURAL SCIENCES



### UNIVERSITY OF CALIFORNIA RIVERSIDE

The University of California at Riverside is in a major phase of growth and development. The following tenure-track positions are available in the physical, biological, biomedical and agricultural sciences. For open-level positions, we are looking for outstanding hires at the professor or associate professor levels. Please contact the web sites listed below for information about the individual positions. The College of Natural and Agricultural Sciences web site is found at <http://cnas.ucr.edu>.

#### Tenure-Track Faculty Positions in the Sciences

##### BIOCHEMISTRY—2 POSITIONS

<http://www.biochemistry.ucr.edu/>

Eukaryotic Molecular Biology/Signal  
Transduction—Assistant Professor  
Plant Molecular Biology/Biochemistry—  
Assistant Professor

##### BIOCHEMISTRY/CHEMISTRY—1 POSITION

<http://cnas.ucr.edu/~cnas/structural-biology.html>

X-ray Protein Crystallography—Oper. Level

##### BIOLOGY—3 POSITIONS

<http://cnas.ucr.edu/~bio/facultypositions.html>

Evolutionary Biology—Level to be Determined  
Evolutionary Genetics—Assistant Professor  
Population Ecology—Open Level

##### BIOMEDICAL SCIENCES—4 POSITIONS

<http://biomed.ucr.edu/faculty/faculty-framer.html>

Molecular Basis of Disease/Molecular Mechanisms  
of Cellular Stress—Open Level and Assistant Professor

##### BOTANY—2 POSITIONS

<http://cnas.ucr.edu/~bps/hposition.htm>

Environmental Horticulture—Assistant Level of  
Cooperative Extension  
Plant Systematics—Assistant Professor

##### CELL BIOLOGY AND NEUROSCIENCE—2 POSITIONS

<http://cnas.ucr.edu/~neuro.home.html>

Cell Biology—Assistant Professor  
Neuroscience/Cell/Molecular/Genetics—  
Assistant Professor

##### CHEMISTRY—6 POSITIONS

<http://www.chem.ucr.edu/faculty/search.html>

Analytical Chemistry—Open Level and  
Assistant Professor  
Inorganic Chemistry—Open Level and  
Assistant Professor  
Physical Chemistry—Assistant Professor

##### EARTH SCIENCES—1 POSITION

<http://cnas.ucr.edu/~earth/jobs/index.htm>

Global Sedimentary Systems—Assistant Professor

##### ENTOMOLOGY—2 POSITIONS

<http://cnas.ucr.edu/~ento/index.html>

Molecular Biologist/Insect Physiologist—  
Level to be Determined  
Molecular Population Geneticist—Level to be Determined

##### ENVIRONMENTAL SCIENCES—2 POSITIONS

[http://envisci.ucr.edu/about\\_newposition.html](http://envisci.ucr.edu/about_newposition.html)

Land Resources—Assistant Professor  
Aquatic Toxicologist—Open Level

##### MATHEMATICS—3 POSITIONS

<http://math.ucr.edu/>

Algebra/Analysis—Open Level  
Analysis/Geometry—Assistant Professor  
Topology—Open position for the F. Burton Jones Chair

##### NEMATOLOGY—1 POSITION

<http://cnas.ucr.edu/~nem/announce.html>

Rhizosphere/Ecology—Assistant Professor

##### PHYSICS—2 POSITIONS

[http://cnas.ucr.edu/~physics/physics/Oppsdat/  
ucrcomp1.html](http://cnas.ucr.edu/~physics/physics/Oppsdat/ucrcomp1.html)

[http://cnas.ucr.edu/~physics/physics/Oppsdat/  
ucrhep1.html](http://cnas.ucr.edu/~physics/physics/Oppsdat/ucrhep1.html)

Theoretical Condensed Matter Physics—Open Level  
Experimental High Energy Physics—Open Level

##### PLANT PATHOLOGY—2 POSITIONS

<http://cnas.ucr.edu/~ppath/jobs.html>

Plant Virology—Assistant Professor  
Plant Disease Resistance—Open Level

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

**90 YEARS OF TEACHING, RESEARCH, AND SERVICE**

## POSITIONS OPEN

Nine-month tenure-track **ASSOCIATE PROFESSOR** in an academic department of the College of Natural Resources and affiliation with the Natural Resource Ecology Laboratory; 70 percent research, 20 percent teaching, and 10 percent service. Ecosystem Scientist to collaborate on multidisciplinary environmental problems (e.g., land-water-atmosphere interactions, mathematical/simulation modeling, human dimensions of ecosystems); establish research program to fund 70 percent of nine-month salary; teach one course per academic year in area of expertise. Requirements include Ph.D. in relevant area and proven ability in research and teaching. Submit curriculum vitae, statement of research and teaching interests, representative reprints, and three letters of reference to: **Dr. Lee Sommers, Search Committee Chair, College of Natural Resources, Colorado State University, Fort Collins, CO 80523-1401. FAX: 970-491-0279.** Applications and nominations will be considered until the position is filled; however, applicants should submit materials by November 1, 1999, for full consideration. Position is available immediately. For questions, contact: **Dr. Sommers, Telephone: 970-491-5371; e-mail: lsommers@lamar.colostate.edu** or **Dr. Diana Wall, Telephone: 970-491-2504, e-mail: diana@nrel.colostate.edu.** See website: <http://www.ColoState.EDU/Depts/OEO/employ.htm> for full position description. *CSU is an Equal Employment Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR MOLECULAR AND CELLULAR BIOLOGY HARVARD UNIVERSITY

The Department of Molecular and Cellular Biology (MCB) is seeking outstanding candidates for the position of Assistant Professor (entry-level appointment). Our department covers a broad range of topics including cellular biology, developmental biology, molecular biology, molecular evolution, molecular genetics, neurobiology, and structural biology. We are particularly interested in candidates working in the following areas: neurobiology; cell biological and evolutionary approaches to development; structural biology; genomics; and molecular approaches to understanding gene function.

Applications should include curriculum vitae, reprints of publications, and a statement of present and future research plans (one to three pages). Complete applications and three letters of recommendation, solicited by the applicant, should be received no later than October 15, 1999. Mail applications to:

**MCB Search Committee  
Harvard University  
7 Divinity Avenue  
Cambridge, MA 02138**

*Harvard University is an Affirmative Action/Equal Opportunity Employer. We strongly encourage applications from women and minority candidates.*

### FUNCTIONAL ECOLOGIST DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY University of Arizona Tucson, Arizona 85721-0088

The Department of Ecology and Evolutionary Biology invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. We seek an individual who studies the mechanistic basis of important ecological interactions or traits, with research that is morphological, physiological, and/or behavioral in focus. Further information is available at the department's website: <http://eebweb.arizona.edu>. Review of applications begins October 22, 1999, and continues until filled. Please send curriculum vitae, statements of research and teaching interests, and three letters of recommendation to: **Dr. Daniel R. Papaj, Chair, Search Committee, Department of Ecology and Evolutionary Biology, Biological Sciences West 310, University of Arizona, Tucson, AZ 85721-0088.** *The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer/Minorities/Women/Disabled/Veterans.*

## POSITIONS OPEN

### FACULTY POSITION IN DEVELOPMENTAL BIOLOGY

The Department of Cell and Molecular Biology anticipates filling a tenure-track position beginning July 1, 2000, at the level of **ASSISTANT PROFESSOR**. Targeted are individuals whose research interests focus on mammalian or avian development, although other qualified applicants will be considered. We seek applications from individuals whose research addresses basic developmental questions and can interface with the interests of existing faculty. The department has targeted developmental biology and neurobiology as areas for future growth. Applicants must have a Ph.D., at least two years of postdoctoral experience, a strong publication record, and show potential for obtaining external funding. The successful applicant will be expected to establish a vigorous, independent research program and to participate in graduate and undergraduate teaching. Opportunities exist for research collaborations and participation in the Interdisciplinary Graduate Program in Molecular and Cellular Biology, the Tulane Cancer Center, the Tulane Primate Center, the Center for Bioenvironmental Research, and the Neuroscience Interdisciplinary Graduate Program. Applicants should send curriculum vitae, a brief statement of research plans, and three letters of recommendation to:

**Dr. Ken Muneoka, Chair  
Department of Cell and Molecular Biology  
Tulane University  
New Orleans, LA 70118**

*Tulane University is an Equal Opportunity/Affirmative Action Employer and encourages minority and female applicants to apply.*

### TENURE-TRACK FACULTY POSITIONS LOUISIANA STATE UNIVERSITY MEDICAL CENTER, NEW ORLEANS Department of Biochemistry and Molecular Biology

Applications are invited for two tenure-track positions at the **ASSISTANT PROFESSOR** level. Applicants should have two or more years of postdoctoral experience and should have the potential for establishing an active, externally funded research program. The Medical Center is undergoing expansion with a Clinical Science Building under construction and the Stanley S. Scott Cancer Center Building in the final planning stages. The Stanley S. Scott Cancer Center, the Molecular and Human Genetics Center, and the Neuroscience Center are integral components of the University, and several faculty in the Department are members of these Centers. Interest and excellence in teaching are expected. The Department can be visited through our home page at website: <http://www.lsumc.edu/campus/bioc/>. Interested individuals should send a curriculum vitae with a bibliography, a short (three-page) summary of planned research, and the names and addresses of three references to the following: **Robert Roskoski, Jr., Fred G. Brazda Professor and Head, Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center, 1100 Florida Avenue, New Orleans, LA 70019-2799.** *LSUMC is an Equal Employment Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR DEVELOPMENTAL NEUROSCIENCE

Department of Psychology, University of California, Santa Barbara. A tenure-track position effective July 1, 2000. For full details, see our website: <http://www.psych.ucsb.edu/>. Application reviews will begin on December 15, 1999. *Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT/ASSOCIATE PROFESSOR.** Dairy food chemistry. The Department of Food Science and Nutrition, University of Minnesota seeks a Dairy Food Chemist for a 12-month tenure-track position. See website: <http://fscn.che.umn.edu>. *The University of Minnesota is an Equal Opportunity Educator and Employer.*

## POSITIONS OPEN

### ASSISTANT/ASSOCIATE PROFESSOR IMMUNOLOGY/STD

Louisiana State University Health Sciences Center in New Orleans is seeking applicants for a 12-month tenure-track faculty position at the Assistant or Associate Professor level in the Department of Microbiology, Immunology, and Parasitology available as of January 1, 2000. Applicants should have a Ph.D. and/or M.D. in microbiology and/or immunology and also be committed to teach medical, dental students as well as teach/mentor graduate students. Strong consideration will be given to candidates with research interests in immunology and sexually transmitted diseases (STDs), or other relevant infectious diseases. We are seeking an individual who has demonstrated the ability to establish an independently funded research program and has secured transferable extramural support. Applicants are encouraged to visit our website: [www.lsumc.edu/campus/micr](http://www.lsumc.edu/campus/micr) for details about the department and the health sciences center. Interested candidates should submit a curriculum vitae with publications, statement of present and future research goals, and names and addresses of three references by November 15, 1999, to **Dr. Paul L. Fidel, Jr., Search Committee Chair, Department of Microbiology, Immunology, and Parasitology, Louisiana State University Health Sciences Center, 1901 Perdido Street, Box P6-1, New Orleans, LA 70112. FAX: 504-568-2918.** *LSUHSC is an Equal Employment Opportunity/Affirmative Action Employer.*

The Department of Psychological and Brain Sciences and The Center for Cognitive Neuroscience at Dartmouth College announce two openings in the area of human cognitive neuroscience starting in the fall of 2000. Candidates must be experienced in some aspect of cognitive neuroscience research and committed to excellence in teaching. Of the two openings, one is at the **ASSISTANT PROFESSOR** level, and one is **OPEN AS TO RANK**. The Department of Psychological and Brain Sciences and The Center are jointly housed in new facilities and will have a variety of brain imaging modalities available including fMRI, ERP, and NIR. For candidates at the Assistant Professor level, postdoctoral training is desirable. For further information, please contact the Search Committee Chair. Candidates for either position should submit a letter of application, curriculum vitae, and at least three letters of recommendation to: **Cognitive Neuroscience Search Committee, Department of Psychological and Brain Sciences, 6207 Moore Hall, Dartmouth College, Hanover, NH 03755-3578.** The review of applications will begin on October 30, 1999, and continue until the positions are filled. *Dartmouth College is an Equal Opportunity/Affirmative Action Employer and encourages applications from minorities and women.*

The Department of Ophthalmology at the University of Alabama at Birmingham (UAB) School of Medicine invites applications for a faculty position at the rank of **ASSISTANT PROFESSOR**. This is a non-tenure-track position. Successful candidates are expected to conduct productive independent research programs dealing with psychophysical testing of vision. Send curriculum vitae and statement of research interests to: **Lanning B. Kline, M.D., Chairman, University of Alabama Birmingham, Department of Ophthalmology, 700 South 18th Street, Suite 601, Birmingham, AL 35233.** *UAB is an Affirmative Action/Equal Opportunity Employer.*

The University of Wisconsin-Whitewater (UWW) seeks two tenure-track **ASSISTANT PROFESSORS**, one in molecular genetics (botany or immunology) and one in aquatic invertebrate zoology. UWW is a premier public regional university with an emphasis on undergraduate research. Details, website: <http://facstaff.uww.edu/biology/search99.html>. Review begins November 1, 1999. Contact: **University of Wisconsin-Whitewater, 800 West Main Street, Whitewater, WI 53190. Telephone: 414-472-1092.** *Affirmative Action/Equal Opportunity Employer.*



COLLEGE OF ARTS AND SCIENCES

## DEPARTMENT OF BIOLOGY *Animal Physiology and Anatomy*

The Department of Biology at the University of San Francisco invites applications for a tenure-track position in animal physiology and anatomy at the Assistant or Associate Professor level to begin in the Fall of 2000.

**Department:** The Department of Biology offers Bachelor of Science degrees and has a small Master's degree program. The large majority of our undergraduate students are interested in post-graduate work in health and medical science related fields. Faculty interests include cell and molecular biology, genetics, immunology, ecology, marine biology, plant physiology and entomology.

**Teaching Responsibilities** may include introductory Biology courses for undergraduate majors (General Biology, Cell Physiology) and for non-majors (Foundations of Natural Science); and upper division courses such as Animal Physiology, Human Physiology, Comparative Physiology, Human Anatomy, Comparative Anatomy, Neurobiology, Endocrinology or other courses in the field(s) of specialty. (Descriptions of the undergraduate Biology curriculum and current course offerings can be found at <http://www.usfca.edu/biology>.)

The candidate will be expected to develop an independent and ongoing research program. Opportunities are available to supervise undergraduate research as well as Master's-level graduate students. (Please note: animal care facilities are not available.)

**Qualifications:** University teaching experience, evidence of scholarship, an earned doctorate in a biological field by Fall 2000, experience and willingness to work in a culturally diverse environment, and an understanding of and commitment to support the mission of the University are required.

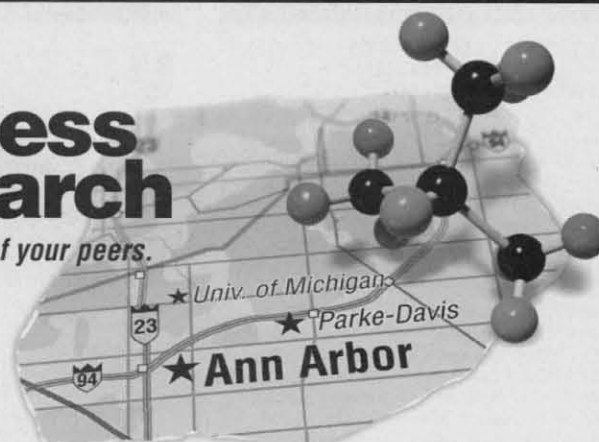
**Applicants** should submit a letter of application, *curriculum vitae*, graduate transcripts, brief description of research plans, statement of teaching philosophy, evidence of teaching ability (including available student evaluations), and three letters of recommendation to: **A/P Search Committee**, c/o Deneb Karentz, Chair, Department of Biology, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.

**Applications** must be received by **January 10, 2000** to ensure their full consideration.

*The University of San Francisco is a private, Catholic and Jesuit institution and particularly welcomes candidates who will positively contribute to such an environment. USF is an Equal Opportunity and Affirmative Action Employer, and will provide reasonable accommodations to individuals with disabilities upon request. We particularly encourage minority and women applicants for all positions.*

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Parke-Davis, a division of Warner-Lambert, is devoted to discovering, developing, manufacturing and marketing quality pharmaceutical products. We're known throughout the industry for our impressive track record of innovations - innovations that would never have come about without our world-class scientists and our state-of-the-art research facility. And, should you choose to take advantage of one of the following opportunities, you'll be in excellent company - the vibrant **ANN ARBOR, MI** environment you'll share with your peers is as intellectually stimulating as it is attractive.

## CARDIOVASCULAR THERAPEUTICS

### Postdoctoral Fellow - Job Code: HS\99-6137SC

The qualified individual will contribute to the conception of basic research programs consistent with the following objectives: nuclear receptor signaling in endothelial cells in health and disease; elucidation of molecular mechanisms of steroid hormone and Peroxisome Proliferator Activated Receptor ligand action in the endothelium; and discovery of novel orphan nuclear receptor signaling pathways in naive and activated endothelial cells. You will plan strategies and experimental designs and implement the research, as well as follow closely current relevant literature and present key findings to internal science information meetings. In addition, you will prepare manuscripts for submission for publication.

To qualify, you must have a Ph.D. in Molecular Biology, Molecular Genetics or Biochemistry. Hands-on experience in transcriptional regulation of gene expression in general, and specific strengths in the mechanisms of transcription regulation by ligand activated nuclear receptors are essential. Experience in molecular biology, tissue culture, gene expression assays, profiling strategies, and other functional genomics approaches is required.

### Assistant Scientist/Senior Assistant Scientist - Job Code: HS\99-0669SC

Working under the guidance of an experienced investigator, you will validate, optimize, and implement high-throughput screening assays for the discovery of novel drugs that prevent atherosclerosis. You will also participate in projects directed towards the identification and validation of novel drug discovery targets.

Requires an MS or BS degree, and a minimum of three years of experience in an industrial or academic setting. Must have technical expertise in cell culture, stable and transient transfection procedures and relevant reporter assays, Southern, Northern, and Western blotting analysis, basic cloning techniques, plasmid construction and preparation, and quantitative PCR assays. Working knowledge in appropriate software use for data management is essential.

### Senior Scientist/Research Associate - Job Code: HS\99-0670SC

The qualified individual will establish *in vitro* endothelial cell systems to evaluate nuclear receptor signaling mechanisms associated with pro-atherogenic alterations in endothelial cell behavior. Identifying novel transcriptional pathways, you will evaluate their role in atherosclerosis initiation and progression in appropriate animal model systems. In addition, you will conceive, plan, implement, and direct high-throughput screening efforts for the discovery of compounds with anti-atherosclerotic properties, as well as supervise research associates involved in these projects. You will also work closely with other department members towards the validation and optimization of lead compounds.

This position requires a Ph.D., and a minimum of three years of prior industry experience. Must have a strong background in transcription regulation of gene expression and the mechanisms of transcription regulation by ligand activated nuclear receptors. Hands-on experience in nuclear receptor signaling in cardiovascular tissues, tissue selective actions of relevant ligands, and knowledge of the role of transcriptional co-activators and co-repressors in these processes are essential. Requires experience in gene expression profiling strategies, and other functional genomics approaches for target identification, validation and use for high-throughput screening.

