

## DISPLAY CLASSIFIED ADVERTISEMENTS

Call for rate and deadline information on display classified advertisements.

E-mail: science\_displayads@aaas.org

Bren Peters  
Recruitment Display Advertising  
Telephone: (202) 326-6541  
FAX: (202) 289-6742  
E-mail: science\_displayads@aaas.org

Gabrielle Boguslawski  
Recruitment Advertising Sales Manager  
Telephone: (718) 491-1607  
FAX: (202) 289-6742

Debbie Cummings  
European Recruitment Advertising  
Telephone: +44 (0) 1223 302067  
FAX: +44 (0) 1223 576208  
E-mail: european\_ads@science-int.co.uk

## LINE CLASSIFIED ADVERTISEMENTS

### How to Submit a Line Classified Ad:

Send your ad text to: e-mail: science\_classifieds@aaas.org; fax: (202) 289-6742. You must include your telephone number, billing address, and purchase order number in your e-mail or fax. Do not bold, italicize, or abbreviate any words. SCIENCE will edit and typeset ads according to SCIENCE style. SCIENCE cannot provide proofs of typeset line ads. Available categories: Positions Open, Meetings, Announcements, and Courses and Training. Line advertisements are not commissionable.

**Estimates:** SCIENCE will provide a cost estimate for line ads. **This is an approximate cost only.** Purchase orders must allow for variation between estimated lines and actual typeset lines and resulting final cost.

For line advertising deadlines, call Eric Banks, Telephone: (202) 326-6555; or Troy Benitez, Telephone: (202) 326-6740; FAX: (202) 289-6742. E-mail: science\_classifieds@aaas.org

**Credit Cards:** SCIENCE accepts American Express, MasterCard and VISA. Discount does not apply to credit cards.

**Cancellations:** Deadline for cancellation is Tuesday, 10 days prior to issue date.

**Discounts:** A 3% cash discount is granted to all prepaid ads.

**Ads from Outside the U.S.:** A discount of \$30 will be offered to advertisers making payment in U.S. dollars by checks drawn on U.S. banks. Contact Debbie Cummings. Telephone: +44(0) 1223 302067; FAX: +44(0) 1223 576208.

**SCIENCE Professional Network:** Unless otherwise instructed, all classified advertisements submitted for publication in SCIENCE are automatically posted on SCIENCE's online classified advertising service, SCIENCE Professional Network, at no additional charge.  
www.sciencemag.org

### Mail, FAX or E-mail materials to:

SCIENCE Classified Advertising  
1200 New York Avenue, N.W., Room 911  
Washington, DC 20005  
FAX: 202-289-6742  
E-mail: science\_classifieds@aaas.org (please include your telephone number in e-mail)

SCIENCE reserves the right, at its discretion, to edit or decline to publish advertisements submitted to it.

## POSITIONS OPEN

### CHAIR DEPARTMENT OF MICROBIOLOGY AND MOLECULAR CELL SCIENCES

The University of Memphis invites applications and nominations for the position of Chair of the Department of Microbiology and Molecular Cell Sciences. Minimum qualifications include the Ph.D. degree and academic qualifications commensurate with the academic rank of Professor of microbiology and molecular cell sciences. The candidate's area of research specialization may be in biochemistry, cell biology, developmental biology, microbiology, or molecular biology. We seek an individual with a distinguished record of performance in research, grantsmanship, and teaching with potential or demonstrated abilities to lead and manage a newly formed academic department. The candidate will be expected to participate in undergraduate and graduate education and therefore must be committed to excellence in teaching. The applicant should also possess interpersonal and leadership skills in mentoring faculty, directing students, and performing administrative duties. The department offers a B.S. degree in microbiology and molecular cell sciences, and M.S. and Ph.D. degrees in biology with concentrations in microbiology or molecular cell sciences. The department's website address is <http://www.people.memphis.edu/~microcell/mmcs.html>.

Review of applications will begin January 7, 1998, and continue until the position is filled. Applicants should submit their curriculum vitae, a statement addressing administrative philosophy and research interests, and at least three letters of recommendation to: Search Committee Chair, Department of Microbiology and Molecular Cell Sciences, Campus Box 526041, The University of Memphis, 201 Life Sciences Building, Memphis, TN 38152-6041. E-mail: [bjtaller@memphis.edu](mailto:bjtaller@memphis.edu).