We offer competitive salaries, outstanding benefits, and an environment conducive to professional growth. We have the above opportunities in **ANN ARBOR, MI**. For confidential consideration, please forward your resume indicating **Job Code**, to: **Warner-Lambert Processing Center, P.O. Box 549231-Suite 24, Waltham, MA 02454-9231. Fax: 877-663-2497 (Toll-free).**

[www.warner-lambert.com](http://www.warner-lambert.com)

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## POSITIONS OPEN

### FACULTY DEVELOPMENT POSITION ASSISTANT PROFESSOR TENURE-TRACK (EDUCATION)

Applications are invited for an Assistant Professor tenure-track (Education) position. The successful candidate will have a 75 percent appointment in the Centre for University Teaching and Learning (CUTL) and a 25 percent appointment in Education. The position calls for someone who enjoys working in a team-based approach with other Faculty Developers to make scholarly contributions to higher education and to carry out faculty development activities across the university.

Candidates for the position should provide evidence of (1) expertise and experience in higher education and faculty development; (2) an appropriate background in science; (3) excellence in teaching and research in higher education. Duties will include consulting with individual Professors, team building, providing advice and support for faculty curriculum initiatives, and scholarly contributions to higher education.

Those interested in applying should consult website: <http://www.education.mcgill.ca/out/position> for further information and list of documents to be submitted. In accordance with Canadian immigration requirements, initial priority will be given to Canadian citizens and permanent residents.

The expected date of appointment is September 1, 2000. Applications will be considered after November 30, 1999. Position will remain open until it is filled. Applications and inquiries should be directed to: **Director, Centre for University Teaching and Learning, 3700 McTavish Street, Montreal, Quebec H3A 1Y2 Canada. FAX: 514-398-4679. McGill University is committed to Equity in Employment.**

All ranks: **ASSISTANT/ASSOCIATE/FULL PROFESSORS** in pathology. Tenured/tenure-track positions available for Investigators with strong basic research programs and/or potential. Candidates are expected to develop and sustain a funded research program while contributing to the service and teaching (graduate, Resident, and Fellow) missions of the Section of Laboratory Medicine in the Department of Pathology. The research endeavors will be the primary focus accounting for approximately 75 percent of effort. Candidates with programs in areas that complement the current departmental faculty are strongly encouraged to apply, but all areas of investigation will be fully considered. Current research activities center around the broad area of molecular cell biology, physiology, and pathology; please see website: <http://path.upmc.edu>. Opportunities for service contributions are possible in all specialties of laboratory medicine: chemistry, hematopathology, immunopathology, microbiology, molecular diagnostics, and transfusion medicine. Mail curriculum vitae and description of research program to: **Dr. Alan Wells, Vice-Chair for Laboratory Medicine, Department of Pathology, 5929 Main Tower, 200 Lothrop Street, Pittsburgh, PA 15213-2582. An Affirmative Action/Equal Opportunity Employer.**

**CHIEF** of the Division of Infectious and Immunologic Disease at the **ASSOCIATE PROFESSOR/PROFESSOR** level. The University of California, Davis, School of Medicine is recruiting a full-time faculty member. Act as Chief of the Division of Infectious and Immunologic Disease. The position requires demonstrated leadership abilities, national or international stature in subspecialty, strong clinical skills, excellence in teaching, and an ability to integrate the program with campus resources. Candidates must be Board-certified in internal medicine and the subspecialty of infectious disease and be eligible for licensure in the State of California. Please forward curriculum vitae to: **M. Eric Gershwin, M.D., c/o Julie Mustard, Department of Internal Medicine, University of California, Davis, Medical Center, 4150 V Street, Suite 3100, Sacramento, CA 95817-9002.** This position is open until filled but no later than June 30, 2000. This position is subject to a criminal background check as part of the medical staff credentialing process. The University of California is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN



DUKE UNIVERSITY MEDICAL CENTER  
Department of Biochemistry

### ASSISTANT, ASSOCIATE, OR FULL PROFESSOR BIOLOGICAL NMR Department of Biochemistry Duke University Medical Center

The Department of Biochemistry, Duke University Medical Center invites applications for a faculty position at the level of Assistant, Associate, or Full Professor. We are seeking outstanding candidates with experience in the field of biological NMR as applied to fundamental problems of enzymology, protein structure, or nucleic acid biochemistry. Duke University has just been awarded Grants to purchase an 800 MHz spectrometer in the NMR Center. This will complement the existing 600 and 500 MHz instruments. The candidate may also choose to be affiliated with the newly created Duke University Center for Chemical Biology. Send résumé, summary of research interest, and three letters of reference to: **Christian R. H. Raetz, Chairman, Department of Biochemistry, Duke University Medical Center, Durham, NC 27710.** Consideration of applications will commence in November 1999. *Duke University is an Equal Opportunity/Affirmative Action Employer.*

### TWO FACULTY POSITIONS IN STRUCTURAL BIOLOGY Indiana University, Bloomington

The Department of Biology seeks two **STRUCTURAL BIOLOGISTS** who employ X-ray crystallography to investigate structures of biological macromolecules. Appointments will be made at any level from **ASSISTANT to FULL PROFESSOR**. A successful candidate at the Full Professor level may be appointed **GILL PROFESSOR OF BIOLOGY**, an Endowed position with a substantial income. The successful candidates will join a strong and growing group of Structural Biologists, Biochemists, and Chemists in the Biology, Chemistry, and Medical Science Departments. Excellent X-ray analysis facilities are available in the Chemistry Department and will soon be available in the Biology Department, along with a dedicated state-of-the-art synchrotron port. Junior candidates should send a curriculum vitae, a statement of past, present, and planned research, and representative publications, and arrange to have four letters of reference sent to: **Dr. Cheng Kao, Chair, Structural Biology Search Committee, Department of Biology, Indiana University, 1001 East Third Street, Bloomington, IN 47405-3700. FAX: 812-855-6705; e-mail: ckao@bio.indiana.edu.** Senior candidates should send a letter of interest and a curriculum vitae. Application review will begin November 15, 1999, and will continue until suitable candidates are identified. For more information about our Biology and Chemistry Departments, see our websites: <http://www.bio.indiana.edu> and <http://www.chem.indiana.edu>. We are committed to increasing the representation of women, minorities, and disabled individuals and encourage applications from such candidates. Inquiries from two-career couples are welcome.

### ASSISTANT PROFESSORSHIPS IN INORGANIC, ORGANIC, AND PHYSICAL CHEMISTRY Harvard University

Department of Chemistry and Chemical Biology

Applicants are invited to apply for Assistant Professorships in inorganic, organic, and physical chemistry. Applicants should arrange to have three letters of recommendation sent independently and should provide a curriculum vitae, a list of publications, and outlines of two future research projects. Applications and supporting materials should be sent to: **Professor James Anderson, Chairman, Department of Chemistry and Chemical Biology, Harvard University, 12 Oxford Street, Cambridge, MA 02138-2902.** *Harvard University is an Affirmative Action/Equal Opportunity Employer and welcomes applications from women and minority group members.*

## POSITIONS OPEN

### TENURE-TRACK FACULTY POSITIONS UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE

The University of North Carolina at Charlotte (UNCC) is seeking applications for three tenure-track positions at the **ASSISTANT PROFESSOR** level in (1) molecular biology (especially those examining control of gene expression), (2) immunology (basic research on host-viral or host-bacterial interactions), and (3) bacteriology (especially those studying host-pathogen interactions), beginning fall of 2000. UNC-Charlotte is a rapidly expanding university committed to research and teaching excellence. Participation and collaboration with faculty in a newly established interdisciplinary Ph.D. program in biology (biomedicine and biotechnology) will be required as well as participation in graduate (M.S.) and undergraduate (B.S., B.A.) programs. Successful applicants are expected to develop and maintain a vigorous research program supported by extramural funding. Research efforts are supported by shared Biotechnology Program core facilities in the Cameron Applied Research Center. A Ph.D. with postdoctoral experience is required. For further information about these positions, the University, the Department of Biology, the Interdisciplinary Ph.D. program, and the research areas of participating faculty, see our website: <http://www.bioweb.uncc.edu>. Applicants should submit a complete résumé, a description of research interests, and names of at least three references to the Chair of the appropriate Search Committee: **Department of Biology, The University of North Carolina at Charlotte, 9201 University City Boulevard, Charlotte, NC 28223-0001.** Consideration of applications will begin November 1, 1999, and continue until the positions are filled. *UNCC is an Affirmative Action/Equal Opportunity Employer.*

### JOHN G. SEARLE ASSISTANT PROFESSOR OF MEDICINAL CHEMISTRY COLLEGE OF PHARMACY University of Michigan

The Division of Medicinal Chemistry in the College of Pharmacy invites applications for an endowed tenure-track Assistant Professor position in medicinal chemistry. Outstanding individuals with a Doctoral degree, postdoctoral experience, and a strong commitment to research and teaching are encouraged to apply. The successful candidate will be expected to establish a vigorous, externally funded research program, and to participate in both the professional and graduate teaching programs of the College. The Division is seeking an individual with research interests in areas that encompass fundamental aspects of drug discovery, design, and/or action with emphasis on molecular-level characterization. Applicants should send a curriculum vitae, a brief description of research plans, and arrange for three letters of recommendation to be sent to: **Prof. Michael A. Marletta, Search Committee Chair, University of Michigan, College of Pharmacy, 428 Church Street, Ann Arbor, MI 48109-1065.** *The University of Michigan is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

University of California, Los Angeles. The UCLA Department of Psychology invites applications for a tenure-track position in cognitive neuroscience at the **ASSISTANT PROFESSOR** level. The primary criteria for the appointment are excellence in research and teaching in cognitive neuroscience. Applications are encouraged from candidates who combine strong backgrounds in experimental psychology and human functional brain imaging. Applications are especially encouraged from candidates who bring those techniques to bear on questions concerning learning, memory, and related processes. Submit a curriculum vitae, a statement of research and teaching interests, plans and goals, reprints and preprints, and arrange for three letters of recommendation to be sent to: **Cognitive Search Committee, Department of Psychology, Box 951563, UCLA, Los Angeles, CA 90095-1563.** Review of applications will begin December 1, 1999. *UCLA is an Equal Opportunity Employer.*



## SCIENCE FACULTY

COLUMBIA COLLEGE CHICAGO is looking to fill a tenure track position in science visualization in the Institute for Science Education and Science Communication. This position is available February 1, 2000.

Responsibilities include teaching courses to non-science majors; curriculum and program development; working with our outreach programs in the Chicago public school system; directing the preparation of web pages and CD-ROMs; college service and student advising. A Ph.D. in a physical or life science with significant command of software packages such as Premier, Director, PhotoShop or a Ph.D. in computer science (or related field) with a strong physical or life science background is required. An ability to program in Java and Html is also highly desired.

The Institute is equipped with a state-of-the-art Science Visualization/Communication laboratory that includes advanced video editing facilities. Further information on the Institute can be found at <http://sciviz.colum.edu/>.

Columbia College is a diverse, open admissions urban institution with 8,600 undergraduate and graduate students emphasizing arts and communications in a liberal education setting. We offer a competitive salary and excellent benefits package. Please send a letter of application, resume, names, telephone numbers and email addresses of four professional references, a statement detailing teaching philosophy and examples of professional science visualization work to: **Institute for Science Education and Science Communication, Columbia College Chicago, 600 S. Michigan Avenue, Chicago, IL 60605.** eoe m/f/d/v

## Senior Computational Scientist/ Computational Scientists

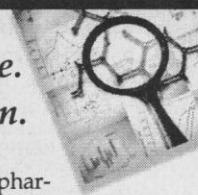
Ceres Inc., a Malibu-based plant biotechnology company, is expanding its Bioinformatics Development Group and is looking for a Senior Computational Scientist and two Computational Scientists who are proficient in Unix, C/C++, SQL programming, development and use of sequence analysis software. A background in the biological sciences, particularly plant biology, is preferred.

### Programmers

Several positions also exist for programmers with experience in Unix, C/C++, SQL, or Web programming. Responsibilities for these positions include the development of integrated sequence analysis software, SQL-Web based database interfaces as well as production software interfaces and other programs to support Ceres's proprietary sequence databases.

Should be a permanent resident of the US. We provide competitive salaries, benefits and equity participation. Please email to [hr@ceres-inc.com](mailto:hr@ceres-inc.com) or fax your resume to (310) 317 8998, Ref: 111, Attn: Human Resource Manager.

## Inspired by the Challenge. Dedicated to the Solution.



Gilead Sciences is an independent biopharmaceutical company that seeks to provide accelerated treatment solutions for patients and the people who care for them. We discover, develop and commercialize proprietary therapeutics for important diseases.

### RESEARCH SCIENTIST

Your primary responsibilities will include analytical method development, assay validation, impurity identification and troubleshooting. Requires a Ph.D. in Organic or Analytical Chemistry with experience in HPLC and GC. LC-MS experience is preferred. Job Code: SCI99-131

### RESEARCH SCIENTIST

Conduct molecular biology and bacteriology studies aimed at identifying new bacterial targets, validating targets, and characterizing drug-bacteria interactions. A Ph.D. with 3+ years' related industry experience is required. Strong computer skills with Word, Excel, PowerPoint, Sigma Plot and Access are also important. Experience with the molecular biology of *S. Aureus* is preferred. Job Code: SCI99-069

### RESEARCH SCIENTIST

This is a full time position in Clinical Virology. You will support the preclinical and clinical development of antiviral compounds; investigate the mechanisms of HIV drug resistance at the molecular and cellular level; and present virology data for written and oral presentations. A Ph.D. in a biological science with 3+ years' related postdoctoral experience is required. Technical proficiency with tissue culture, PCR sequencing, and spreadsheets is also required. Job SCI99-110

### SENIOR RESEARCH SCIENTIST

Your responsibilities will include analytical method development, assay validation and impurity identification, as well as characterization of the physical properties of drug substances and contract lab supervision. Requires a Ph.D. in Organic or Analytical Chemistry with 5+ years' related experience. Strong HPLC and GC skills are required. Experience with LC-MS, GC-MS, BET and DSC is preferred. Job Code: SCI99-132

### SENIOR RESEARCH SCIENTIST

Head a small research group engaged in a multidisciplinary antiviral drug discovery program. The focus will be on identifying novel viral-specific and host-specific factors as antiviral targets, development of assays, identification of lead molecules and structure-activity relationships and supporting compounds through pre-clinical and clinical development. A Ph.D. in Biochemistry, Molecular Biology, Cell Biology or Microbiology is required. At least 5 years' post-doctoral experience including at least 2 years in the biotechnology or pharmaceutical industry. Technical experience with recombinant DNA, protein biochemistry, enzymology, and structure-function analysis is strongly desired. Job Code SCI99-138

Interested candidates may send a resume, indicating Job Code, via email to: [careers-fostercity@gilead.com](mailto:careers-fostercity@gilead.com) (please include all information in the body of the email), or fax to: (650) 578-9264, or mail to: Gilead Sciences, Human Resources, 333 Lakeside Drive, Foster City, CA 94404. Gilead Sciences is proud to be an Equal Opportunity Employer. For more information on these and other opportunities, visit our Web site at [www.gilead.com](http://www.gilead.com).

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SCIENCES

[www.gilead.com](http://www.gilead.com)

## POSITIONS OPEN

### TENURE-TRACK FACULTY POSITION IN GEOSCIENCES

The Department of Environmental Sciences at the University of Virginia invites applications for a tenure-track **ASSISTANT PROFESSORSHIP** in geosciences. The department is an interdisciplinary community of process-oriented scientists representing atmospheric sciences, ecology, geosciences, and hydrology. The department offers B.A., M.S., and Ph.D. degrees. We strongly encourage prospective candidates to review our departmental website: <http://www.evsc.virginia.edu/> prior to applying.

We encourage applications from scientists whose research and teaching strengths and interests show promise for capitalizing on the unique interdisciplinary nature of our department, and to build upon our existing strengths in low-temperature geochemistry and geomorphology in particular. Examples include, but are not limited to, landscape-scale geomorphic processes, field-oriented coastal and estuarine sedimentary processes, geochemical processes in soils and sediment, environmental geochemistry, and geochronology.

The successful candidate will be expected to develop outstanding programs in research and teaching at both the undergraduate and graduate levels and to participate in teaching our undergraduate core course in physical geology. Applicants must show demonstrated excellence in their research and a strong commitment to quality teaching.

Applicants should include one-page statements on their research and teaching interests and experience, a curriculum vitae, and the names and contact information of three references. The application deadline is December 15, 1999. Applications should be sent to:

**James N. Galloway, Professor and Chair**  
Department of Environmental Sciences  
Geosciences Search Committee  
University of Virginia  
Clark Hall  
Charlottesville, VA 22903  
Telephone: 804-924-0561

*We encourage applications from underrepresented groups. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR UNIVERSITY OF WISCONSIN-MADISON

The Division of Pharmaceutical Sciences at the University of Wisconsin-Madison School of Pharmacy is seeking a tenure-track Assistant Professor to begin between July 1 and September 1, 2000. The position is likely to be filled at the Assistant Professor level, but outstanding candidates at the Associate Professor level will be considered. The position requires a Ph.D. in medicinal chemistry, chemistry, or a related discipline, postdoctoral research experience, and outstanding research potential. The successful candidate will be expected to establish an independent research program in one of the following areas and employ organic synthesis: synthesis and evaluation of novel macromolecular ligands with a potential for use in new types of drug therapy; develop novel methods for drug design; develop novel approaches to combating drug resistance; develop new methods for elucidation of gene function. Other innovative research endeavors consistent with a department whose focus is in drug research at the chemistry/biology interface would be considered. Teaching duties will include teaching medicinal chemistry and related courses for undergraduate and professional students and a graduate course to be devised by the new faculty member.

Applications must be received by November 15, 1999. Send a statement of research and teaching interests, a curriculum vitae, selected reprints, and the names, addresses, telephone numbers, and e-mail addresses of three references to: Prof. Daniel H. Rich, Medicinal Chemistry Search Committee, School of Pharmacy, University of Wisconsin-Madison, 425 North Charter Street, Madison, WI 53706.

*The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer and strongly encourages women and minorities to apply.*

## POSITIONS OPEN

### FACULTY POSITIONS ELIZABETHTOWN COLLEGE DEPARTMENT OF BIOLOGY

Microbiology. Tenure-track position at the **ASSISTANT PROFESSOR** level beginning August 2000. Candidates must be broadly trained, possess a Ph.D., and have a commitment to undergraduate teaching and the development of a research program with significant student involvement. Responsibilities include teaching courses in introductory and advanced microbiology, participation in introductory biology, assisting in a Biotechnology Program, and academic advising. Grant writing experience is desirable but not necessary. Strong molecular and statistical background and industrial experience are pluses. Application deadline is October 15, 1999.

Developmental biology and invertebrate zoology. Tenure-track position at the **ASSISTANT PROFESSOR** level beginning August 2000. Candidates must possess a Ph.D., and have a commitment to undergraduate teaching and the development of a research program with significant student involvement. Responsibilities include teaching courses in developmental biology and invertebrate zoology, participation in introductory biology, and academic advising of biology majors. Grant writing experience is desirable but not necessary. Application deadline is November 1, 1999.

Elizabethtown College, rated one of the best northern liberal arts institutions by *U.S. News and World Report*, offers its 1,600 students 40 major programs in traditional liberal arts and professional fields. The Elizabethtown motto, "Educate for Service," expresses the College's mission of linking the world of work with the world of the spirit to advance the values of peace, justice, and human dignity. Located in Pennsylvania's historic Lancaster County, Elizabethtown enjoys outstanding quality of life and easy access to the major metropolitan areas of Philadelphia, Washington, D.C., and Baltimore.

To apply, send letter of application, curriculum vitae, summary of teaching and research interests, and arrange for at least three letters of reference to be sent to: Nancy E. Florey, Director of Human Resources, Elizabethtown College, One Alpha Drive, Elizabethtown, PA 17022. Website: <http://www.etown.edu>. Women and minority candidates are strongly encouraged to apply. Affirmative Action/Equal Opportunity Employer.

### ASSISTANT PROFESSOR OF PHARMACOLOGY UNIVERSITY OF WASHINGTON Seattle, Washington

Applications are invited for a tenure-track appointment at the rank of Assistant Professor in the Department of Pharmacology at the University of Washington School of Medicine. A Ph.D. or M.D. degree and at least two years of postdoctoral research experience are required. All areas of pharmacology will be considered, but individuals integrating molecular, genetic, and physiological approaches are especially encouraged to apply in order to complement the current strength of the Department in signal transduction. The successful candidate will be expected to develop an outstanding independent research program, teach in graduate, medical, or other health profession courses, and participate in graduate student training in the Department of Pharmacology. Additional information about the Department and its current research interests may be obtained at website: <http://weber.u.washington.edu/~phcol/>. For full consideration, please submit a curriculum vitae and statement of research interests, and arrange for three letters of recommendation to be sent by December 1, 1999, to: G. Stanley McKnight, Ph.D., Chair, Pharmacology Search Committee, Department of Pharmacology, University of Washington, Box 357750, Seattle, WA 98195-7750.

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

## POSITIONS OPEN

### DEPARTMENT OF MICROBIOLOGY MICHIGAN STATE UNIVERSITY MOLECULAR PATHOGENESIS

The Department of Microbiology at Michigan State University (MSU) intends to make a tenure-track appointment at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in the broad area of medical microbiology, beginning August 2000. Applicants are sought with demonstrated expertise in the molecular mechanisms of microbial pathogenesis (bacterial, viral, fungal, or parasitic). Responsibilities include developing an independent externally funded research program, with national visibility and limited teaching duties within our graduate, professional school, and/or undergraduate programs. The Department of Microbiology at MSU is among the largest and most diverse in the nation, celebrating our Centennial in 2000, with research emphasis areas in molecular pathogenesis, microbial diversity and evolution, cell growth and differentiation, and functional and comparative genomics. As of 2002, the Department will move into a new Biomedical and Physical Science Building, now under construction. Additional information about the department is available at website: <http://www.msu.edu/unit/mic/www-mic.html>. Requirements include a Doctoral degree in microbiology or a related discipline, at least two years of postdoctoral research experience, and a strong record of research accomplishment. Applicants should send a curriculum vitae including a complete publication list, a statement of current and future research plans, and reprints of recent publications, and should arrange to have three letters of reference sent to: Dr. Martha H. Mulks, Molecular Pathogenesis Search Committee, Department of Microbiology, Giltner Hall, Michigan State University, East Lansing, MI 48824. FAX: 517-353-8957. Curricula vitae may be submitted via e-mail: [micmail@msu.edu](mailto:micmail@msu.edu). To ensure full consideration, complete applications should be received by October 15, 1999. Michigan State University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are particularly encouraged to apply.

### FACULTY MEMBER IN MOLECULAR BIOLOGY

The Institute of Molecular Biology and the Department of Biology at the University of Oregon seek a faculty member in molecular biology to begin fall 2000. We are particularly interested in individuals studying fundamental problems in genetics, cell biology, or developmental biology, but will consider outstanding applications in other areas. We anticipate filling this position at the **ASSISTANT PROFESSOR** level, although more senior candidates will be considered. Interested persons should forward a curriculum vitae, statement of research interests/plans, and arrange for three letters of recommendation to be sent by November 15, 1999, to: George F. Sprague, Chair, Molecular Biology Search, Department of Biology, University of Oregon, Eugene, OR 97403-1210.

*The University of Oregon is an Equal Opportunity/Affirmative Action Institution committed to cultural diversity and compliance with the Americans with Disabilities Act.*

**ASSISTANT/ASSOCIATE PROFESSOR.** The Department of Physiology at the Ponce School of Medicine invites applications for a faculty position at the level of Assistant and/or Associate Professor. We are seeking individuals with a Ph.D. or equivalent and postdoctoral experience. The successful candidate will be expected to participate in the medical and graduate student programs and to develop an independent research program. Review of candidates will begin immediately and will continue until position is filled. Send curriculum vitae, a statement of goals, and names and addresses of three references to: Dr. Angel A. Isidro, Search Committee Chairman, Physiology Department, Ponce School of Medicine, P.O. Box 7004, Ponce, PR 00732. Visit our website: <http://206.105.175.6>. The Ponce School of Medicine is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

## SYSTEMATIC BOTANIST • Assistant/Associate Curator •

The Field Museum is seeking an outstanding systematic botanist pursuing innovative specimen-based research in angiosperms or fungi who will develop a strong field program and actively use the collections for a career-track appointment in the Department of Botany at the level of Assistant or Associate Curator. Candidates who can also make important contributions in a second interdisciplinary field such as biogeography, ethnobotany, neotropical diversity, or symbiosis/mutualisms will be given special attention. In addition to research, responsibilities include curation of relevant collections and participation in public learning programs (including exhibits and informal education), development, and administrative and service activities. The successful candidate will have a Ph.D., a proven record of scientific achievement, and the ability to establish an externally funded research program. There are opportunities for participating in undergraduate and graduate training and for teaching at local universities.

The Botany Department is part of the Museum's Center for Evolutionary and Environmental Biology which includes the departments of Geology and Zoology and the Museum's Environmental and Conservation Programs. Facilities include over 2.5 million botanical specimens (including one of the world's richest collections of neotropical plants), an outstanding library, well-equipped molecular systematics laboratories, and excellent computer facilities. Consideration of applications will begin on October 15, 1999. Please submit a Curriculum Vitae; a statement of research objectives; names, addresses and contact numbers of at least 3 references; and copies of relevant publications to: **Search Committee, Department of Botany, The Field Museum, 1400 South Lake Shore Drive, Chicago, IL 60605-2496.** E-mail inquiries: [botany@fmnh.org](mailto:botany@fmnh.org) Field Museum is an equal opportunity institution. For more information visit: <http://www.fieldmuseum.org>

The Field  
Museum

## Become an M. D. Anderson Cancer Center Odyssey Scholar or Odyssey Fellow

The **Odyssey Program** sponsors outstanding postdoctoral fellows who wish to pursue innovative cancer research at The University of Texas M. D. Anderson Cancer Center. Odyssey Fellows and Scholars will receive up to 3 years of support to explore novel areas of clinical or basic cancer research while preparing for successful and independent careers. Selected applicants may present their results at the annual M. D. Anderson Odyssey Symposium.

**Advantages:** M. D. Anderson Odyssey Scholars and Fellows will receive salary and fringe benefits at 20% above the NIH-NRSA-recommended level. A yearly research allowance for supplies, small equipment, meeting attendance, and other professional development needs is provided also: \$5,000 to Fellows and \$10,000 to Scholars.

### Eligibility

#### M. D. Anderson Odyssey Scholars:

Candidates should hold a Ph.D., M.D., or equivalent degree, with no more than 3 years of postdoctoral training. They must have demonstrated productivity and creativity in cancer-related research, with a track record of high impact first-author publications in international peer-reviewed journals. Former and current M. D. Anderson trainees are not eligible.

#### M.D. Anderson Odyssey Fellows:

Candidates must be within 1 year of obtaining a Ph.D., M.D. or equivalent degree. They must have demonstrated productivity in their graduate studies, as illustrated by major first-author publications in international peer-reviewed journals. They must have already chosen a mentor for their postdoctoral studies at M. D. Anderson Cancer Center.

### Year 2000 Awards Application Deadlines

- Notice of intent: October 15, 1999
- Complete application: November 1, 1999
- Award activation date: Between February 1, 2000 and August 1, 2000

For further information and application packages, consult our web site:  
[www.mdanderson.org/profeducation](http://www.mdanderson.org/profeducation)

*The University of Texas M.D. Anderson Cancer Center is an equal opportunity employer and a smoke-free environment.*

The University of Texas M. D. Anderson Cancer Center

FACULTY

Cellular  
Molecular  
Developmental Biology

The Department of Biochemistry and Molecular Biology at the University of Texas M.D. Anderson Cancer Center in Houston has faculty positions available at all levels for outstanding applicants with interests in molecular, cellular and genetic approaches to important issues of contemporary biology. Individuals working in the areas of signal transduction, gene regulation, differentiation, and development are particularly encouraged to apply. We offer a highly attractive recruitment package, an active graduate and postdoctoral training program and the unmatched scientific environment of the Texas Medical Center. Applicants should hold a Ph.D. and/or M.D. and be able to demonstrate their potential as independent scientists. Those interested should send a C.V., a two-page research summary and the names and addresses of at least three references before Dec. 1, 1999, to:

**William Klein, Ph.D., Chairman, Department of Biochemistry & Molecular Biology, Box 117,  
The University of Texas M.D. Anderson Cancer Center,  
1515 Holcombe Blvd., Houston, TX 77030**  
[www.mdanderson.org/DEPARTMENTS/biochem/](http://www.mdanderson.org/DEPARTMENTS/biochem/)

MDACC is an Equal Opportunity Employer, smoke free environment.  
Women & minority candidates are encouraged to apply.

## ASSOCIATE DEAN FOR RESEARCH AND ENDOWED CHAIR Texas Tech University HSC School of Pharmacy

Applications are sought from outstanding candidates for the position of Associate Dean for Research and Endowed Chair at the Texas Tech University Health Sciences Center (HSC) School of Pharmacy. The Associate Dean for Research will be charged with spearheading the development of clinical and basic research at the School of Pharmacy, as well as fostering research collaborations between faculty at the School of Pharmacy and all regional campuses of the Texas Tech University HSC, including affiliated hospitals and institutions. The Endowed Chair will come with a discretionary fund to support the individual's research program.

The School of Pharmacy is located in a new 102,000+ square foot building at the Harrington Regional Medical Center in close proximity to the School of Medicine, School of Allied Health, and Veterans Affairs Medical Center in Amarillo, Texas. The School has 18 faculty members in the Department of Pharmaceutical Sciences and 33 faculty members in the Department of Pharmacy Practice. A Pharmaceutical Sciences Ph.D./M.S. program was just started at the School this Fall as part of the HSC Graduate School of Biomedical Sciences. For more information, visit our home page at <http://pharmacy.ama.ttuhsc.edu>.

The position requires a senior-level Pharm.D., Ph.D. or M.D. scientist with extensive hands-on experience in the design, implementation and conduction of biomedical or pharmaceutical research. Prior academic experience is preferred, but not required. The successful candidate must have a strong history of independent grant funding, solid administrative and leadership skills, and an established national and international reputation in their field of expertise.

Interested applicants should submit (1) a curriculum vitae with list of publications, (2) a summary of research accomplishments and future goals, and (3) the names, addresses, and telephone numbers of three references to: **Dr. Quentin Smith, Texas Tech University HSC, School of Pharmacy, 1300 Coulter Drive, Amarillo, TX 79106.** Fax: 806-356-4034 Email: [quentin@cortex.ama.ttuhsc.edu](mailto:quentin@cortex.ama.ttuhsc.edu)

*Texas Tech University Health Sciences Center is an Equal Opportunity/Affirmative Action institution. Minorities and women are encouraged to apply.*

## POSITIONS OPEN

### BIOLOGY BIOCHEMIST/BIOLOGIST

Ursinus College invites applications for an **ASSISTANT PROFESSOR** position, tenure-track, beginning fall 2000. Responsibilities include teaching biochemistry, cell biology, or genetics; contributing to introductory biology; and developing a research program that includes undergraduates. We have a new major in biochemistry to which the successful applicant will contribute. Ph.D. required; postdoctoral experience and experience in a small college setting desirable.

Applicants must demonstrate excellence in and commitment to undergraduate teaching in a liberal arts setting, and should describe how their research program will involve undergraduate collaborators.

Ursinus, northwest of Philadelphia in a suburban setting, is a highly selective, residential, coeducational, liberal arts college of 1,250 students, with a long tradition of strength in science. Laboratory facilities in biology and chemistry, supported by numerous grants from NSF and HHMI, are outstanding.

Send letter of application, curriculum vitae, transcripts, and three letters of recommendation to: **Dr. Peter F. Small, Interim Chair, Department of Biology, Ursinus College, P.O. Box 1000, Collegeville, PA 19426-1000** by November 30, 1999. *Ursinus College is an Equal Opportunity Employer/Affirmative Action Employer. In keeping with the College's historic commitment to equality, women and minorities are especially encouraged to apply.*

### MEDICAL UNIVERSITY OF SOUTH CAROLINA EXPERIMENTAL PATHOLOGY

The Department of Pathology and Laboratory Medicine is seeking an established Investigator to join its Research Division. The appointment will be at the level of **ASSOCIATE PROFESSOR** on a tenure track. The area of research is open, but should involve some aspect of experimental pathology. Research interests of current division members include cancer and the pathobiology of neurosensory systems and aging. Qualifications include an M.D. or Ph.D. degree and demonstration of the ability to develop and sustain an extramurally funded research program. A competitive salary and attractive relocation package is available.

Please forward curriculum vitae and statement of research interest to:

**Janice M. Lage, M.D.**  
Professor and Chair  
Department of Pathology and  
Laboratory Medicine  
Medical University of South Carolina  
165 Ashley Avenue, Suite 309  
P.O. Box 250908  
Charleston, SC 29425

*The Medical University is an Equal Opportunity Employer.*

Division of Endocrinology, Metabolism, and Clinical Nutrition. The University of California, Davis, School of Medicine is recruiting for two full-time positions at the **ASSISTANT, ASSOCIATE, and FULL PROFESSOR** levels. The Divisions of Endocrinology and Metabolism and Clinical Nutrition have been combined to form a new Division. This position will interact with The Vascular Biology Group at UC, Davis. These positions require demonstrated strong clinical skills, excellence in teaching, and an interest in clinical and/or basic research. One position will focus research in bone metabolism and the other in nutrition/diabetes. This program is integrated with the Northern California System of VA Clinics and with a network of primary care providers and institutional affiliations in North Inland California. Please forward curriculum vitae to: **John C. Rutledge, M.D., c/o Julie Mustard, Department of Internal Medicine, 4150 V Street, PSSB Suite 3100, Sacramento, CA 95817.** This position is subject to a criminal background check as part of the medical staff credentialing process. This position is open until filled, but not later than March 1, 2000. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

The University of Florida, Department of Pathobiology (Division of Comparative Medicine) seeks to fill a position for a senior faculty member at the academic rank of **PROFESSOR**. This position is primarily an academic/research appointment. The successful candidate should have research experience in the areas of prokaryote genetics or molecular biology and should have developed a mature research program. Duties of the position will include (1) the development of a research program centered around prokaryote genetics/molecular biology with concentration in laboratory animal medicine/comparative medicine. Both independent and collaborative research projects are encouraged; (2) participate in the training of graduate students including helping with didactic courses designed for Residents in laboratory animal medicine; (3) participate in lectures and seminars for Divisional staff, University personnel, and others on a variety of topics related to the use of animals in biomedical research; (4) participate in lectures designed for training Veterinary Students in laboratory animal medicine; (5) development of molecular diagnostic tests for the improvement of veterinary care for research animals; (6) preparation and editing of relevant portions of manuscripts, case reports, contracts, and research grant proposals; and other related matters. Qualifications include a Ph.D. or D.V.M.-Ph.D. degrees or equivalent with experience in molecular biology or molecular genetics. Rank and salary will be commensurate with experience and qualifications. Appointment will begin as early as January 1, 2000. The closing date for applications is November 1, 1999. To apply, send curriculum vitae and arrange for three letters of reference to be sent to: **Dr. Mary B. Brown, Chair, Search Committee, Department of Pathobiology, P.O. Box 100880, Gainesville, FL 32611-0880.**

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

Cornell University. The Department of Chemistry and Chemical Biology is searching for a tenure-track faculty member at the **ASSISTANT PROFESSOR** level. Outstanding candidates with research interests in any field of chemistry/chemical biology that complements rather than duplicates our existing strengths are encouraged to apply. We have special interest in candidates with research plans in chemical biology, biophysical chemistry, or the phase science of amphiphilic compounds. In exceptional cases a tenured-level appointment may be considered. The successful applicant will be expected to carry out an effective research program and to teach introductory chemistry as well as advanced undergraduate and graduate courses. A Ph.D. degree is required, and postdoctoral experience preferred. Applicants should submit a graduate transcript, curriculum vitae, publication list, and separate summaries of research experience and research plans. These materials and three letters of recommendation should be sent to: **Chair, Faculty Search Committee, Department of Chemistry and Chemical Biology, Baker Laboratory, Cornell University, Ithaca, NY 14853-1301** and be received no later than November 1, 1999. *Cornell University is an Affirmative Action/Equal Opportunity Employer and Educator.*

California Institute of Technology invites applications for a tenure-track position as **ASSISTANT PROFESSOR** of chemical physics/physical chemistry, including multidisciplinary areas with experimental and/or theoretical emphasis. The initial appointment is four years. Outstanding candidates who have completed their Ph.D. and have a strong commitment to research and teaching excellence are encouraged to apply. Submit by November 15, 1999, curriculum vitae, publication list, a concise description of proposed research, and three letters of recommendation to: **Professor Ahmed Zewail, Chair, Faculty Search Committee, Arthur Amos Noyes Laboratory of Chemical Physics, 127-72, California Institute of Technology, Pasadena, CA 91125.** *The California Institute of Technology is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.*

## POSITIONS OPEN

### CELL AND MOLECULAR BIOLOGY

The Biology Department at Santa Clara University invites applications for an **ASSISTANT PROFESSOR** tenure-track position in cell and molecular biology, starting September 2000. A Ph.D., demonstrated teaching ability, and postdoctoral experience are required. We are seeking a dynamic teacher-scholar studying gene expression, signal transduction, or subcellular structure and function. Teaching responsibilities will include lower-division lecture and laboratory courses for majors and non-majors, as well as upper-division lecture and laboratory courses for majors in the candidate's area(s) of expertise. The successful candidate will be expected to develop and maintain an active research program that includes undergraduate participation. Interested persons should refer to the Biology Department website for more information about our programs and faculty, **website: <http://www.scu.edu/SCU/Departments/BIOL/home.html>**.

Applicants should submit (1) curriculum vitae, (2) statement of current and future research interests, (3) statement of teaching experience and philosophy, and (4) three letters of recommendation to: **Chair, Cell and Molecular Biology Search Committee, Biology Department, Santa Clara University, Santa Clara, CA 95053.** The deadline for application is November 1, 1999. *Santa Clara University, a Jesuit institution, is an Equal/Affirmative Action Employer and welcomes applications from women, persons of color, and members of other historically underrepresented U.S. ethnic groups.*

### ENDOWED CHAIR IN ECOLOGY

The Department of Zoology at the University of Florida invites applications and nominations for the Arthur R. Marshall Eminent Scholar Chair in Ecology. We seek a colleague, recognized as a leader in ecology, to contribute to programs in ecology, evolution, and conservation. This person should be known not only for research excellence and breadth, but also for acknowledged expertise in teaching and service. The appointment will be made without regard to subdiscipline of ecology or taxonomic focus.

Applications should include a curriculum vitae; a statement of research philosophy and plans; pertinent reprints; and names, postal addresses, e-mail addresses, and telephone numbers of five potential references. Closing date for applications is October 29, 1999. Additional information about this search can be found at **website: <http://www.zoo.ufl.edu/marshallsearch.html>**. Applications, nominations, and inquiries should be sent to: **Louis J. Guillette, Jr., Chair, Arthur Marshall Chair Search, Department of Zoology, 223 Bartram Hall, P.O. Box 118525, University of Florida, Gainesville, FL 32611.** Telephone: 352-392-1098; [marshallsearch@zoo.ufl.edu](mailto:marshallsearch@zoo.ufl.edu).