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

### FACULTY POSITION KANSAS STATE UNIVERSITY

The Department of Anatomy and Physiology invites applications for a tenure-track faculty position at the ASSISTANT PROFESSOR level (80 percent research, 20 percent teaching). Preference will be given to candidates whose research interest complement departmental programs in cardiovascular physiology, immunophysiology, or neurobiology. Candidates with expertise in cell signaling are especially encouraged to apply. The appointee will be expected to develop a graduate-level course related to their research interests, and contribute to one of our team-taught courses for veterinary students. Applicants should have postdoctoral experience, a strong publication record, and an extramurally funded research program; D.V.M. and/or Ph.D. required. Position available July 1, 1998.

Applications should include a curriculum vitae, a statement of research and teaching interests, addresses of three references, and reprints of three representative publications. Applications will be received until February 15, 1998, or until the position is filled. Send application to: Dr. Jon D. Dunn, Professor and Department Head, Department of Anatomy and Physiology, College of Veterinary Medicine, VMS 228, Kansas State University, 1600 Denison Avenue, Manhattan, KS 66506-5602. *Kansas State University is an Equal Opportunity Employer/Affirmative Action Employer.*

### DEVELOPMENTAL GENETICS/ GENE TARGETING UNIVERSITY OF KANSAS MEDICAL CENTER

The Department of Molecular and Integrative Physiology is seeking to fill a tenure-track faculty position with an outstanding individual utilizing gene targeting strategies to investigate important biological problems. Applicants should possess a Ph.D. or M.D. degree and significant postdoctoral training. The successful candidate will have an opportunity to participate in strong interactive programs in neuroscience, reproductive and developmental biology, and cancer research. Please send: a statement of future research plans, curriculum vitae, and three letters of recommendation to: Chair, Faculty Search Committee, Department of Molecular and Integrative Physiology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160. Applications will be reviewed as soon as they are received and will be accepted until January 15, 1998, or until the position is filled.

*An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### DEAN OF THE GRADUATE SCHOOL/ ASSOCIATE VICE-PROVOST FOR RESEARCH AND GRADUATE STUDIES Clemson University

Clemson University, South Carolina's land-grant university, invites applications and nominations for the position of Dean of the Graduate School and Associate Vice-Provost for Research and Graduate Studies who will report to the Chief Research Officer and Senior Vice Provost for Research and Graduate Studies. The university seeks an innovative and dynamic leader with demonstrated administrative and interpersonal skills, a strong research and teaching background, and the ability to attract graduate students and resources to a comprehensive and diverse Graduate School. The successful candidate must have an earned doctorate and be tenurable within an academic unit of Clemson University. Salary will be competitive. Nominations should include the name and address of the nominee and a letter discussing the qualifications of the nominee for this position. Applicants should submit a letter of interest, a statement of graduate leadership philosophy, and a résumé with names, addresses, telephone numbers, and e-mail addresses of five references to: Dr. N. H. Ferguson, Chair, DGS Search Committee, 300 Brackett Hall, Clemson University, Clemson, SC 29634-5701. Telephone: 864-656-3510; FAX: 864-656-3443; e-mail: [nfrgsn@clemson.edu](mailto:nfrgsn@clemson.edu). A more detailed ad is at website: <http://people.clemson.edu/groups/humanres>.

Review will begin January 15, 1998, and continue until the position is filled. Preferred starting date is July 1, 1998.

*Clemson University is an Equal Opportunity/ADA/Affirmative Action Employer, and strongly encourages applications from minorities and women.*

### HEAD OF BIOMOLECULAR ANALYSIS FACILITY THE BURNHAM INSTITUTE, LA JOLLA

We are seeking a dedicated individual with a pioneering spirit to manage and direct our core service to analyze macromolecules. The facility is widely used by principal investigators at the Institute and contains the following equipment:

Kratos MALDI-I—for protein identification via tryptic peptide mapping as well as large and small glycoconjugates and modified proteins.

BiaCore 1000 Plasmon Resonance Instrument—for measuring kinetic aspects of protein-protein, nucleic acid-protein, and protein-carbohydrate interactions.

AVIV Circular Dichroism Spectrometer—to analyze molecular conformation of biomolecules in solution.

Qualifications: Ph.D. or M.S. with substantial hands-on experience, and technical mastery of MALDI as indicated by publications in the field, along with a working knowledge of the other technologies. High level of organizational, communication, and interpersonal skills are required on a daily basis.

If you qualify and are interested in maintaining the service, but also have a vision for its future development, please send curriculum vitae and a list of at least three references to: Sherri Marinovich, Director of Human Resources, The Burnham Institute, 10901 North Torrey Pines Road, La Jolla, CA 92037. *Equal Opportunity Employment.*

### CREIGHTON UNIVERSITY FACULTY POSITION PHARMACOLOGY

The Department of Pharmacology, Creighton University School of Medicine, invites applicants for a tenure-track position. Applicants should have a Ph.D. in pharmacology, or related discipline, and at least two years of postdoctoral experience. Candidates must show productivity in research, and will be expected to support research by extramural funding. Candidates also must show a proficiency in teaching. Current research interests in the Department include cardiovascular, renal, and exocrine pharmacology; adrenergic, purinergic and peptidergic receptors; ion channels; and molecular pharmacology. Send an outline of future research plans, curriculum vitae, and the names of four references by January 15, 1998, to:

Dr. Frank Dowd, Chairman  
Department of Pharmacology  
Creighton University  
Omaha, NE 68178

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

# Astra Bioinformatics Center

## Director, Bioinformatics

We are seeking an innovative, dynamic individual with strong leadership qualities to work closely with research leaders both inside and outside of Astra to build pre-eminent bioinformatics and genomic capabilities for scientists throughout our worldwide organization. The successful candidate will have a Ph.D. in the Biological Sciences and a minimum of 10 years' experience supporting pharmaceutical discovery with bioinformatics and cheminformatics.

## Bioinformatics Scientists

Working in close collaboration with laboratory scientists, you will use your strong record of success in computational applications in the biological sciences, and your broad understanding of computer technology to identify novel therapeutic targets. Specific activities will include evaluating new algorithms, implementing new computational tools, and database mining. A Ph.D. in the Biological Sciences and a minimum of 5 years' relevant experience are required.

## Cheminformatics Scientists

In this key position, you will use your strong background in computational applications in chemistry and pharmaceutical discovery to identify, develop, and implement computer systems to support the drug identification and refinement process. A Ph.D. in Chemistry or the Biological Sciences, a minimum of 5 years' relevant experience, and a broad understanding of computer technology are required.

## Bioinformatics System Integrators

The ideal candidate will bring a strong record of success in designing, developing, and integrating computer systems for bioinformatics and/or cheminformatics. In addition, a BS/MS in Computer Science and a minimum of 5 years' relevant experience are required.

**A**s an influential international presence in the research and development of pharmaceuticals and novel therapies, Astra continues to expand its leadership position. We have focused our efforts and increased our commitment to the biotechnology arena in an effort to bring to market therapies that improve human health and the quality of life. With over \$5 billion in sales and more than 20,000 employees worldwide, we are currently directing our attention to a variety of key treatment areas — from gastrointestinal, respiratory, and cardiovascular diseases, to pain control, diseases of the central nervous system, and anti-infectives.

To enhance our performance and ensure optimal results, we are making major, ongoing investments in biotechnology and genomics as part of our biotechnology strategy. The result has been significant development in areas such as high throughput compound screening, bioinformatics, biotech protein production, structural chemistry, and transgenic animal models. The philosophy behind our strong forward momentum is to integrate the newest technologies into our research in order to ensure long-term, in-house knowledge and expertise in these areas, enhancing our capacity to import exciting new technological advances and critically manage ongoing research and business collaborations.

Astra Bioinformatics Center, now located in Cambridge, MA, is rapidly expanding, providing accelerated and enhanced information transfer to our colleagues throughout the world. The project is quickly assuming an increasingly important role in supporting our search for new therapeutic targets, drug screening, and genetic understanding.

Astra Bioinformatics Center offers excellent opportunities for professionals to shape the future of this key resource for pharmaceutical discovery. You will play an influential role in directing our focus and growth, and have the resources of a global pharmaceutical leader behind you. The work you do will facilitate research and development projects at Astra facilities throughout the world while providing major contributions to the global knowledge base. Further, Astra Bioinformatics Center will be located on a new campus for Astra Research Center Boston in the year 2000.

For professionals who are serious about their careers and about their contributions, Astra offers you the tools and the opportunities to exercise your expertise in a role that will shape the future...yours and ours.