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

The Department of Physiology and Neuroscience at the Medical University of South Carolina seeks to fill three **TENURE-TRACK POSITIONS**. Rank will be commensurate with experience and the candidates must have a Ph.D. or M.D., a minimum of two to three years of postdoctoral training, and evidence of the ability to sustain an extramurally funded research program. Candidates should have research experience in one of four areas: (1) molecular neurobiology with an emphasis on substance abuse, (2) biophysics of neurotransmission, (3) neurobiology of central nervous system neoplasms, and (4) aging, neuroregeneration, or apoptosis to be part of a multidisciplinary center of Parkinson's and Alzheimer's disease. Candidates should send a curriculum vitae, summary of research interests, and a list of at least three individuals to contact as references to: **Jacqueline F. McGinty, Ph.D., Search Committee, Department of Physiology and Neuroscience, Medical University of South Carolina, 167 Ashley Avenue, Suite 607, Charleston, SC 29425.** Review of applications will begin on November 1, 1999, and continue until the positions are filled. For further information contact: **e-mail: [heissenc@musc.edu](mailto:heissenc@musc.edu); website: [www2.musc.edu/PGY/PGY.html](http://www2.musc.edu/PGY/PGY.html)**.

## UNIVERSITY OF CALIFORNIA SEA GRANT DIRECTOR

The University of California is inviting applications for the full-time position of Director of the University of California Sea Grant College Program. The program is part of the National Sea Grant Office Program, National Oceanic and Atmospheric Administration (NOAA).

The California Sea Grant Program funds marine-related research, education and outreach activities at more than 30 public and private institutions throughout California. Its headquarters are located at the Scripps Institution of Oceanography in La Jolla. The Director reports to the Office of the President of the University of California on policy and program issues and to the Directors of Scripps on matters of administration.

**RESPONSIBILITIES:** The Director provides overall leadership for the development, evaluation and administration of the research, education and outreach activities funded by the program. California Sea Grant administers a total annual budget of about seven million dollars from state, federal and university sources.

**QUALIFICATIONS:** The Director should have the following skills, knowledge, and abilities:

- A record of research accomplishments in a Sea Grant-related discipline;
- Knowledge of scientific developments and expertise in any of the subject areas funded by the program: coastal ocean research, fisheries, aquaculture, ocean engineering, marine policy and law, and marine biotechnology;
- Working knowledge of coastal and marine resource management and policy issues and of the federal and state laws that govern these resources;
- Familiarity with the user-groups served by the program: private coastal and marine-based industries; state, federal and regional agencies; academic institutions; private users; and non-profit organizations; and
- Understanding of the National Sea Grant Program's mission.

In addition, the Director must have a doctoral degree in a Sea Grant-relevant discipline or the equivalent in knowledge and experience. Salary and benefits are commensurate with experience and qualifications.

**APPLICATION PROCEDURE:** Nominations and applications are invited. Applicants should provide a letter of application, a curriculum vitae, and names, telephone numbers and addresses of no fewer than three references to:

**Robert Shelton**  
Vice Provost for Research  
University of California  
Office of the President  
1111 Franklin St., 11<sup>th</sup> floor  
Oakland, CA 94607

Applications and nominations will be accepted until the position is filled, but the search committee will begin the review of applications on October 1, 1999.

## PH.D. LEVEL - ELECTROPHYSIOLOGY

Ph.D. Electrophysiologist to head a group of 3-4 people. Must have 2-7 years' experience in addition to at least 2 years' post-doctoral training, a consistent record of quality publications, and expertise in patch-clamping cultured cells, slice patch, voltage-gated ion channel physiology, ligand-gated ion channel physiology, and GPCRs. Primary responsibility of the group will involve developing drug screening assays for GPCRs using Ca fluorescence technology. Secondary research will involve developing fluorescence based assays for voltage-gated and ligand-gated channels. Additional research will involve recording ion channel activity in cultured cells, oocytes, and brain slices as it relates to drug discovery.

Neurogen's competitive benefits package pays 100% of the premium for employees and their families for these plans: Medical, dental and life insurance, long term disability and accidental death and dismemberment. Additional benefits include 401(k) plan, 3 weeks' vacation, performance based bonus, and stock options.

*Founded in 1987 by scientists from one of the world's leading research universities, today Neurogen is a recognized leader in discovering drugs which act at the burgeoning number of new drug targets emerging from scientific advances in understanding the genetic and molecular underpinnings of diseases. Neurogen's Accelerated Intelligent Drug Design program and its other drug discovery technologies, together with its R&D collaborations with major pharmaceutical companies, have catapulted Neurogen to a leading position in the biotechnology and pharmaceutical industries.*

Please send your resumes to [snolan@nrgn.com](mailto:snolan@nrgn.com) or fax them to 203-481-8683.

Resumes may also be mailed to Human Resources, Neurogen Corporation, 35 NE Industrial Rd., Branford, CT 06405. NO PHONE CALLS PLEASE.

Neurogen is an Equal Opportunity Employer.

Neurogen Corporation



Visit us on the web at [www.neurogen.com](http://www.neurogen.com)

## Georgia Southern University Assistant Professor Organic & Biochemistry



Tenure-track faculty positions in an ACS certified Department: one in Organic and up to two in Biochemistry to begin August 1, 2000. Applicants must have command of written and spoken English, and their vita must provide evidence of strong teaching and research abilities. A commitment to teaching at the undergraduate level is expected. Successful candidates will teach in their area of specialty and in our lower division courses and will be expected to develop an effective research program in collaboration with undergraduate students. Salary dependent upon qualifications. **Organic Chemistry:** areas open. Applicants must have a Ph.D. in Chemistry by time of appointment. **Biochemistry:** areas open. Must have a Ph.D. in Chemistry or Biochemistry by time of appointment. For more information see departmental web page: <http://www2.gasou.edu/chemdept>. Applicants for either position should send a current curriculum vitae, unofficial copies of undergraduate and graduate transcripts, a statement of teaching philosophy, a description of proposed research, and arrange to have three letters of reference sent to **Dr. Bill Ponder, Search Chair, P.O. Box 8064, Georgia Southern University, Statesboro, GA 30460**. Postmark deadline for completed applications is October 29, 1999. The names of applicants and nominees, resumes, and other general non-evaluative information are subject to public inspection under the Georgia Open Records Act. GSU is an EO/AA institution. Persons who need reasonable accommodations in the applications process under ADA should contact the search chair.

## SCIENTIFIC PROGRAM MANAGER

Major international health foundation is seeking a Scientific Program Manager to work in our Research Department. The successful candidate will assist in the planning of the research grants program, training grants program, projects and collaborations. Will help determine program priorities and funding levels as well as track and prepare analyses of research requirements. Coordinate programs and committees. Assist in the supervision of the grant administration process.

Post doctoral scientific research experience or equivalent is a must. PhD, MD or equivalent professional degree is preferred. Excellent written, verbal and interpersonal skills are essential.

Please forward your resume and salary requirement to:

**Carmel Simone, HR Director**  
**The Juvenile Diabetes**  
**Foundation International**  
120 Wall St, 19th Fl,  
New York, NY 10005-4001 or  
Fax to: (212) 785-9595  
EOE M/F/D/V



## POSITIONS OPEN

The University of Wisconsin-Madison is launching a major new initiative in behavioral, cognitive, and affective neuroscience. The Department of Psychology is recruiting for positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Outstanding candidates at the **FULL PROFESSOR** level may be considered for one of the positions.

One position is in animal behavioral neuroscience with a focus on biological bases of social behavior or motivation or with a focus on the neurophysiology of cognitive or affective behaviors.

A second position is in human cognitive neuroscience, with research interests in one or more of the basic processes of cognition. Any research method (lesion, neuroimaging) is appropriate for this position.

A third position is in cognitive or affective neuroscience and is specifically targeted for Psychologists using functional neuroimaging as their primary research tool. Candidates at any level will be considered for this position.

A fourth position is in clinical cognitive neuroscience. We are searching broadly in all areas of clinical psychology.

All applicants will have access to a variety of resources including non-primate and primate facilities (Harlow Primate Laboratory, The Wisconsin Regional Primate Center) and the W. M. Keck Laboratory for Functional Brain Imaging and Behavior that will house a new 3T MRI scanner for functional brain studies, a PET scanner, and associated image processing areas. Applications will be accepted until November 20, 1999, although interviewing may begin earlier. Candidates should submit a letter of application, at least three letters of recommendation, a curriculum vitae, and selected reprints to: **The Chair of either the Animal Behavioral Neuroscience, Human Cognitive Neuroscience, Cognitive or Affective Neuroscience, or Clinical Cognitive Neuroscience Search Committee, 1202 West Johnson Street, Madison, WI 53706-1696.** Those candidates at the Full Professor level for the cognitive or affective neuroscience position need only initially submit the curriculum vitae. *The University of Wisconsin-Madison is an Equal Opportunity/Affirmative Action Employer and especially encourages women and minorities to apply. Unless confidentiality is requested in writing, information regarding applicants must be released upon request. Finalists cannot be guaranteed confidentiality.*

## FACULTY POSITION IN PHYSIOLOGY

### University of North Carolina at Chapel Hill

The Department of Cell and Molecular Physiology at the University of North Carolina at Chapel Hill invites applications for a tenure-track faculty position at the rank of **ASSISTANT PROFESSOR**. In exceptional cases, appointment at higher rank will also be considered. We seek an individual with a Ph.D., M.D., or the equivalent degree and significant post-doctoral experience who uses molecular and genetic approaches (including transgenic and targeted gene disruption methods) to investigate physiological problems related to the vascular/cardiovascular system. The appointee will be expected to establish a vigorous, independent research laboratory and participate effectively in the department's graduate and medical student teaching programs. This recruitment is part of a new initiative to expand research on the vascular and cardiovascular systems in the School of Medicine. For information about our department, see our website: [www.med.unc.edu/physiol/](http://www.med.unc.edu/physiol/). Review of applications will begin October 15, 1999, and continue until the position is filled.

Send a complete curriculum vitae, a brief description of research interests, and at least three letters of reference to:

**Cardiovascular Search Committee  
Department of Cell and Molecular Physiology  
CB 7545  
University of North Carolina School of Medicine  
Chapel Hill, NC 27599-7545**

*UNC-CH is an Affirmative Action/Equal Opportunity Employer. Minorities and women are especially encouraged to apply.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR POSITION THE UNIVERSITY OF BRITISH COLUMBIA BIOTECHNOLOGY LABORATORY

The Biotechnology Laboratory invites applications for a tenure-track faculty position at the level of Assistant Professor in the area of plant molecular and cellular biology.

The Biotechnology Laboratory is an interdisciplinary facility established 10 years ago at the University of British Columbia by Nobel Laureate **Michael Smith**. Its mandate is to foster the development of biotechnology through an interactive approach to problems in human, animal, plant, and forest biotechnology, and in fermentation and process engineering. The Biotechnology Laboratory is also an active partner in a major new initiative to develop genomic science in British Columbia. There are currently 10 faculty members conducting research in the Biotechnology Laboratory with 52 graduate students drawn from 10 different academic departments. In addition, the Biotechnology Laboratory has actively promoted plant biotechnology on campus by the inclusion of three additional Plant Scientists as Associate Members of the Laboratory. The Biotechnology Laboratory provides an exceptionally supportive environment for new faculty and for the development of new research directions.

The successful candidate will be expected to establish a vigorous research program in plant molecular/cellular biology. We will consider applicants in a broad range of areas including genomics, plant-microbe interactions, development, plant biotechnology and molecular farming, metabolism, physiology, and plant signaling systems. Investigators with experience in model systems and an interest in applied aspects of plant biology are encouraged to apply. He/She will have cross appointments in Botany and Agricultural Sciences and will be expected to participate in the education of students at the undergraduate and/or graduate level.

There are many opportunities for collaboration with other members of the Biotechnology Laboratory and with other units on campus. Several Networks of Centres of Excellence are represented at the University and a New Genome Sequence Centre is starting operations in Vancouver. The successful applicant will assume a laboratory completely equipped for molecular genetics and cell biology, will have access to state-of-the-art facilities for a wide range of studies in biotechnology, and will play an integral role in maintaining and expanding the University's strength in plant molecular genetics/biology. Screening of applicants will begin November 1, 1999, and continue until the position is filled. Candidates should provide a bibliography, a current curriculum vitae, a description of proposed research and interests, and the names and addresses of three references to: **Dr. Douglas G. Kilburn, Director, Biotechnology Laboratory, University of British Columbia, 6174 University Boulevard, Room 237, Vancouver, British Columbia V6T 1Z3 Canada.**

*UBC hires on the basis of merit and is committed to Employment Equity. We encourage all qualified persons to apply. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.*

The Department of Chemistry of The University of Chicago invites applications from outstanding individuals for the position of **ASSISTANT PROFESSOR** of chemistry. This search is in all fields of experimental and theoretical chemistry including the areas broadly defined as inorganic, organic, and physical chemistry. Postdoctoral experience is preferred. The department plans to make multiple appointments. Applicants should submit a curriculum vitae, a list of publications, and succinct outline of their research plans. Candidates should arrange for three letters of recommendation to be sent directly to: **James R. Norris, Jr., Chairman, Department of Chemistry, The University of Chicago, 5735 South Ellis Avenue, Chicago, IL 60637.** Deadline for application materials is October 31, 1999. *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### FACULTY POSITIONS IN MOLECULAR GENETICS AND PHARMACOLOGY ASSISTANT OR ASSOCIATE PROFESSOR Department of Biopharmaceutical Sciences (Tenure-Track)

#### University of California, San Francisco

The Department of Biopharmaceutical Sciences, in conjunction with the Program in Genetics, invites applications for a tenure-track position at the Assistant or Associate Professor level in the field of molecular genetics and pharmacology. We are interested in individuals who apply molecular and genetic methods to understand pharmacologic problems including drug action, drug metabolism, molecular toxicology, and response to drugs and xenobiotics. We are particularly interested in individuals who are using model systems such as *Drosophila*, nematodes, yeast, zebrafish, and mice in their studies. We are receptive to individuals with basic genetic background who are interested in exploring problems in molecular pharmacology/pharmaceutical sciences even if they have no prior experience in pharmacology or pharmaceutical sciences. This position is part of the development of a new program at University of California, San Francisco (UCSF) in pharmacogenomics. There are ample opportunities for participating in existing multidisciplinary programs in genetics, cell biology, molecular biology, and pharmaceutical sciences on the UCSF campus, as well as for clinical collaborations in the area of drug response. Applicants should have a Ph.D. or M.D. or other advanced degree and will be expected to establish a dynamic research program and teach in graduate and professional school courses. Send a curriculum vitae, three letters of reference, a summary of current research, and a description of possible future research plans in molecular genetics and pharmacology.

Application material should be sent by December 20, 1999, to:

**Biopharmaceutical Sciences Search Committee  
c/o Barbara Paschke  
Department of Biopharmaceutical Sciences  
Box 0446  
University of California, San Francisco  
San Francisco, CA 94143-0446  
E-mail: [paschke@itsa.ucsf.edu](mailto:paschke@itsa.ucsf.edu)**

Applications will be reviewed as received. Early applications are encouraged.

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

### TENURE-TRACK POSITIONS DEPARTMENT OF PHARMACOLOGY University of Tennessee Memphis

The Department of Pharmacology of The University of Tennessee College of Medicine is enlarging its neuropharmacology faculty and is seeking to fill two (2) tenure-track positions at the **ASSISTANT/ASSOCIATE PROFESSOR** level. Applicants must have a Ph.D. or M.D.-Ph.D.; candidates for the Associate-level position must have demonstrated capability to support and direct a competitive research program. Individuals using molecular, cellular, and/or electrophysiological approaches, who look forward to collaboration in a highly interactive research environment with a large, well-funded neuroscience community, will be given preference. This is a 12-month appointment that includes teaching responsibilities in both the professional and graduate colleges. Excellent laboratory facilities and start-up funding are available. These positions will remain open until filled. Applicants should submit a curriculum vitae, three (3) letters of reference, and a detailed description of their research program to: **Burt M. Sharp, M.D., Chair, Department of Pharmacology, The University of Tennessee College of Medicine, 874 Union Avenue, Memphis, TN 38163.** *The University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ADA/ADEA Employer. Women and minorities are especially encouraged to apply.*

## Ground Floor R&D Opportunities

The ability to create new science and new businesses has been a hallmark of innovation management at Corning for decades. Today's revolution in life science research is creating new opportunities for drug discovery and testing technologies. These technologies build on Corning strengths in polymers and surface chemistry allowing us to apply new developments in molecular biology to produce a growing range of tools for genomics, combinatorial chemistry and high-throughput screening.

Today, Corning is a leading producer of advanced microplates to support the high-speed automated testing of potential drug candidates. An extensive stream of new products targets additional DNA analysis and drug discovery markets expected to grow dramatically by 2005. For example, Corning's new CMT-GAPS coated slides are just the first of many innovations to come from Corning Microarray Technology, an innovative new family of advanced research tools.

If you enjoy the challenge of product development research and the collegial atmosphere of a scientific discovery environment, we invite you to learn more.

## Applications Support Scientists

(Job Code: AD/SCIENCE/993328)

We have several opportunities for individuals who have strong customer relations skills and experience involving customer training, needs assessment and sales/marketing. These positions will support the product development, sales and marketing groups in Corning Microarray Technology. 20-50% travel is involved.

- Ph.D. in Molecular Biology or equivalent experience
- Experience in RNA, cDNA desired
- Experience in microarrays preferred

## Molecular Biologists

(Job Code: AD/SCIENCE/980598)

- RNA, gene expression, cDNA background essential
- Ph.D. in Molecular Biology, Genetics or Cell Biology
- Statistical analysis experience highly desired
- Post-doctoral experience desirable
- Ability to work across chemistry, materials science and molecular biology disciplines required

## Biochemists

(Job Code: AD/SCIENCE/993503)

- Ph.D. Biochemistry with strong Chemistry and Biology
- Experience in biochemistry, protein chemistry preferred
- Array experience a plus
- Ability to work across chemistry, materials science and molecular biology disciplines required

Corning offers a rich infrastructure of world-class materials research, development and manufacturing expertise, enabling wide-ranging support for innovative approaches to product development. Projects generally are customer driven and are for near-term commercial application. Location is Corning, NY. Some travel will be required.

We invite you to learn more about us at [www.corning.com](http://www.corning.com). All resumes must reference the associated Position Title and #, and should be submitted in MS WORD format via e-mail to: [corning@aon-hros.com](mailto:corning@aon-hros.com). Mail to: Corning, Attn: Ad Code # \_\_\_\_\_ PO Box 1262, Findlay, OH 45840 Corning is an equal opportunity employer with a strong commitment to workforce diversity.

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## Bayer NAD: Expanding the Possibilities

**Bayer Diagnostics** seeks talented professionals eager to be challenged in an expanding entrepreneurial environment offering career opportunities and the resources of an established, worldwide company. We currently have the following openings available at our headquarters located on the shores of the San Francisco Bay.

### MARKET DEVELOPMENT

#### Manager, Pharmacogenetics/Pharmacogenomics

Responsible for designing and executing clinical outcome studies, This individual will provide scientific and clinical support plus strategic and tactical development for pharmacogenomic programs. Qualified candidates will possess a PharmD (or related degree) and 3-5 years postgraduate clinical marketing or development experience in a pharmaceutical setting. Critical to success in this role is a thorough understanding of human drug absorption, drug metabolism, mechanics of drug action, genetic basis of diversity, and the methodologies used in designing and evaluating Phase II/III pharmacokinetic studies.

#### Manager, Medical Research, Outcomes Research and Health Economics

As a member of the Medical Research Department, you will conceptualize, develop and complete studies to determine the clinical and economic value of our novel diagnostic and therapeutic strategies. Publication of data in peer-reviewed journals is an essential function of your role. In addition to a PhD in Health Economics, Public Health or a related discipline, you must have 2-5 years experience evaluating novel diagnostic and therapeutic intervention strategies, a substantial record of publication, and a background in clinical study design, outcomes research, and analyzing clinical and administrative databases and economic modeling. Proficiency with DATA, Decision Maker, Excel, and SAS or STATA also needed.

### SCIENTIFIC AFFAIRS

#### Manager, Scientific Affairs

You will design and execute studies to evaluate the performance, competitiveness and clinical utility of NAD products. You will also provide scientific/clinical input to NAD Product Support and NAD Training, supply scientific guidance and category expertise to the field, and assist the Director of Scientific Affairs in realizing business unit goals. To qualify, you must possess a PhD or MD, 5-8 years experience in nucleic acid diagnostics or infectious disease diagnostics, and knowledge of the infectious disease diagnostic marketplace. Excellent analytical, clinical and communication skills are essential to your success.

Conveniently located in the East Bay and overlooking beautiful San Francisco, we offer an excellent compensation and benefits program. To apply, please fax resumes to (510) 923-8464, or mail to Bayer Nucleic Acid Diagnostics, NAD-W 849, 4560 Horton Street, Emeryville, CA 94608. email: [mary.letterii.b@bayer.com](mailto:mary.letterii.b@bayer.com). EOE

**Bayer** 

Business Group Diagnostics

## POSITIONS OPEN

### MOLECULAR ECOLOGIST

As part of its aggressive development initiative in environmental marine biology, the Marine Sciences Program at the University of North Carolina at Chapel Hill invites applications for the first of three tenure-track (ASSISTANT or ASSOCIATE PROFESSOR) faculty positions. This position is in molecular ecology and will be at the Institute of Marine Sciences in Morehead City, North Carolina. The Institute has excellent access to diverse estuarine and coastal environments, and a strong research focus on coastal ecological, physical, and biogeochemical processes and resources. We are seeking a Ph.D.-level colleague capable of developing and applying molecular and genetic approaches to characterize, understand, and integrate ecological and evolutionary processes that affect structural and functional linkages among marine populations and communities and their environment. Individuals having a broad synthetic perspective and wishing to participate in multidisciplinary studies of environmental/biological interactions in the coastal zone are encouraged to apply. The applicant is expected to develop a strong, externally funded research program that takes advantage of the Institute's coastal location and ties to the Departments of Marine Sciences, Biology, Environmental Sciences and Engineering, and the Carolina Environmental Program located in Chapel Hill.

Send curriculum vitae, a description of research and teaching interests, and the names, addresses, and e-mail addresses of four references to: **Molecular Ecology Search Committee, University of North Carolina at Chapel Hill, Institute of Marine Sciences, 3431 Arendell Street, Morehead City, NC 28557.** For full consideration, applications should be received by October 15, 1999, but will be accepted until the position is filled. *The University of North Carolina at Chapel Hill is an Equal Opportunity Employer. Minority and female candidates are encouraged to apply.*

The University of Mississippi, Department of Chemistry invites applications for three tenure-track faculty positions. Two positions are available in the area of physical chemistry/chemical physics at the rank of ASSISTANT/ASSOCIATE PROFESSOR. One position is available in the area of biochemistry/biophysical chemistry at the level of Assistant Professor. Applicants must have a Ph.D. degree in the chemical sciences appropriate for the position being sought, postdoctoral experience, the ability to establish a nationally competitive research program, and a commitment to undergraduate and graduate teaching excellence. Applicants should send a curriculum vitae and a brief description of research plans, and arrange to have three letters of recommendation sent to: **Professor Charles L. Hussey, Chair, Department of Chemistry, The University of Mississippi, University, MS 38677.** Review of applications will begin November 19, 1999, but applications will be accepted until these positions are filled. *The University of Mississippi is an Affirmative Action Employer and actively seeks applications from women and minorities.*

**RESEARCH ASSOCIATES, SENIOR/JUNIOR** in molecular immunology. Both training and research grant support. Cell/molecular studies of the decay accelerating factor (DAF), ocular immunology, and hemolytic disorder, paroxysmal nocturnal hemoglobinuria (PNH), and the glycosylated phospholipid (GPI) anchoring pathway. Projects include (1) development of mouse models to study PNH and DAF, (2) structure/function analyses of DAF protein, (3) complement regulation in the eye, and (4) studies of GPI anchor biology. Ph.D. in biochemistry or molecular biology, proficiency in cloning, gene expression, flow cytometry, protein chemistry, and prior work in preparing transgenic/knockouts preferred. Academic laboratory, part of a large collaborative immunology group. Staff includes Postdoctoral Fellows and Ph.D. students. Contact: **Edward Medof, Institute of Pathology, 2085 Adelbert Road, Cleveland, OH 44106.** Telephone: 216-368-5434; FAX: 216-368-0495. *Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### PRESIDENT OF AURA

The Association of Universities for Research in Astronomy (AURA) is seeking a new President effective immediately. AURA is a consortium of U.S. universities and international affiliates that operates world-class astronomical research facilities (Centers) for the benefit of U.S. and international astronomers. AURA manages the National Optical Astronomy Observatories (Cerro Tololo InterAmerican Observatory in Chile, Kitt Peak National Observatory in Arizona, and the National Solar Observatory in New Mexico) and the International Gemini Project (in Hawaii and Chile) under cooperative agreements with the National Science Foundation. It also manages the Space Telescope Science Institute in Baltimore under contract with the National Aeronautics and Space Administration (NASA).

The President plays a leadership role in ensuring that AURA succeeds in its primary mission of advancing astronomy and related sciences through his/her interaction with the Directors of the Centers, the funding agencies, the Board of Directors, and the science community.

Minimum qualifications include demonstrated managerial and leadership ability and a background in the physical sciences.

The search will remain open until the position is filled but the Search Committee will begin considering applications on September 30, 1999.

Applications and nominations should be sent to:

**Dr. Gregory Geoffroy**  
Chair, AURA Search Committee  
Senior Vice President for Academic Affairs  
and Provost  
1119 Main Administration  
University of Maryland  
College Park, MD 20742

*AURA is an Equal Opportunity Employer/Affirmative Action Employer.*

### FACULTY POSITION IN MARINE BIOLOGY

The Department of Biology at Clark University invites applications for a tenure-track faculty appointment in marine biology at the ASSISTANT PROFESSOR level. At least two years of postdoctoral experience are desired. The successful candidate will be expected to establish a productive research program, teach undergraduate courses in marine biology and related fields of expertise, and a graduate course in the area of research interest. Formal review begins November 5, 1999. Applicants should submit a curriculum vitae, two reprints, a statement of teaching and research interests, and the names of three references to: **Chair, Marine Biology Search Committee, Department of Biology, Clark University, 950 Main Street, Worcester, MA 01610.** *Clark University is an Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT to FULL PROFESSOR.** Behavioral Medicine Division, Wayne State University School of Medicine, Department of Psychiatry and Behavioral Neurosciences. Ph.D. or M.D. with strong research record sought to conduct independent and collaborative research on molecular biology of blood vessels, genetics, and effects of sex hormones on vascular function. Demonstrated funding ability required. Send curriculum vitae, reprints, and statement of research interests to: **Robert R. Freedman, Ph.D., Professor and Director, 275 East Hancock, Detroit, MI 48201.** *Wayne State University is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available immediately to study the molecular genetics of meiotic drive systems in the mosquito *Aedes aegypti*. A strong background in molecular biology and genetics is required. Salary commensurate with experience. E-mail or mail letter of interest, curriculum vitae, and references to: **Dave Severson, Ph.D., University of Notre Dame, Department of Biological Sciences, Notre Dame, IN 46556-5645.** E-mail: david.w.severson.1@nd.edu.

## POSITIONS OPEN

**MASS SPECTROMETRY SPECIALIST** is sought for managing an LC-MS-MS instrument (Hewlett-Packard HPLC/Micromass Quattro II Electrospray MS-MS instrument) in a Biomedical Research Cleveland facility, supporting work of biomedical researchers at Cleveland State University, The Cleveland Clinic Foundation, Case Western Reserve University, industry, and other Cleveland area institutions. The candidate will work with scientists from the different institutions on a wide range of biomedical research projects. Duties include running samples, assisting users in the operation of the instrument, consulting with users on experimental design and data interpretation, maintenance and troubleshooting, training students and users, scheduling, recordkeeping, and management of data storage. The candidate should have a B.S. or M.S. (preferred) in chemistry, biochemistry, or equivalent, with expertise in mass spectrometry. Preference will be given to those with experience in electrospray MS techniques applied to biomolecules. It is desired that the candidate have a strong background in analytical chemistry, be proficient in troubleshooting instrumentation, have excellent organization skills, be able to work independently, and have good interpersonal skills for interacting with and training students and users. Laboratory experience in HPLC and familiarity with computer networking will be a plus. The person hired will be trained on the Micromass instrument prior to taking on the full responsibilities. Send curriculum vitae, undergraduate and graduate transcripts, and three letters of reference to: **Dr. David Anderson, Chair, Mass Spectrometry Specialist Search Committee, Department of Chemistry, Cleveland State University, Cleveland, OH 44115.** Telephone: 216-687-2453; FAX: 216-687-9298; e-mail: d.anderson@popmail.csuohio.edu. Review of applications will begin on October 1, 1999, and will continue until the position is filled. *Cleveland State University is an Affirmative Action/Equal Opportunity Employer committed to nondiscrimination. Minorities/Females/Disabled/Veterans encouraged.*

### RESEARCH TAXONOMIST

Brooklyn Botanic Garden seeks a Plant Taxonomist/Systematist with interest in floristics to join team writing the New York Metropolitan Flora (see website: [www.bbg.org/nymf](http://www.bbg.org/nymf)). Duties include writing vascular plant descriptions and keys in DELTA language format, performing taxonomic research related to flora, pursuing other systematics research interests using traditional and/or modern methods. On-site facilities include herbarium of local flora with over 250,000 accessions, 57,000-volume research library, and laboratory equipped for anatomical and molecular techniques; opportunity to teach. Ph.D. in plant taxonomy/systematics with demonstrated ability to write descriptions and keys required. Field experience, knowledge of northeastern flora. Ability to work independently and as team member.

Send curriculum vitae, a letter with statement of research interests and goals, and names and addresses of three references to:

**Human Resources**  
Brooklyn Botanic Garden  
1000 Washington Avenue  
Brooklyn, NY 11225  
FAX: 718-622-7826

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

**POSTDOCTORAL POSITION** is available immediately for M.D.-Ph.D. or equivalent with an expertise in immunochemistry. Experience in antibody characterization and purification, affinity chromatography, protein separation, and peptide sequencing is desirable. Candidate will study a variety of processes involving platelet immunology and coagulation inhibitors. Stimulating environment with collaborative opportunities. Send or e-mail résumé to: **Mervyn A. Sahud, M.D., Director, Blood Research Institute, Sherrick Research Building, Level 2, 3023 Summit Street, Oakland, CA 94609.** E-mail: atp123@aol.com.

## EUROPEAN OPPORTUNITIES

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

### Professor in experimental Astrophysics

The new professor is expected to considerably strengthen research in astrophysics at ETH. She or he will be a member of the Institute of Astronomy and make use of the existing infrastructure of national (Paul Scherrer Institute) and international (in particular ESA and ESO) organisations. The applicant is expected to develop her or his own research activities. In particular she or he will participate in the preparation and the running of international observing campaigns, in the analysis of the corresponding data, and in the conception and the development of novel instrumentation.

The new professor is expected to participate in the teaching of physics in all departments of ETH. She or he will also take part in the teaching of advanced courses in astrophysics and in supervising diploma and PhD students.

Candidates with an internationally recognised scientific record in the field of astrophysics are asked to send their curriculum vitae, the list of publications, and a summary of their research interests to the **President of ETH Zurich, Prof. Dr. O. Kuebler, ETH Zentrum, CH-8092 Zurich, no later than November 30, 1999.** The ETHZ specifically encourages female candidates to apply with a view towards increasing the proportion of female professors.

## Postdoctoral Positions in Biochemistry University of Missouri-Columbia

### Dr. Lesa Beamer

*Protein x-ray crystallography protein-lipid interactions*

### Dr. Susan Deutscher

*Antibody engineering; phage display for cancer therapeutics*

### Dr. David Eide

*Metal ion transporters and their regulation*

### Dr. David Emerich

*Symbiotic nitrogen fixation*

### Dr. William Folk

*Animal cell DNA replication; plant tRNA expression*

### Dr. Tom Guilfoyle

*Auxin-regulated transcription*

### Dr. Mark Hannink

*Oncogenes and signal transduction*

### Dr. Dennis Lubahn

*Estrogen receptors and environmental estrogens*

### Dr. Ruth MacDonald

*Role of diet in hormonal control of cancer risk/Functional roles of zinc*

### Dr. Bruce McClure

*Pollination biology*

### Dr. Beryl Ortwerth

*Protein glycation; oxygen free radicals and cataract formation*

### Dr. Joe Polacco

*Nitrogen and nickel metabolism in plants/genomics*

### Dr. Tom Quinn

*Synthesis of radiolabeled peptides and proteins; phage display*

### Dr. R. Michael Roberts

*Maternal-embryo interaction during early pregnancy*

### Dr. Frank Schmidt

*RNA structure and function/Combinatorial genetics*

### Dr. Krishna Sharma

*Structure-function of lens crystallins*

### Dr. Grace Sun

*Signal transduction and gene expression in the nervous system*

### Dr. Roger Sunde

*Selenium and nutrient regulation of gene expression/Boron transporters*

### Dr. John Tanner

*Protein crystallography, molecular dynamics simulations*

### Dr. Richard Tsika

*Skeletal muscle cis-elements and transcription factors underlying plasticity*

### Dr. Judy Wall

*Potential of sulfate-reducing bacteria for bioremediation*

### Dr. Gary Weisman

*Nucleotide receptors in cystic fibrosis, cardiovascular disease and cancer*

### Dr. Shuqun Zhang

*Functions of MAP kinases in plant stress responses*

Additional information is available at: [www.biochem.missouri.edu](http://www.biochem.missouri.edu). Applicants should send CV and names of two references to: Postdoctoral Application, Department of Biochemistry, 117 Schweitzer Hall, University of Missouri, Columbia, MO 65211. **Please specify research interest.**

*The University of Missouri is an Equal Opportunity Institution*

## EUROPEAN OPPORTUNITIES

## UNIVERSITY OF CAMBRIDGE

### Four Lectureships in BP Institute

Salary £20,810 - £32,000

Applications invited for four University Lectureships in the newly formed BP Institute concerned with fundamental research on multiphase flow in rocks, pipes, process equipment and systems, involving collaboration with five Departments; Earth Sciences (host department), Applied Mathematics and Theoretical Physics, Chemistry, Chemical Engineering and Engineering.

The holders of the four Lectureships will carry out research in the Institute and teach in the appropriate Departments.

The interests of the Institute will encompass many aspects of multiphase flow, with an aim to understand the fundamental processes involved. Research will incorporate theory, laboratory experiment and field observation.

We invite applications from those interested in one or more of a wide range of disciplines in multiphase flow including the following broad areas.

- fluid mechanics: quantitative and experimental modelling of fluid flows, reservoir modelling and computational fluid mechanics
- colloids and interfacial phenomena
- thermodynamics and chemical reactions between rocks and flows
- multi-phase flows, especially problems of entrainment and separation between phases.

Please send 10 copies of CV, lists of publications, 1,000 word statement of research and names and e-mail addresses of three referees to The Administrator, Department of Earth Sciences, Downing Street, Cambridge CB2 3EQ by 23 October 1999. Candidates should ask their referees to write direct to the Administrator by the same date ([mij10@esc.cam.ac.uk](mailto:mij10@esc.cam.ac.uk)).

For further information, contact Professor Andrew Woods ([woods@esc.cam.ac.uk](mailto:woods@esc.cam.ac.uk)) or Margaret Johnston, the Administrator ([mij10@esc.cam.ac.uk](mailto:mij10@esc.cam.ac.uk)).

The University is committed to equality of opportunity.



## THE UNIVERSITY of LIVERPOOL

### Department of Earth Sciences Lectureship in Geology

Initial salary within the range £17,238 - £30,065 pa

To work in a large department nationally graded as excellent for research and teaching in Geology, Geophysics and Oceanography. You should have a proven research track record and either develop new research areas in low temperature geochemistry and fluid process, hydrogeology, palaeoecology and neotectonics, or complement existing Geology core research in palaeoceanography/palaeoclimatology, isotope geochemistry, volcanology/magma chamber processes, rock deformation/textures, fault mechanics, sedimentology and sequence stratigraphy. The post is available from 1 January 2000.

Informal enquiries to Professor Nick Kusznir, Head of Department on 0151 794 5182 or email: [sr11@liv.ac.uk](mailto:sr11@liv.ac.uk)

Quote Ref: B/197/S

Closing Date: 15 October 1999

Further particulars and details of the application procedure may be requested from the Director of Personnel, The University of Liverpool, Liverpool L69 3BX on 0151 794 2210 (24 hr answerphone) or via email: [jobs@liv.ac.uk](mailto:jobs@liv.ac.uk)  
Web site at <http://www.liv.ac.uk>

COMMITTED TO EQUAL OPPORTUNITIES

## POSITIONS OPEN

### DIRECTOR OF RESEARCH

Fairchild Tropical Garden (FTG) seeks an administrative and scientific leader for the Research Department. Located in Miami, FTG is the largest tropical botanical garden in the continental United States with extensive collections of palms, cycads, tropical flowering trees, vines, endangered species, and tropical fruit cultivars. The Fairchild Research Center houses offices, class and seminar rooms, library, historical archives, herbarium, greenhouses, and nursery complex. Major expansion of the research facilities is planned. Scientists work in multidisciplinary teams and collaborate with the Garden's Horticulture and Education Programs. Fairchild scientists serve as Adjunct Professors and graduate student advisors at local universities, and are active in regional and international botanical networks and programs. Qualifications of the Director of Research include a Ph.D. in botany or other plant science, demonstrated administrative and leadership experience, ability to develop programs and write successful grants, and skilled in networking and strategic planning. Priority will be given to candidates who have tropical experience and are bilingual (preferably Spanish or French). Candidates should send a curriculum vitae, names of three professional references, and a cover letter detailing the candidate's achievements in research and administration to: Dr. Julia Kornegay, Acting Director, Fairchild Tropical Garden, 10901 Old Cutler Road, Miami, FL 33156. E-mail: [kornegay@fiu.edu](mailto:kornegay@fiu.edu); Telephone: 305-667-1651; FAX: 305-667-6930.

### SALES CAREER OPPORTUNITY TECHNICAL SALES REPRESENTATIVE INTEGRATED DNA TECHNOLOGIES

Integrated DNA Technologies (IDT) is a leading supplier of synthetic DNA/RNA products. We are looking for a dynamic individual to add to our team. Responsibilities include direct outside sales to academic, government, and industry accounts. Maintenance and maturation of the northeast region will be the primary responsibility. Requirements include a M.A. or B.A. in science or engineering and knowledge of molecular biology techniques, or three-plus years of sales experience in the life science industry. Interested individuals should contact: Kevin Wuest, e-mail: [kwuest@idtdna.com](mailto:kwuest@idtdna.com).