Qualified candidates, please send your C.V., indicating appropriate position, to:  
**Astra Research Center Boston, Human Resources, 128 Sidney Street,  
Cambridge, MA 02139; FAX: (617) 576-4668.**

*Pursuing knowledge through the power of equal opportunity.*

# ASTRA

ASTRA BIOINFORMATICS

CENTRE

Dade Behring, the result of Dade International recently merging with the Behring Diagnostics unit of Hoechst AG, has established itself as a global power. We now have a sales base of \$1.5 billion, the broadest line of products and services for laboratories and hospitals available, and facilities in 22 countries. We're now seeking driven, talented professionals in our Glasgow facility in Newark, Delaware, to help us achieve our next goal - creating diagnostic information that leads to better patient care. Period.

### CHEMISTS/SR. CHEMISTS

Successful candidate will lead all aspects of technical effort to design and commercialize arrays for use on Dade International automated clinical analyzers. Qualifications are a Ph.D. in Biochemistry, Immunochemistry, Chemistry or related field. Postdoctoral experience in Clinical Chemistry is desirable but not required.

### ORGANIC CHEMISTS

Successful candidates will develop synthetic processes for compounds necessary for the research and development of medical diagnostic products. Qualifications are a Ph.D. in Organic Chemistry. Postdoctoral experience in Organic Chemistry is desirable but not required.

### ANALYTICAL CHEMISTS

Successful candidates will develop analytical procedures for components used in the research and development of medical diagnostic products. Qualifications are a Ph.D. in Analytical / Inorganic / Physical Chemistry. Postdoctoral experience in these fields is desirable but not required.

### IMMUNOLOGIST/IMMUNOCHEMIST ANTIBODY DEVELOPMENT

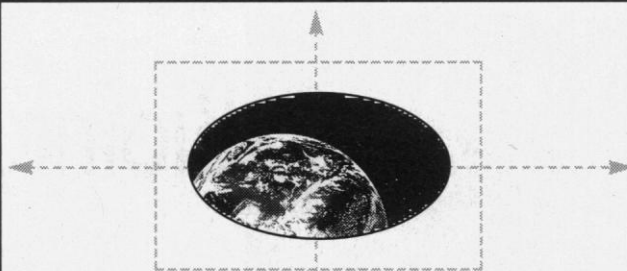
Successful candidates will develop monoclonal antibody producing cell lines for use in research and development of medical diagnostic products. Qualifications are a Ph.D. in Immunochemistry, Biochemistry or related field. Experience in mammalian cell culture, ELISA and RIA techniques are required. Postdoctoral experience is desirable but not required.

### POLYMER/FORMULATIONS CHEMIST

Successful candidates will develop polymer layers and formulations for planar sensor arrays for use in medical diagnostic instrumentation. Qualifications are a Ph.D. in Organic Chemistry, Polymer Chemistry or related field. Postdoctoral experience is highly desirable and preference will be given to candidates with experience in sensor development.

Dade offers an excellent salary and benefits package. For consideration, please send your resume with salary history: **Dade Chemistry Systems, Human Resources (Box 517), P.O. Box 6101, Newark, DE 19714, Attn: Pat Heegard or FAX: 302-451-0348.** Dade is an Equal Opportunity Employer offering an excellent compensation and benefits package.

**DADE**  
DADE INTERNATIONAL



**We're redefining the way the world  
looks at life sciences.**

**We're the new life  
sciences company at Monsanto.**

And we're even more focused on the future. That's why our entire organization, from agricultural biotechnology to pharmaceuticals to food ingredients, is dedicated to life sciences. Now, we can answer the questions, needs and demands of our ever-changing planet. After all, the world's resources are finite, but our vision for the future is limitless.

### Group Leader - Plant Molecular Biochemistry/Functional Genomics

You'll lead a genetic engineering team focused on improving the nutritional characteristics of plant seed. This involves setting strategic technical direction, budgeting and planning resources, mentoring laboratory personnel and effectively communicating the team's progress to management.