### MOLECULAR ECOLOGY

**POSTDOCTORAL POSITION** available to study anaerobic microbial process in contaminated subsurface environments and/or the deep subsurface. Experience in the application of molecular techniques to the study of microbial communities is required. Please send curriculum vitae and names of references to: Dr. Derek Lovley, Department of Microbiology, University of Massachusetts, Amherst, MA 01003. FAX: 413-545-1578; e-mail: [dlovley@microbio.umass.edu](mailto:dlovley@microbio.umass.edu). *UMASS is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available to study molecular mechanisms of tumor suppression by pVHL, implications of which include tumor angiogenesis, hypoxia-inducible gene expression, and renal and vascular development. Experience in molecular biology and/or protein chemistry preferred. Please send curriculum vitae and names of three references to: Dr. Herbert T. Cohen, Boston University Medical Center, E428, 88 East Newton Street, Boston, MA 02118. FAX: 617-638-7322; e-mail: [htcohen@bu.edu](mailto:htcohen@bu.edu).

**POSTDOCTORAL POSITION** to study gene expression in autoimmune disease using high-throughput technologies. Experience in cellular immunology and molecular biology required. Applicants who qualify for NIH Training Grant positions preferred. Send curriculum vitae and the names of three references to: Dr. Elizabeth Mellins, Department of Pediatrics, Room H306B, Stanford University School of Medicine, 300 Pasteur Drive, Stanford, CA 94305-5208.

## POSITIONS OPEN

### SENIOR RESEARCH FELLOW IN ENDOCRINOLOGY DISNEY'S ANIMAL KINGDOM

A two-year Postdoctoral Fellowship is available immediately at Disney's Animal Kingdom to study the reproductive biology of exotic animals. Responsible for the developing and validating new assay systems in collaboration with the scientific, veterinary, and animal management teams. A Ph.D. in endocrinology or related field and experience with enzyme immunoassays is preferred. The ability to communicate scientific information to the public and the ability to work well in a fast-paced, team-oriented atmosphere is essential. Send curriculum vitae and names and addresses of three references to:

Anne Savage, Ph.D.  
Disney's Animal Kingdom  
P.O. Box 10,000

Lake Buena Vista, FL 32830-1000  
E-mail: [anne.savage@disney.com](mailto:anne.savage@disney.com)

### X-RAY FACILITY MANAGER/ STAFF MACROMOLECULE CRYSTALLOGRAPHER Howard Hughes Medical Institute

The Howard Hughes Medical Institute is seeking an X-ray Facility Manager/Staff Macromolecule Crystallographer for their facility at the University of California in San Francisco. Responsibilities: manage the X-ray data collection facility, carry out basic research as a member of the Agard research laboratory, provide routine maintenance of three rotating anode generators, provide alignment/maintenance of three image plate detectors, update crystallographic software, and train users. The ideal candidate will be no more than five years postdoctorate and have expertise in macromolecular crystallography as well as mechanical/people skills.

To apply, please send your curriculum vitae with three references to: Howard Hughes Medical Institute, David A. Agard, Department of Biochemistry, University of California San Francisco, 513 Parnassus Avenue, San Francisco, CA 94143-0448. E-mail: [agard@msg.ucsf.edu](mailto:agard@msg.ucsf.edu).

*HHMI is an Equal Opportunity Employer.*

### QUANTITATIVE SCIENTIST/ BIOMETRICIAN International Pacific Halibut Commission, Seattle

The Commission expects to have an opening later this year for a well-qualified scientist to work on the design and analysis of surveys, mark-recapture experiments, and other projects. The job will be a mixture of independent projects, collaborative work with senior assessment and biological staff, and some consulting. Fishery experience is desirable, but strong credentials in statistics are more important. The position will be filled at the GS 12-13 level DOE. *U.S. citizenship is not required; pension and benefit plans available.* Send résumé to: Director, International Pacific Halibut Commission, P.O. Box 95009, Seattle, WA 98145-2009 USA.

### RESEARCH SCIENTIST AQUATIC ECOLOGICAL RISK ASSESSMENT

National Water Research Institute  
Environment Canada, Saskatoon, Saskatchewan

A permanent position is available to develop approaches for assessing the cumulative environmental effects of stressors on aquatic communities and ecosystems. *Open to persons employed or residing in Canada with Ph.D. or equivalent experience. Preference given to Canadian citizens.* Salary range \$38,721 to \$50,944 per year (CDN). Contact: The Public Service Commission, Telephone: 306-780-5723; website: <http://jobs.gc.ca>.

## POSITIONS OPEN

### EXECUTIVE DIRECTOR PUBLIC HEALTH POLICY ADVISORY BOARD, INC.

Newly established, nationally prominent nonprofit organization dedicated to sound, science-based public health policymaking seeks a dynamic, visionary, highly motivated professional with a high energy level.

Successful candidate will have overall management, administrative, and programmatic responsibility for developing a young organization, which includes Distinguished Policy Fellows, staff, outside consultants, and Board of Trustees as well as contacts with the media, medical and public health community, and the public. Functional responsibilities include health policy analysis, fundraising, budgeting, and public relations.

Candidates must have a minimum of a graduate degree in related field and eight or more years of relevant experience (in medicine, public health, or science policy) with increasing responsibility, possess excellent communication and analytical skills, and proven management and leadership ability. Superior interpersonal skills are also essential as is attention to detail. More information about Public Health Policy Advisory Board can be found on our website: [www.phpab.org](http://www.phpab.org). Send cover letter with résumé, salary history, writing sample, and list of three references no later than September 30, 1999, to: Louis W. Sullivan, M.D., Chairman, Public Health Policy Advisory Board, 6830 Elm Street, McLean, VA 22101. FAX: 703-556-3240. No telephone calls, please.

### POSTDOCTORAL POSITION

Postdoctoral Associate position at Cornell University in a laboratory studying the cognitive effects of developmental brain damage using animal models. Two current NIH-funded projects concern early exposure to lead and cocaine, respectively. Studies involving transgenic animal models of altered folate metabolism and Down syndrome are currently being initiated. These studies are designed to specify the cognitive processes affected, identify the mechanisms underlying the cognitive dysfunction, and test improved therapeutic interventions. Preference will be given to candidate with expertise in the biology of cognition, cognitive testing of mice, and/or statistics. Send curriculum vitae and three letters of reference to: Dr. B. J. Strupp, Department of Psychology and Division of Nutritional Sciences, Cornell University, 109 Savage Hall, Ithaca, NY 14853-6401. FAX: 607-255-1033; Telephone: 607-255-2694; e-mail: [bis13@cornell.edu](mailto:bis13@cornell.edu). *Affirmative Action/Equal Opportunity Employer.*


### POSTDOCTORAL POSITIONS IN CANCER RESEARCH

Available immediately for studies of cancer spread and tumor immunology (*Science* 271:509-512, 1996; *Science* 284:1187-1191, 1999). Successful candidates will be highly qualified; background or experience in molecular biology or biochemical analysis of cell activation preferred. A joint appointment will be held in an appropriate department of Tufts University Medical School. Please forward curriculum vitae, bibliography, and names of three references to: Dr. Georg F. Weber, New England Medical Center, Radiation and Cancer Biology, NEMC #824, 750 Washington Street, Boston, MA 02111. FAX: 617-636-6205.

### MUSCULOSKELETAL RESEARCH

**RESEARCH SCIENTIST** with academic appointment at New York University available immediately. Seek Ph.D. with experience in mechanisms, and treatment of disorders of bone, cartilage, tendon, and/or muscle. **POSTDOCTORAL FELLOWSHIP** position also available. Send curriculum vitae to: Paul Di Cesare, M.D., Musculoskeletal Research Center, Hospital for Joint Diseases, 301 East 17th Street, New York, NY 10003. FAX: 212-598-6567; e-mail: [pedicesare@yahoo.com](mailto:pedicesare@yahoo.com).

## EUROPEAN OPPORTUNITIES



New scientific discoveries are based on innovation, sharing knowledge and synergy of skills. This philosophy is a priority for the Institut de Recherche Jouveinal/Parke-Davis, one of the European R&D facilities of Parke-Davis Pharmaceutical Research, located in the suburbs of Paris. In our Research Centres in Ann Arbor (USA), Cambridge (UK) and Fresnes(FR), scientists are working on a broad range of mechanistic approaches to discover and develop new drugs for important human diseases.

In France, our focus is the discovery and development of new drugs in the fields of gastroenterology, allergy, inflammation, and pain. With our continuing growth, we are looking for a

### **Bioinformatics scientist**

As a part of the Department of Cell & Molecular Biology, you will be responsible for Bioinformatics aspects of several drug discovery projects within the therapeutic areas of interest to our French R&D Facility. You will be in charge of liaising with research scientists leading drug discovery programs across all scientific disciplines, to assist in the application of Functional Genomics data as a part of drug discovery process. The selected candidate will work in a team with other bioinformatics scientists and information technology support personnel, and act as the key liaison between France and our Cambridge and Parke-Davis Ann Arbor (Michigan) based Bioinformatics teams.

The ideal candidate should have a PhD/MSc in Molecular Biology, Biochemistry or related subject, with minimum 2 years experience in Bioinformatics. Knowledge of DNA Protein sequence database and the ability to manipulate these is essential. Proficiency in programming C, C++, Java or Perl, in Unix and Windows NT environment, is required. Also experience in design of relational database and SQL would be an advantage. Flexible and team player, the ideal candidate must have demonstrated the ability to manage research projects and collaborate closely in a multicultural scientific environment.

Because we are looking for excellence in people and science, we are dedicated to fostering an environment which encourages scientific innovation and creativity, by sharing ideas and experiences.

If you are interested by this challenging position, please send your application (letter of interest, resume, references) quoting reference Bioin/sc, to Marie-Aude Julien, Human Resources Department, Institut de Recherche Jouveinal/Parke-Davis, 3/9 rue de la Loge, BP 100, 94265 Fresnes Cedex, France - Fax : (33.1) 40 96 77 32

**PARKE-DAVIS** PHARMACEUTICAL RESEARCH  
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BDDP CORPORATE

## GLOBAL OPPORTUNITIES



### **UNITED ARAB EMIRATES UNIVERSITY FACULTY OF MEDICINE AND HEALTH SCIENCES**

#### **Electron Microscope Technician**

**Providing support** for both SEM and TEM equipment, we are looking for applicants who have a Masters Degree in a Biological Science or equivalent with a minimum of eight years experience, six years of which are in a routine electron microscopy laboratory with hands on experience of electron microscope operation. Excellent communication skills are required.

**The position** will be actively involved in current on-going research projects of the Faculty and practical demonstrations to undergraduate medical students. At the present time the opportunity to develop personal independent research will be limited.

**The successful candidate** will be offered a tax-free salary, free accommodation, furniture allowance, annual air passage and an end of service bonus. Interested applicants may forward their curriculum vitae together with the names and addresses of two professional referees and a covering letter with an indication of current salary to:

The Personnel Department  
Faculty of Medicine and Health Sciences, UAE University  
P O Box 17666, Al Ain, United Arab Emirates  
Fax No. 00971-3-672001

**Applications will be closed 3 weeks after the date of publication.**

## **ENDOWED CHAIR AUBURN UNIVERSITY**

The College of Veterinary Medicine of Auburn University invites nominations and applications for the Buris R. Boshell, M.D., Chair in Endocrine and Metabolic Diseases. The individual occupying this Endowed Chair will be a visionary and energetic leader with an outstanding record of research and academic accomplishments in endocrine and metabolic diseases. In particular, applicants whose research emphasizes topics related to the syndrome of diabetes mellitus are strongly encouraged to apply.

The Chair will be based in the Scott-Ritchey Research Center where research will be conducted in state-of-the-art molecular medicine facilities. The incumbent will have an academic appointment in the Department of Anatomy, Physiology and Pharmacology and the Scott-Ritchey Research Center and will participate in the direction of professional and graduate students.

Candidates should have credentials appropriate for appointment at the rank of Professor. However, individuals in earlier stages of their career may be considered for the chair provided they clearly demonstrate exceptional potential for distinguished scholarship. Salary and benefits are negotiable and commensurate with experience.

Send nominations or applications to Joseph S. Janicki, Ph.D., Chairman Search Committee, 106 Greene Hall, College of Veterinary Medicine, Auburn University, AL 36849-5517. Applications should include, curriculum vitae, statement of research interests and contact information for at least 3 references. References will not be contacted until advanced stages of screening, and candidates will receive prior notification. Review of applications will begin on November 1, 1999 and the search will continue until a candidate is recommended. AU is an affirmative action, equal opportunity employer. Women and minorities are encouraged to apply.

## POSITIONS OPEN

### GENETIC BASIS OF AGING

Two **POSTDOCTORAL POSITIONS** are available immediately to study the gene expression profile of the aging process using high-density oligonucleotide arrays (see: Lee et al., *Science* 285:1390-3, 1999). Knowledge of molecular biology and/or immunology is desirable but not essential. Please send curriculum vitae, summary of research accomplishments, and contact information of three references to: **Dr. Thomas A. Prolla, Department of Genetics, University of Wisconsin-Madison, WI 53706. FAX: 608-280-7202; e-mail: taprolla@facstaff.wisc.edu.**

### POSTDOCTORAL POSITION FOR INVESTIGATING THE MECHANISM OF IMMUNE EVASION BY HEPATITIS C VIRUS

Two Postdoctoral positions are available to investigate the mechanism of immune evasion by hepatitis C virus (HCV). The major goals of our researches are to characterize the molecular interaction between the HCV core protein and host protein(s) and further analyze its biological significance using HCV core transgenic mice. Individuals with expertise in a recombinant DNA technology, mammalian cell culture systems, and transgenic animals are especially encouraged to apply. Salary is negotiable. Send complete curriculum vitae and names of three references to: **Young S. Hahn, Ph.D., Beirne Carter Center for Immunology Research, Box MR4-4012, University of Virginia Health Sciences Center, Charlottesville, VA 22908. FAX: 804-924-1221; e-mail: ysh5e@virginia.edu. Equal Opportunity Employer.**

The Washington University Medicine Department Mass Spectrometry Facility seeks to fill two positions at level of **POSTDOCTORAL FELLOW** or **RESEARCH ASSISTANT PROFESSOR** with opportunity to advance to permanent positions. (1) Ph.D. Molecular Biologist to use cloning, mutagenesis, two-hybrid screening, and knockout construction to study pancreatic islet biology and (2) Ph.D. with experience in protein chemistry and mass spectrometry to study posttranslational modifications and proteomics. Send curriculum vitae, reference letters, and reprints to: **Dr. John Turk, Box 8127, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110. E-mail: jturk@imgate.wustl.edu.**

**POSTDOCTORAL POSITION** available immediately to investigate genetic and phenotypic diversity among *Streptomyces* in prairie soils. Emphasis on patterns of antibiotic inhibition/resistance and interspecies communication at varying spatial scales. Research conducted at Cedar Creek Natural History Area, and NSF LTER site. Candidates must have Ph.D. in microbiology, ecology, or related field. Experience with molecular techniques for genetic analysis highly desirable. Please forward résumé, reprints, transcripts, and three letters of reference to: **Dr. Linda Kinkel, University of Minnesota, 495 Borlaug Hall, 1991 Upper Buford Circle, St. Paul, MN 55108. E-mail: lindak@pucini.crl.umn.edu. The U of MN is an Equal Opportunity Educator and Employer.**

**POSTDOCTORAL POSITION(S)** available immediately to study reactive oxygen mediated DNA damage in human retinal cells. A strong background in molecular biology and associated laboratory techniques is desirable. Applicants should provide a curriculum vitae and three references to: **Bernard Godley, M.D., Ph.D., University of Texas Medical Branch, Department of Ophthalmology, 301 University Boulevard, Galveston, TX 77555-0787. E-mail: bgodley@utmb.edu. UTMB is an Equal Opportunity/Affirmative Action Employer/Minorities/Females/Disabled/Veterans.**

## POSITIONS OPEN

### POSTDOCTORAL RESEARCH AWARDS.

The National Research Council announces opportunities for Postdoctoral Research at the Naval Research Laboratory, Washington, D.C. and Stennis Space Center, Mississippi. Competitive Research Associateship awards will be made for one year initially with the possibility of renewal for a second year. Annual stipend is \$47,000 with funds for relocation and conference travel.

Research Associates are sought in two areas: (1) Underwater acoustic positioning with application to autonomous underwater vessels at Stennis Space Center. Applicants should have a background in electrical/mechanical engineering, applied mathematics, or physics with a strong emphasis in signal processing and modeling. Experience with underwater acoustic positioning and communication systems is preferred. (2) Littoral geodesy, including work in gravimetry, satellite altimetry, and oceanography at the Washington, D.C. location. Applicants should have background in geodesy. Some experience in satellite altimetry is preferred.

Send letters of interest with curriculum vitae, publication list, and list of three references to: **Dr. B. S. Bourgeois, Code 7442, Naval Research Laboratory, Stennis Space Center, MS 39529. Or: Dr. J. Brozena, Code 7421, Naval Research Laboratory, 4555 Overlook Avenue S.W., Washington, DC 20375. U.S. citizenship and no more than five years of postdoctoral experience is required. Any questions regarding the above opportunities may be directed to the above-named individuals at the above addresses or to e-mail: bsb@nrlssc.navy.mil or john.brozena@nrl.navy.mil.**

Application materials may be obtained from the Associateship Programs, National Research Council website: <http://national-academies.org/rap> or by contacting: The Associateship Programs, National Research Council, 2101 Constitution Avenue N.W., TJ2114/N3, Washington, DC 20418. E-mail: rap@nas.edu; FAX: 202-334-2759; Telephone: 202-334-2760.

### UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

**POSTDOCTORAL FELLOW** to study the mechanism of drug-DNA interactions. Experience in DNA preparation, DNA end-labeling, and detection is desirable. Send curriculum vitae and three letters of reference to: **Professor Harold Kohn, Division of Medicinal Chemistry and Natural Products, School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7360. E-mail: harold\_kohn@unc.edu. The University of North Carolina is an Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** available to work on cellular and molecular aspects of cell surface proteoglycans in the context of vascular biology and atherosclerosis. Project funded by the NIH. Applicants should have a Ph.D. degree with training in biochemistry and/or molecular biology. Experience with GAG structural analysis is desirable. Send curriculum vitae to: **Elliot L. Chaikof, M.D., Ph.D., Emory University School of Medicine, Department of Surgery, 1635 Pierce Drive, 5105 WMB, Atlanta, GA 30322. FAX: 404-727-3660; e-mail: echaiko@emory.edu.**

Emory University is an Equal Opportunity/Affirmative Action Employer.

Cellular immunology **POSTDOCTORAL POSITION** available immediately to study the role of the costimulatory molecule Ox-40 (CD134) in CD4 T cell responses using transgenic and knockout models. Applicants should have a strong background in cellular techniques including tissue culture, cytokine assays, and flow cytometry. Also some molecular biology experience preferred. Ph.D. with no more than three years of experience sought. Send curriculum vitae and three references to: **Dr. Michael Croft, La Jolla Institute for Allergy and Immunology, 10355 Science Center Drive, San Diego, CA 92121. E-mail: mick\_croft@liai.org.**

## POSITIONS OPEN

A **POSTDOCTORAL POSITION** in microbial pathogenesis is available to investigate virulence mechanisms of *Moraxella catarrhalis*, an etiologic agent of otitis media in infants. Emphasis will be placed on characterization of *M. catarrhalis* gene products involved in the regulation of expression of virulence factors, especially surface proteins involved in attachment and serum resistance (see: *J. Bacteriol.* 181: 4026-4034, 1999). Experience with recombinant DNA techniques is required; this project makes extensive use of mutant analysis. Position includes salary, fringe benefits, and the opportunity to work in a dynamic research environment. Position available after January 1, 2000. Send curriculum vitae and the names and telephone numbers of three references to: **Dr. Eric J. Hansen, Department of Microbiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9048. FAX: 214-648-5905; e-mail: hansen01@utsw.swmed.edu. UT Southwestern is an Equal Opportunity/Affirmative Action Employer.**

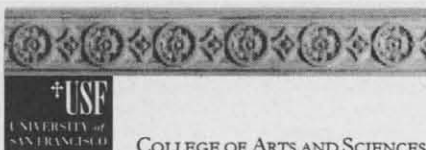
### POSTDOCTORAL FELLOWS

Four positions immediately available at University of Wisconsin-Madison in the laboratories of **Dr. Terry Oberley** and **Dr. James Malter**. Dr. Oberley seeks one individual with skills in cell and molecular biology and the other with training in cell biology and electron microscopy to study cell cycle progression and the role of oxidative stress. Dr. Malter seeks two motivated and independent individuals with training in molecular biology to identify novel early response genes in the central nervous system (see: *NAR* 27: 1464-72, 1999). Please provide the names of three references, a statement of research interests, and a curriculum vitae to: **Dr. James Malter, B4/263, UWHC, 600 Highland Avenue, Madison, WI 53792. FAX: 608-263-1568; e-mail: js.malter@uwmh.hosp.wisc.edu. UW/M are an Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** available immediately for individual with Ph.D. or M.D.-Ph.D. to participate in translational studies on the receptor-targeted radiotherapy and radiodiagnosis of breast cancer. Experience in *in vitro* and *in vivo* drug evaluation with background in radiohalide labeling of proteins and peptides desirable. Candidates must be U.S. citizens or permanent residents. Please send résumé, a letter describing research skills and interests, reprints of recent publications, and names of at least three references to: **Janina Baranowska-Kortylewicz, Ph.D., Department of Radiation Oncology, University of Nebraska Medical Center, 981050 Nebraska Medical Center, Omaha, NE 68198-1050. FAX: 402-559-9127.**

**POSTDOCTORAL FELLOWSHIP.** Johns Hopkins University School of Medicine. Available immediately to study genomic imprinting in normal development and cancer (see our papers: *Nature* 362:747-749, 1993; *Nature Genetics* 15:181-185, 1997; *Nature Medicine* 4:1276-1280, 1998; *PNAS* 96:5203-5208, 1999). Candidates should have a recent or pending Ph.D. in molecular biology or genetics with an outstanding record. Please send curriculum vitae, research statement, and names of three references to: **Dr. Andrew P. Feinberg, Institute of Genetic Medicine, Johns Hopkins University School of Medicine, Ross 1064, 720 Rutland Avenue, Baltimore, MD 21205.**

**POSTDOCTORAL/RESEARCH SCIENTIST** recruitment with experience in vector construction with genes expressing signaling proteins; dominant-negative and/or antisense constructs; transfection with mammalian, retroviral, and adenoviral vectors; assaying signal cascades by gel shift, reporter gene and kinase assays, and Northern and Western analyses. (Salary \$30,000 to \$40,000). Send curriculum vitae to: **Dr. Sheldon Rothenberg, SUNY-Downstate Medical Center, 450 Clarkson Avenue, Box #20, Brooklyn, NY 11203. FAX: 718-270-1578. U.S. citizen or permanent residency required. Affirmative Action/Equal Opportunity Employer.**



COLLEGE OF ARTS AND SCIENCES

## DEPARTMENT OF BIOLOGY

### Fletcher Jones Professor, Endowed Chair

The Department of Biology at the University of San Francisco invites applications for the **Fletcher Jones Chair in Biology**, endowed by the Fletcher Jones Foundation and to begin in Fall 2000. The successful applicant will be appointed to a tenure-track position at the rank of Associate or Full Professor. [Term appointment (non-tenure-track) will also be considered if appropriate. Renewal of a term appointment will be dependent on faculty review.]

**Department:** The Department of Biology offers Bachelor of Science degrees and has a small Master's degree program. The large majority of our undergraduate students are interested in post-graduate work in health and medical science related fields. Faculty interests include cell and molecular biology, genetics, immunology, ecology, marine biology, plant physiology and entomology.

**Teaching Responsibilities** may include introductory Biology courses for undergraduate majors (General Biology); and upper division courses in the field(s) of specialty. (Descriptions of the undergraduate Biology curriculum and current course offerings can be found at <http://www.usfca.edu/biology>.)

A tenure-track candidate will be expected to develop an independent and ongoing research program. Opportunities are available to supervise undergraduate research as well as Master's-level graduate students. (Please note: animal care facilities are not available.)

**Qualifications:** Distinguished scholarship and research record in area of specialty; established record of exemplary university teaching experience, especially at the undergraduate level; exceptional university, professional and community/public service; an earned doctorate; experience and willingness to work in a culturally diverse environment, and an understanding of and commitment to support the mission of the University are required.

**Applicants** should submit a letter of application, *curriculum vitae*, graduate transcripts, brief description of research plans, statement of teaching philosophy, evidence of teaching ability (including available student evaluations), and three letters of recommendation to: **Fletcher Jones Search Committee**, c/o Deneb Karentz, Chair, Department of Biology, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.

**Applications** must be received by **January 10, 2000** to ensure their full consideration.

*The University of San Francisco is a private, Catholic and Jesuit institution and particularly welcomes candidates who will positively contribute to such an environment. USF is an Equal Opportunity and Affirmative Action Employer, and will provide reasonable accommodations to individuals with disabilities upon request. We particularly encourage minority and women applicants for all positions.*



## Two Theoretical Neuroscience Faculty Positions Brown University Brain Science

Two tenure track faculty positions in the area of theoretical neuroscience have been created as part of the new Brain Science Program at Brown University. The **first position** (FP#FM464) is at the rank of Assistant Professor in the Department of Neuroscience, with a joint appointment in the Institute for Brain and Neural Systems. Applicants must have a Ph.D. or equivalent, formal advanced training in mathematics or physics, experience in experimental neurophysiology and the ability to teach theoretical Neuroscience courses. Research must involve mathematical analysis and modeling closely tied to experimental work on vertebrate nervous system function. Preference will be given to candidates whose research addresses the role of synaptic plasticity in learning and memory storage in the cerebral cortex.

The **second position** (FP#FM465) is at the Assistant or Associate Professor level (tenure-track or tenured). The appointment will be joint between the Division of Applied Mathematics and the Department of Neuroscience. Candidates must have a Ph.D. or equivalent, formal advanced training in mathematics or its applications, strong analytic skills and experience in experimental neurophysiology. Candidates must be prepared to teach courses both in the Division of Applied Mathematics and the Neuroscience Department. Research should involve mathematical analysis and modeling of nervous system function. Preference will be given to candidates whose research addresses higher level representation and computation in the cerebral cortex.

Candidates for assistant professor rank must have two or more years of postdoctoral research experience and the potential to carry out independent research, secure external research funding and be an effective teacher and mentor for undergraduate and graduate students.

Those at the associate professor rank must have proven effectiveness as a lecturer and mentor of graduate students and postdoctoral fellows. Demonstrated scholarly productivity through publication in peer-reviewed journals, a record of presentation at scientific meetings and research seminars, and an established program of research is also necessary. A national reputation for excellence in scholarship and a record of professional service to the scientific and academic community is required.

All applications received by December 1, 1999 will be given full consideration. Please specify position and level. Submit a curriculum vitae, a set of representative reprints, a concise description of research interests and goals, and the names of three (Assistant Professor) to five (Associate Professor) references to: Theoretical Neuroscience Search Committee, Box F - Attn: Janice D'Amico, Division of Applied Mathematics, Brown University, Providence, RI 02912, <http://neuroscience.brown.edu/Neuropage/bbs.html>

*Brown University is an Affirmative Action/Equal Opportunity employer.  
Women and minorities are encouraged to apply.*

## DIRECTOR TRANSLATIONAL RESEARCH FACILITY cGMP CLINICAL BIOLOGICS MANUFACTURING



The new Waisman Translational Research Facility (WTRF) at the University of Wisconsin-Madison's Waisman Center invites applications for a SENIOR SCIENTIST to serve as TECHNICAL DIRECTOR of a new pilot-scale biologics clinical manufacturing facility that will produce experimental gene therapy materials for Phase I and II human clinical trials. The facility is currently under construction and will be located in a new tower addition to the Waisman Center's existing building on the UW-Madison campus. Candidates should hold a Ph.D. in biochemistry, molecular biology, virology, biochemical engineering, or related field. The position requires a minimum of 7 years experience (2 years management level) in clinical biomedical manufacturing. Preference will be given to a candidate with hands-on experience in laboratory production environment that operates in compliance with current Good Manufacturing Practices (cGMPs) or related environment.

This is a high-level leadership position involving significant management and program development responsibilities. Ability to interface with federal agencies, academic clinical research scientists, and industrial entities is important. Please send a curriculum vitae and names of three references to: Screen Committee, Waisman Center, UW-Madison, Attn: Lisa D. Nanstad, Assistant Director/Expansion Programs, 1500 Highland Avenue, Madison, Wisconsin, 53705-2280, or [nanstad@waisman.wisc.edu](mailto:nanstad@waisman.wisc.edu). Recruitment deadline: Oct. 15, 1999. Anticipated start date: January 1, 2000.

UW-Madison is an Equal Opportunity and Affirmative Action Employer. Note: Unless confidentiality is requested in writing, information regarding applicants and nominees must be released upon request. Finalists cannot be guaranteed confidentiality.

## AMERICAN HEALTH FOUNDATION

has openings at all levels for research into the mechanisms of cancer development and cancer prevention by nutritional and other intervention strategies.



Areas of particular research interest: nutritional carcinogenesis; oxidative stress; environmental carcinogenesis; fatty acid metabolism; signal transduction; molecular epidemiology; cancer and aging; and clinical trials in nutritional intervention.

Candidates must meet the following requirements: Education (Ph.D., MD or equivalent); ability to direct and maintain an independent research program; independent support within 2 years; strong commitment to finding means to prevent cancer.

Successful applicants will be expected to maintain or eventually develop independent research programs. Special consideration will be given to candidates with strong backgrounds in molecular biology or molecular epidemiology.

AHF is a national cancer institute - designated cancer center located 20 miles north of New York City in Valhalla, NY in a suburban setting on a campus shared with the Westchester Medical Center and the New York Medical College.

Submit curriculum vitae to: Dr. Tony Albino, The American Health Foundation, One Dana Road, Valhalla, New York 10595 or email [talbino@aol.com](mailto:talbino@aol.com) EEO M/F/D/V/ADA

## POSITIONS OPEN

### INTERDISCIPLINARY PROGRAM IN MUSCLE BIOLOGY UNIVERSITY OF MARYLAND, BALTIMORE

**PRE- and POSTDOCTORAL POSITIONS** for training in biophysics, biochemistry, physiology, and cellular, developmental, and molecular biology of skeletal, cardiac, and smooth muscle.

Postdoctoral applicants should e-mail their letter of interest, curriculum vitae, and list of references to **e-mail: kreineck@umaryland.edu**. Predoctoral candidates should request an application via e-mail. *NIH-NLAMS-funded positions available for U.S. citizens and permanent residents only.*

Further information is available at **website: <http://www.som1.umaryland.edu/muscle/home.html>** or contact: **Dr. Martin Schneider, 108 North Greene Street, Baltimore, MD 21201. E-mail: mschneid@umaryland.edu.**

*The University of Maryland is an Equal Opportunity Educator and Employer.*

### TWO POSITIONS IN CANCER BIOLOGY

The Center for Cancer and Transplantation Biology (CTCB) in The Children's Research Institute is seeking applications for two **POSTDOCTORAL FELLOWS**. We are seeking individuals with research interest in tumor immunology or glycobiology to participate in a funded program focusing on the tumor-host interaction. Applicants must have a Ph.D. and a minimum of two years of postdoctoral experience, as well as demonstrated success or the potential to excel in teaching and advising graduate students and Research Assistants. *All candidates must be U.S. citizens or permanent residents.*

Interested candidates should submit a letter of interest including a brief summary of research interest/program, a curriculum vitae, and three references to: **Stephan Ladisch, M.D., Scientific Director, Children's Research Institute, Children's National Medical Center, 111 Michigan Avenue N.W., Washington, DC 20010. FAX: 202-884-3898; e-mail: sladish@cnmc.org.**

### POSTDOCTORAL POSITION IN HORMONES AND BEHAVIOR

Available immediately. Seeking individual interested in estrogen effects on the brain and emotional behavior. Expertise in neuroanatomy, immunocytochemistry, and image analysis required. Experience with molecular biological techniques would be an asset. Please send curriculum vitae to: **Rochelle S. Cohen, Ph.D., Department of Anatomy and Cell Biology, University of Illinois at Chicago, Chicago, IL 60612. E-mail: rscohen@uic.edu. UIC is an Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** is available immediately to study the molecular regulation of growth factor receptor gene expression during vertebrate skeletal muscle cell differentiation. The laboratory also investigates the cellular and molecular control of fiber type development via cell-cell interactions and signal transduction. Applicant must have experience in molecular biology, and a background in cell signaling is desired. Send curriculum vitae and names of three references to: **Dr. Joseph DiMario, Department of Cell Biology and Anatomy, FUHS/Chicago Medical School, 3333 Green Bay Road North, Chicago, IL 60664.**

**POSTDOCTORAL POSITION.** Project utilizes a unique multidisciplinary approach involving anatomy, molecular biology, and electrophysiology to probe the role of olfactory receptors in sensory processing. Candidate with anatomical and/or molecular biological expertise preferred; but an interest and research experience in sensory processing and/or receptor function also useful. Send curriculum vitae, and names, addresses of references to: **Dr. James E. Marchand, Departments of Pharmacology and Anesthesia, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111. E-mail: jmarchan@opal.tufts.edu.**

## POSITIONS OPEN

**POSTDOCTORAL FELLOWSHIPS** in genetic regulation of hematopoiesis at Yale University. *U.S. citizens and permanent residents with an interest in mechanisms of differential gene expression and cellular differentiation are invited to apply.*

**Nancy Berliner, e-mail: [nancy.berliner@yale.edu](mailto:nancy.berliner@yale.edu).** Characterization of the role of neutrophil-specific genes expressed during myeloid development. We propose to characterize the role of a novel Ca-signaling pathway expressed during early myelopoiesis in the differentiation and mature function of neutrophils.

**Bernard Forget, e-mail: [bernard.forget@yale.edu](mailto:bernard.forget@yale.edu).** The long-range goal of our studies is to identify and characterize the function in hematopoiesis of novel or known genes expressed in primitive hematopoietic stem cells.

**Archibald Perkins, e-mail: [archibald.perkins@yale.edu](mailto:archibald.perkins@yale.edu).** Transcriptional deregulation of normal myelopoiesis in leukemia. We are using cDNA microarrays to identify transcriptional changes induced by leukemogenic oncoproteins, specifically focusing on the leukemogenic zinc finger protein Evi-1.

Please send curriculum vitae and the names of three references to: **Nancy Berliner, M.D., Section of Hematology, Department of Medicine, Yale School of Medicine, WWW403, 333 Cedar Street, New Haven, CT 06510.** Or, alternatively, use the e-mail addresses listed above.

### POSTDOCTORAL POSITIONS IMMUNOLOGY AND CELL BIOLOGY

Several Postdoctoral positions are available immediately in the Laboratory of Immune Cell Biology (LICB) in the National Cancer Institute (NCI), National Institutes of Health (NIH). The focus of ongoing work is apoptosis and signal transduction, with special emphasis on these processes in T cell development and function. Applicants should have an M.D. or a Ph.D. Well-qualified applicants with a strong background in immunology and/or cell biology should send a curriculum vitae, bibliography, and three letters of reference to: **Jonathan D. Ashwell, Building 10, Room 1B-40, NIH, 9000 Rockville Pike, Bethesda, MD 20892. FAX: 301-480-1550; e-mail: [jda@box-j.nih.gov](mailto:jda@box-j.nih.gov). The NIH is an Equal Opportunity Employer.**

Applications are invited for a **POSTDOCTORAL POSITION** available immediately at the University of California, Irvine. We are seeking a Ph.D. with experience in the synthesis and purification of modified peptides with oral bioavailability. Send curriculum vitae and names of three references to: **Dr. Kelvin Gee, Department of Pharmacology, College of Medicine, University of California, Irvine, Irvine, CA 92697-4625.** For full description of this position see **website: [www.eod.uci.edu/cgi/ad/](http://www.eod.uci.edu/cgi/ad/)**. *UCI is an Equal Opportunity Employer committed to excellence through diversity.*

### POSTDOCTORAL POSITIONS

Postdoctoral positions available immediately to study viral transformation of lymphocytes via expression of bcl-2 family members. Experience in molecular biology and cell biology preferred. Send curriculum vitae and names of three references to: **Dr. William L. Marshall, Division of Adult Oncology, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. FAX: 617-632-4257; e-mail: [wmarshall@dfci.harvard.edu](mailto:wmarshall@dfci.harvard.edu). Equal Opportunity Employer.**

A **POSTDOCTORAL POSITION** is available to study the structure and function of genomic regions associated with apomixis in *Penisetum* species and relatives using a comparative physical mapping approach. Experience with basic molecular biology techniques and molecular cytogenetics is required. Send curriculum vitae and three letters of reference to: **Dr. Peggy Ozias-Akins, Department of Horticulture, University of Georgia Tifton Campus, P.O. Box 748, Tifton, GA 31793. E-mail: [ozias@tifton.cpes.peachnet.edu](mailto:ozias@tifton.cpes.peachnet.edu).**

## POSITIONS OPEN

### MOLECULAR IMMUNOLOGISTS

The Receptor Cell Biology Section of NIAID, NIH is recruiting for **POSTDOCTORAL FELLOWS** for studies on natural killer cell receptor expression and function, and the roles that  $\beta 1$  integrins and the hemochromatosis protein HFE play in the immune response. Salary commensurate with credentials and research experience.