We require a Ph.D., postdoctoral training and an additional 3+ years of experience in academic laboratory leadership or industrial research. Knowledge of molecular genetics, biochemistry and functional genomic technology is essential, as are excellent communication skills. The ability to work productively in a team-based environment is also required. (Job #GL1)

### Protein Biochemist

You'll be responsible for enzyme characterization and metabolic engineering. A Ph.D. with postdoctoral experience is required. (Job #PB2)

### Plant Molecular Biochemist

You'll engineer seed nutritional characteristics including macro- and micronutrients. We require a Ph.D. and postdoctoral experience. (Job #PMB3)

### Molecular Biologist

You'll be responsible for gene engineering and expression analysis. We require a Ph.D. and postdoctoral experience. (Job #MB4)

### Arabidopsis Plant Physiologist/Plant Handler

We require a BS/MS with at least 1 year of research experience. (Job #APP5)

### Biochemist

You'll be responsible for kinetic studies, purification and assay development. An MS is required. (Job #B6)

### Molecular Biologist

You'll be responsible for gene cloning, vector construction, PCR and expression analysis. We require a BS/MS with 2+ years of laboratory experience. (Job #MB7)

For an opportunity in St. Louis, MO, or Middleton, WI, please submit your resume, a list of publications, and the names of three references to: **The Monsanto Company, Job Code: \_\_\_\_\_ (select from above), Mail Zone O3E, Attn: BAS, 800 N. Lindbergh Blvd., St. Louis, MO 63167. E-mail: NCP.bio.jobs@monsanto.com, EEO/AA Employer M/F/D/V.** Please visit our website at [www.monsanto.com](http://www.monsanto.com).

**Monsanto**



# Macromolecular Crystallographers

## *in UK and USA*

SmithKline Beecham is a leader and an innovator in genome-based pharmaceutical research and development. Following the successful implementation of a major genetics initiative, we are now embarking on a planned, phased expansion of our crystallographic capabilities with the creation of a new transnational Department of Structural Biology. In the UK, the Department is establishing a macromolecular crystallography group while in the USA, the group is expanding. As a result of this expansion we have opportunities in both the UK & the USA for macromolecular crystallographers.

### Senior Crystallographers

With a PhD in a relevant discipline and at least two years' postdoctoral experience and five years' or more academic or industrial experience in the area of macromolecular crystallography, you will have demonstrated creativity and productivity as evidenced by a strong relevant publication record. **Ref: NB/BIP/021** for UK positions; **H7/SALH/1** for USA positions.

### Crystallographers

You must have a PhD in a relevant discipline with at least two years' postdoctoral experience. **Ref: NB/BIP/022** for UK positions; **H7/SALH/2** for USA positions.

All candidates must have a strong background in the practical aspects of macromolecular crystallography, including crystallisation, data acquisition, structure solution and refinement and molecular modelling. Successful candidates are expected to initiate research programmes in the crystallography of proteins of therapeutic interest including recombinant human proteins, receptors and enzymes.

The provision of high-quality structural information on these targets is an integral part of the collaborative efforts between Crystallographers, Computational Chemists and Medicinal Chemists engaged in the knowledge-based design of pioneer therapeutic agents. Clearly, the ability to work effectively in multi-disciplinary teams is essential.

In the USA, our research facility is equipped with area detectors, rotating anode generators, an extensive network of computers and modern graphic systems. We are located in suburban Philadelphia, near Valley Forge, PA. In the UK, a laboratory similar to that in the USA is currently being equipped and is based at the New Frontiers Science Park in Harlow. Both are state-



of-the-art facilities, offer superb working environments and represent SB's commitment to drug discovery.

The transnational macromolecular crystallography group will have access to the 7 GeV Advanced Photon Source (APS) synchrotron through membership of the Industrial Macromolecular Crystallography Association (IMCA).

Salary and benefits reflect the influential and growing contribution we expect you to make to our future and benefits include bonus, pension and medical plans, share-matching scheme, profit-related pay, flexible working hours, subsidised restaurant, superb sports and social facilities and, where applicable, a comprehensive relocation package.

For confidential consideration, please send your CV with the names of three references and quoting the appropriate reference on both the letter and envelope, to:

For UK positions: The UK Recruitment Manager, SmithKline Beecham Pharmaceuticals, c/o A.E.P., 41 Birkdale Drive, Stoke-on-Trent, Staffs ST7 4SL.

For USA positions: SmithKline Beecham Pharmaceuticals, PO Box 2645, Bala Cynwyd, PA 19004, USA.