Qualified and interested candidates should send curriculum vitae and three letters of references. For more information regarding these positions, contact:

**John E. Coligan, Ph.D.**  
Laboratory of Allergic Diseases  
Receptor Cell Biology Section  
NIAID/NIH/Twinbrook II, Room 205  
12441 Parklawn Drive  
Rockville, MD 20852 USA  
Telephone: 301-496-8247  
FAX: 301-480-9094  
E-mail: [jcoligan@niaid.nih.gov](mailto:jcoligan@niaid.nih.gov)

*NIH is an Equal Opportunity Employer.*

A Mayo Clinic **POSTDOCTORAL POSITION** with NIH Training Grant support is available for a Postdoctoral Fellow with an interest in the molecular mechanisms of liver cancer development. The project, which will be based in the laboratory of **David I. Smith, Ph.D.**, is a collaborative effort between the Division of Gastroenterology and Hepatology and the Cancer Genetics Program of the Mayo Comprehensive Cancer Center to study the role of chromosomal fragile sites in liver carcinogenesis. Ongoing studies include fragile site cloning, identification of genetic abnormalities in liver cancer, and discovery of gene targets in liver carcinogenesis. *Candidates must be a U.S. citizen or permanent resident and have an M.D. or Ph.D. degree.* Please send curriculum vitae and the names of three references to: **Lewis R. Roberts, M.D., Ph.D., Division of Gastroenterology and Hepatology, Mayo Clinic, 200 First Street S.W., Rochester, MN 55905. Telephone: 507-284-4823; e-mail: [roberts.lewis@mayo.edu](mailto:roberts.lewis@mayo.edu). Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.**

### POSTDOCTORAL RESEARCH POSITIONS IN MICROBIOLOGY

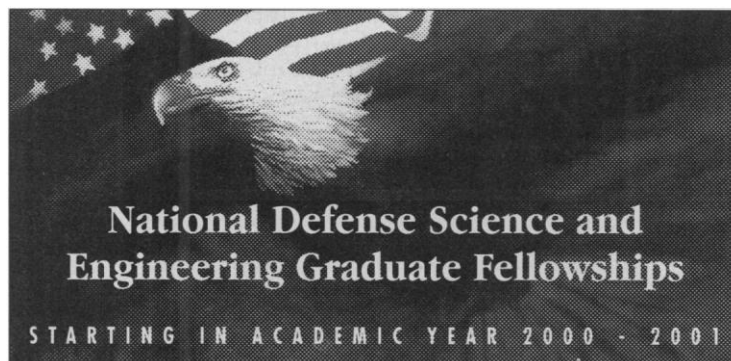
**American Society for Microbiology/  
National Center for Infectious Diseases**

Positions are available for Postdoctoral Scientists to conduct novel research with the overall objective of developing practical applications of microbiology, immunology, and epidemiology for diagnosis and prevention of infectious diseases. Associates will perform research in residence at the National Center for Infectious Diseases, which is headquartered at the Centers for Diseases Control and Prevention in Atlanta, Georgia.

Deadline for applications is November 15, 1999. **Website: <http://www.asmusa.org/edusrc/edu23e.htm>; e-mail: [fellowships-careersinformation@asmusa.org](mailto:fellowships-careersinformation@asmusa.org).**

**POSTDOCTORAL POSITIONS** open immediately to develop gene therapy approaches for treating rheumatoid arthritis and diabetes. Candidates with experience in virology, immunology, or animal models of disease are encouraged to apply. Please send curriculum vitae and names of three references to: **Paul D. Robbins, Ph.D., Department of Molecular Genetics and Biochemistry, University of Pittsburgh, School of Medicine, Pittsburgh, PA 15261. E-mail: [probb@pop.pitt.edu](mailto:probb@pop.pitt.edu).**

The Division of Digestive Diseases, The Ohio State University College of Medicine has positions open for **POSTDOCTORAL FELLOWS** who have obtained their Ph.D. in molecular biology, biochemistry, or physiology. Applicants must possess excellent communication skills in English. Please send curriculum vitae to: **Dr. Sundaram, Digestive Diseases, 410 West 10th Avenue, N214 Doan Hall, Columbus, OH 43210-1228. Telephone: 614-292-6828; FAX: 614-688-5706.**



As a means of increasing the number of U.S. citizens trained in disciplines of science and engineering of military importance, the Department of Defense plans to award approximately 90 new three-year graduate fellowships in April 2000. National Defense Science and Engineering Graduate Fellowships may be awarded for study and research in pursuit of doctoral degrees in, or closely related to, the following disciplines:

**AERONAUTICAL AND ASTRONAUTICAL ENGINEERING**  
**BIOSCIENCES** (Includes Toxicology)  
**CHEMICAL ENGINEERING**  
**CHEMISTRY**  
**COGNITIVE, NEURAL, AND BEHAVIORAL SCIENCE**  
**COMPUTER SCIENCE**  
**ELECTRICAL ENGINEERING**  
**GEOSCIENCES** (Includes terrain, water, and air)  
**MATERIALS SCIENCE AND ENGINEERING**  
*(Includes Manufacturing Sciences and Engineering)*  
**MATHEMATICS**  
**MECHANICAL ENGINEERING**  
**NAVAL ARCHITECTURE AND OCEAN ENGINEERING**  
**OCEANOGRAPHY**  
**PHYSICS** (Includes Optics)

National Defense Science and Engineering Graduate Fellows selected in 2000 will receive a stipend in addition to full tuition and required fees. The stipend amount starts at \$18,500.

**Recipients of 2000-2001 National Defense Science and Engineering Graduate Fellowships do not incur any military or other service obligation.**

Specific information regarding the fellowship and an application package are available from the American Society for Engineering Education, which is administering the program for the Department of Defense.

Additional information and an application are available from:

**NDSEG Fellowship Program**  
**ATTN: Jeff Jarosz**  
**American Society for Engineering Education**  
**1818 N St., NW, Suite 600**  
**Washington, DC 20036**  
**Phone: (202) 331-3516**  
**Fax: (202) 265-8504**  
**NDSEG@ASEE.ORG**  
**www.asee.org/ndseg**



Completed applications must be received by ASEE by January 19, 2000.

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## CLINICAL CONSULTANTS

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An extremely important position for us. An exceptional opportunity for you. You will be responsible for generating prescription demand and managing sales at the territory level. Specific responsibilities include building customer alliances, establishing and maintaining market leadership in assigned products, and achieving long-term sales objectives. To qualify, you must have 3-5 years of sales experience in the pharmaceutical/healthcare industry with an impressive track record of success. Excellent interpersonal, communication, and organizational skills are essential. Compassion and/or passion for HIV/AIDS work a must. **Job Code: CCMIT**

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**SERONO LABORATORIES, INC.**

**Job Code:** \_\_\_\_\_  
**100 Longwater Circle**  
**Norwell, MA 02061**  
**Fax: (781) 982-9612**



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## POSITIONS OPEN

### POSTDOCTORAL POSITION SENSORY SYSTEM SIGNAL TRANSDUCTION

Postdoctoral position available to study molecular mechanisms of proliferation and differentiation in the inner ear. Biochemical and molecular biologic approaches are used to study the signaling involved in hair cell regeneration and the regulation of potassium channel gene expression. Candidates should have a strong background in biochemistry and/or molecular biology. Please send curriculum vitae, statement of research experience, and names of three references to:

Dr. J. Carl Oberholtzer

Department of Pathology and Laboratory

Medicine, 264JMB

University of Pennsylvania School of Medicine

3620 Hamilton Walk

Philadelphia, PA 19104

FAX: 215-573-7738

E-mail: oberholt@mail.med.upenn.edu

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

### GENE THERAPY

Higuchi Biosciences Center at the University of Kansas has two **POSTDOCTORAL POSITIONS** available: (1) Work in the characterization and mechanism of action of nonviral gene delivery vehicles. Experience in the macromolecular physical biochemistry of proteins, or preferably polynucleotides, is desirable. Specific expertise in spectroscopy (FTIR, CD, fluorescence, light-scattering, etc.) and/or calorimetry are a plus. (2) Participate in the development of novel, polymer-based nonviral gene delivery agents. Experience in synthetic organic chemistry with particular expertise in the synthesis of polymers including peptides, is desired.

To apply for both positions, send curriculum vitae and three references to: C. Russell Middaugh, Ph.D., University of Kansas, 2099 Constant Avenue, Lawrence, KS 66047. E-mail: middaugh@ukans.edu. Review of applications will begin October 1, 1999. Position will remain open until filled. *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available immediately to study signal transduction underlying plastic events in the auditory brain stem structures following cochlear lesions. Ph.D. degree in biochemistry/molecular biology/neuroscience/pharmacology is required. Techniques include microdissection, tissue lysis, Western blotting, efflux assays, receptor binding, and immunohistochemistry. Send résumé, and two (2) letters of recommendation to: Dr. Steven J. Potashner, Professor, Department of Anatomy, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3405. E-mail: sjp@neuron.uchc.edu.

## GLOBAL OPPORTUNITIES

### FACULTY POSITION AVAILABLE BEN-GURION UNIVERSITY OF THE NEGEV

Faculty of Health Sciences

The Department of Virology, Faculty of Health Sciences of Ben-Gurion University of the Negev, Beer-Sheva is seeking candidates for two tenure-track faculty positions. One of the positions is for Clinical Virologist and the second is for Molecular Virologist. Applicants should hold a Ph.D. or M.D. degree and have postdoctoral experience. The successful candidates will be expected to develop a vigorous research program and teach virology courses for undergraduate and graduate students in the various schools in the faculty. A curriculum vitae, list of publications, and a brief research program should be sent to: Prof. Yoram Grossman, Chairman, Division of Basic Sciences, Faculty of Health Sciences, Ben-Gurion University, Beer-Sheva 84105 Israel no later than November 15, 1999. At least four letters of recommendation should be sent to the same address, or to FAX: 972-7-6477628.

## POSITIONS OPEN

**POSTDOCTORAL POSITION.** Position is available in the laboratory of Dr. Vincent A. Guacci at Fox Chase Cancer Center to study sister chromatid cohesion, chromosome condensation, and cell cycle progression during mitosis in budding yeast. The project will employ genetic, cell, and molecular biology techniques. Applicants should be motivated individuals with a fascination for biological processes and the desire to work independently. Fox Chase has excellent shared core facilities and provides a stimulating, interactive scientific environment. Interested applicants, please submit résumé to: Dr. V. A. Guacci, c/o Human Resources, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. E-mail: va\_guacci@fccc.edu; Telephone: 215-728-5632; FAX: 215-728-3616. *Equal Opportunity Employer.*

### POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER

To examine the mechanism of action of GM-CSF in regulating the growth, differentiation, and malignant transformation of hematopoietic cells. Potential for use of yeast and ES cells. Strong background in molecular/cellular biology is required. Please send curriculum vitae to: Dr. Andrew S. Kraft, Chief, Division of Medical Oncology, 4200 East 9th Avenue, Denver, CO 80262. FAX: 303-315-5502.

## GLOBAL OPPORTUNITIES

### RESEARCH FELLOW POSITIONS INSTITUTE OF MOLECULAR BIOLOGY ACADEMIA SINICA, TAIWAN, ROC

Institute of Molecular Biology (IMB) is an expanding, stimulating research institute. Tenure-track positions for Research Fellows are now available for outstanding individuals to establish innovative research programs in any area of genetics, molecular/cell biology. Applicants should have a Ph.D. degree and at least two years of postdoctoral experience.

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Deadline for application is October 31, 1999. First-round candidates will be selected by November 30, 1999. The interview process and final decision are expected to be completed by March 2000.

Interested individuals should send curriculum vitae, a description of past research accomplishments and future research interests, and three letters of reference by October 31, 1999, to: Director's Office, Institute of Molecular Biology, Nankang, Taipei 11529 Taiwan, ROC. FAX: 886-2-2788-4177.

### POSTDOCTORAL POSITIONS

Several Postdoctoral positions in the Institute of Molecular Biology, Academia Sinica are available immediately. Projects include *Drosophila* gene regulation and development; X-ray analysis of protein-DNA complexes; virus entry and host cell response; plant signaling; RNA decay and mammalian growth arrest genes; oncogenes/cell-cycle control; T cell activation, integration, and modulation; structure and function of chaperon protein; structure and function of protein methylases; and gene therapy of DNA methylation in eukaryotic development.

Salary US\$23,000 to \$27,000 per annum. Please send a cover letter specifying project(s) interested, a curriculum vitae, and three letters of reference by mail or FAX to: Search Committee, c/o Fei Chen, Institute of Molecular Biology, Academia Sinica, Nankang, Taipei 11529 Taiwan, ROC. FAX: 886-2-2782-6085; e-mail: feichen@ccvax.sinica.edu.tw; website: <http://www.sinica.edu.tw/imb>.

## GRANTS

### GRANTS FOR RESEARCH AND WRITING

The Program on Global Security and Sustainability of the John D. and Catherine T. MacArthur Foundation announces an annual competition for Grants for research and writing. Grants are available for research and writing projects in any academic discipline or profession that promise to illuminate the dynamics of international security and sustainability. Projects to be carried out by individuals and by two-person teams are eligible for support. Projects related to research or writing of the Doctoral dissertation are not eligible for awards. Applicants may request up to \$75,000 for individual projects, and \$100,000 for two-person collaborations. Applications must be received by February 1, 2000, to be considered, and Grant awards will be announced in October 2000. Projects may be scheduled to begin as early as October 15, 2000.

For further information about the Research and Writing Grants and a brochure describing how to apply, please contact the Program on Global Security and Sustainability at:

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**Dystonia GRANTS.** One-year grants of \$35,000 focusing on genetics, treatments, and studies of torsinA biology related to dystonia are available from: The Dystonia Medical Research Foundation, One East Wacker Drive, Suite 2430, Chicago, IL 60601. Telephone: 312-755-0198; FAX: 312-803-0138; e-mail: [dystonia@dystonia-foundation.org](mailto:dystonia@dystonia-foundation.org). Application deadline is December 30, 1999.

## COURSES & TRAINING

**SHORT COURSE ON TIME-RESOLVED FLUORESCENCE SPECTROSCOPY.** The Center for Fluorescence Spectroscopy, at the University of Maryland School of Medicine, is offering a Short Course on principles and applications of time-resolved fluorescence spectroscopy in Baltimore, March 20-24, 2000. The course will cover basic and advanced topics in fluorometry, including time and frequency-domain measurements, and Förster energy transfer. Advanced topics include chemical sensing, imaging, fiber optics, infrared fluorometry, two-photon excitation, instrumentation, confocal and multiphoton microscopy, protein fluorescence, DNA technology, high-throughput screening, metal-ligand probes, and immunoassays. Textbook, course materials, lunches, and refreshments will be provided. For further information, a schedule, and fees, please contact: Ms. Mary Rosenfeld or Prof. J. R. Lakowicz, The Center for Fluorescence Spectroscopy, Department of Biochemistry and Molecular Biology, 725 West Lombard Street, Baltimore, MD 21201. Telephone: 410-706-8409; FAX: 410-706-8408; e-mail: [cfs@cfs.umbi.umd.edu](mailto:cfs@cfs.umbi.umd.edu); website: <http://cfs.umbi.umd.edu>. Deadline for enrollment is February 1, 2000, with later enrollment if space permits.

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## FELLOWSHIPS

### CAMILLE AND HENRY DREYFUS POSTDOCTORAL FELLOWSHIP IN ENVIRONMENTAL SCIENCE AT MIT

The Massachusetts Institute of Technology (MIT) has been awarded a Postdoctoral Fellowship by the Dreyfus Foundation, which will enable a Ph.D. Chemist or Chemical Engineer to carry out interdisciplinary research in environmental science. A wide range of research topics is available to interested candidates including atmospheric chemistry, environmental monitoring, studies of transport and transformations of toxic chemicals, and environmentally sustainable chemical manufacturing. In addition to his or her primary research activities, the Postdoctoral Fellow will participate actively in interdisciplinary environmental seminars and teaching programs at MIT. The Fellow will possess a Doctorate specifically in chemical science or engineering but will not be expected to have expertise in environmental science. The salary is \$35,000 for the first year, renewable for one additional year by mutual agreement among the Fellow, the Faculty Supervisor, and the Dreyfus Foundation. A supplementary research allowance of \$5,500 per year is available. A selection committee will review applications received by November 15, 1999. Applications, including a curriculum vitae, publication record, statement of specific research interests, and recommendation letters, should be sent to: **Professor P. M. Gschwend, Department of Civil and Environmental Engineering, 48-415, MIT, Cambridge, MA 02139.** *MIT is an Equal Opportunity/Affirmative Action Employer and encourages applications from minorities and women.*

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Deadline: January 15 annually. Contact: **Office of Fellowships and Grants, Smithsonian Institution, Desk S, Washington, DC 20560-0902.** Telephone: 202-287-3271; e-mail: [siofg@ofg.si.edu](mailto:siofg@ofg.si.edu); website: [www.si.edu/research+study](http://www.si.edu/research+study). *An Equal Opportunity Employer.*

**Dystonia FELLOWSHIP.** A two-year Fellowship of \$50,000 per year focusing on genetics, treatments, and studies of torsinA biology related to dystonia is available from: **The Dystonia Medical Research Foundation, One East Wacker Drive, Suite 2430, Chicago, IL 60601.** Telephone: 312-755-0198; FAX: 312-803-0138; e-mail: [dystonia@dystonia-foundation.org](mailto:dystonia@dystonia-foundation.org). Application deadline is December 30, 1999.

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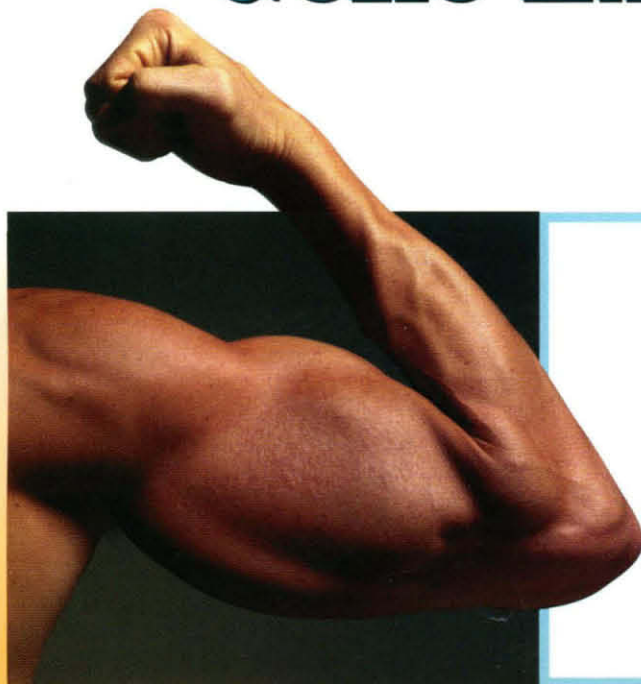
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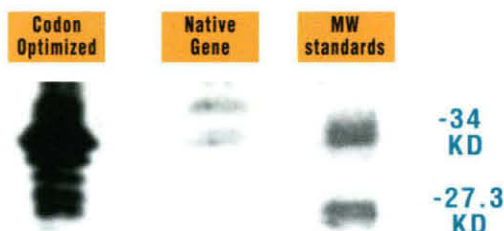
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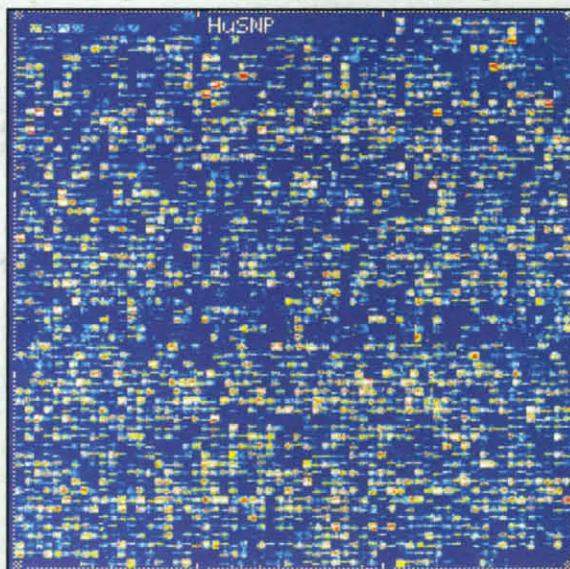
Ref:

1. Wang, D.G. et al. Large-scale identification, mapping and genotyping of single-nucleotide polymorphisms in the human genome. (1998) *Science* 280, 1077-1082.
2. Kruglyak L., The use of a genetic map of biallelic markers in linkage studies. (1997) *Nature Genetics* 17, 21-24.

<sup>†</sup>The Polymerase Chain Reaction (PCR) process is covered by patents owned by Roche Molecular Systems, Inc. and F. Hoffman-La Roche Ltd. Use of the PCR process requires a license. A license for research use may be obtained by purchase and use of authorized reagents and authorized thermocyclers, or by otherwise negotiating a research license with Perkin-Elmer.

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