Closing date: 5th January 1998. Please provide contact details for the New Year period and availability for interview from w/c 26th January 1998. For more information on SmithKline Beecham visit our web site at <http://www.sb.com>

It is part of our fundamental philosophy at SmithKline Beecham that we recruit, train, develop, reward and promote persons in all job areas solely on the basis of qualifications, skills, abilities and aptitudes. Decisions based on race, colour, age, religion, sex, sexual orientation, disability, ethnicity or national origin are unacceptable to the Company.

***New Frontiers for Healthcare***



**SB**  
**SmithKline Beecham**  
Pharmaceuticals  
Research & Development



**A new global leader in  
pharmaceuticals is born.**

Innovative. Progressive. Responsive. This best describes our philosophy at Novartis Pharmaceuticals Corporation. Resulting from the merger of Ciba and Sandoz, Novartis is now the largest pharmaceutical company in the world. And we will continue to grow by discovering, researching, developing and manufacturing innovative prescription drugs that treat a wide variety of diseases and conditions (including organ transplantation, cardiovascular diseases, schizophrenia, cancer, epilepsy and arthritis)...we are helping millions of people live longer, healthier lives. To do this effectively, we are investing over \$1 billion annually in pharmaceutical research and development.

We are also dedicated to providing a stimulating environment that is conducive to professional growth. We invite you to investigate the following opportunities at our state-of-the-art northern New Jersey locations.

**Postdoctoral Fellow  
Arthritis and Bone Metabolism Research**

We are seeking a Ph.D. with a strong background in molecular biology and genetics (transgenic and Knock out model systems) to investigate homologous recombination in mesenchymal stem cells. You will be responsible for the identification of target genes, generation of targeting constructs, and evaluation of DNA delivery methods, targeting frequency and specificity. In addition, you will have responsibility for assessing therapeutic benefit using in vitro assays and, if possible, in vivo assays. Please refer to Position MG-PD066 on resume AND envelope.

**Postdoctoral Fellow  
Arthritis and Bone Metabolism Research**

You will identify non-immunogenic marker genes for mesenchymal stem cell transductions. Responsibilities will include identification, cloning and mutagenesis of candidate marker genes; construction of retroviral vectors and expression analyses in cell lines and mesenchymal stem cells; and evaluation of selection and enrichment methods for transduced cell populations. In addition, you will be responsible for safety profile evaluation including in-vitro toxicity and possibly in-vivo toxicity. Qualifications include a Ph.D. with a strong background in molecular biology and cellular and molecular immunology. Experience in cellular biology, monitoring and evaluation of mammalian immune responses desired. Please refer to Position MG-PD067 on resume AND envelope.

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

**Senior Software Engineer  
Bioinformatics**

As a senior member of our Research Information Management Bioinformatics Team, you will support and enhance our state-of-the-art bioinformatics environment, which is used by our scientists for target identification and drug discovery. This will include the acquisition, design and implementation of advanced algorithms for DNA and protein sequence analysis; improving database access; and developing graphical interfaces to integrate novel algorithms into the environment. Qualifications include a Ph.D. or MS in Computer Science or Computational Biology, along with 2+ years of experience in bioinformatics. In addition, demonstrated coding and system building skills under UNIX and familiarity with web-related technology and database products are required. A broad familiarity with sequence analysis algorithms and bioinformatics tools would be a decided asset; effective verbal/written communication skills, proven team-orientation and strong problem-solving skills are a must. Please refer to Position JN-5175 on resume AND envelope.

Attractive salaries and comprehensive benefits. You will find them all and much more at Novartis. Write your own prescription for success and apply today. **PRINCIPALS ONLY:** send your resume/curriculum vitae and letter of interest, indicating position code on resume AND envelope, to: R&D Staffing, Novartis Pharmaceuticals Corporation, 556 Morris Avenue, Building G2, Summit, NJ 07901. We are an equal opportunity employer M/F/D/V. We appreciate your interest in our Company. Unfortunately, we will only be able to respond to those individuals chosen for interviews or additional follow-up. If you are interested in more than one position, please submit a separate resume for each position and indicate the appropriate position code on each resume or cover letter.

**POSTDOCTORAL  
POSITIONS**

Six new faculty in the Department of Biochemistry and Biophysics at the University of Pennsylvania School of Medicine seek applications from highly motivated postdoctoral candidates with strong backgrounds in protein chemistry, biochemistry, biophysics, or molecular/cell biology. Join an exciting and interactive group of young biochemists and structural biologists brought together by the Department of Biochemistry and Biophysics as it undergoes a period of expansion in several different research areas.

**Joseph Jarrett:** mechanistic studies of enzyme-mediated organic radical formation and radical sulfur biochemistry; model studies of radical electron transfer; studies of vitamin B-12 reactivity.

**Mark Lemmon:** studies of intermolecular interactions in growth factor receptor signaling: in particular erbB receptor heterodimerization mechanisms and pleckstrin homology domain-mediated membrane recruitment.

**Dewey McCafferty:** mechanistic enzymology, organic synthesis, and protein design; antibiotic resistance, cell wall biosynthesis, modulation of cancer proliferation with synthetic ligands.

**Marcos Milla:** regulation of tumor necrosis factor- $\alpha$  secretion; mechanism of activation of G protein-coupled receptors; role of HIV Tat protein in AIDS pathogenesis.

**Hillary C.M. Nelson:** deciphering the signaling pathway of the heat shock/stress response using yeast genetics, biochemistry, crystallography, and other biophysical or structural approaches.

**Greg Van Duyne:** site-specific recombination, transcriptional regulation, protein-DNA assemblies, structural biology.

Please apply to a specific faculty member by sending a letter of application, reprints and/or preprints, and names of three references to them at: **Department of Biochemistry and Biophysics, University of Pennsylvania School of Medicine, C501 Richards Building, Philadelphia, PA 19104-6089.** For more information, please see the Department's website at: <http://www.med.upenn.edu/biocihop/>.



**UNIVERSITY OF  
PENNSYLVANIA  
MEDICAL CENTER**

University of Pennsylvania School of Medicine

# **We** *Invite You To Consider Joining a World Leader!*

DuPont is a world leader in research in the chemical and biological sciences, from fundamental and applied research programs ranging from industrial bioprocesses to genetically improved crops, and faster routes to environmentally friendly crop protection chemicals.

A group is being established within DuPont's Central Research and Development whose objective is to use higher plants as platforms for the production of industrial chemicals. Currently we have several principal investigator (Ph.D.-level) openings within this group for people with the skills listed below. Successful candidates for these positions will work within an interactive team of chemists, biochemists, molecular biologists, and chemical engineers to work on this objective. For that reason candidates with cross disciplinary skills in addition to those listed individually below will be favorably considered. Qualified individuals at all stages of their career are encouraged to apply.

## **Molecular Biology**

The successful candidates will be a plant or microbial molecular biologist who can use techniques of modern molecular biology for the following studies: 1) metabolic engineering, 2) plant and/or microbial biochemistry and physiology. Code: CRD982117

## **Biochemistry/Metabolism**

The successful candidate will have a strong background in metabolism/enzymology with experience in at least one of the following 1) metabolic pathway engineering, 2) enzyme engineering with the goal of changing substrate specificity, and 3) experience with biosynthesis of natural products. Code: CRD982116

## **Natural Products Chemistry**

The successful candidate for this position will have an extensive knowledge of natural product biochemistry and biosynthesis and a strong analytical chemistry background. Experience in higher plant biochemistry, and modifying plant metabolism through genetic engineering will be desirable.

Code: CRD982115

## **Plant Physiology**

The successful candidate for this position will be a plant physiologist with knowledge of cellular and whole plant physiology and metabolism. Of particular interest are individuals who can study the biosynthetic flux, and metabolite conjugation/storage. Experience with molecular biology techniques is highly desirable.

Code: CRD982121

Whether you are just starting your career or looking for growth opportunities, we encourage you to apply. We are looking for highly motivated individuals who can become members of our research teams to enhance both our success as well as their own. You will enjoy our state-of-the-art Experimental Station facilities. These positions offer a highly competitive salary and an excellent benefits package. We are located in Wilmington, Delaware, an area that offers an attractive lifestyle with easy access to all the cultural, academic and recreational activities on the Eastern Seaboard. Qualified candidates should send a resume and three references to: DuPont Human Resources, 1007 Market Street, Wilmington, DE 19898, USA, or fax 1-800-631-2206. We are an equal opportunity employer. When responding, you must make reference to the job code.



**DuPont Central Research and Development**



## WESTERN UNIVERSITY OF HEALTH SCIENCES

Due to our continued growth, Western U has several Academic openings.

### COLLEGE OF OSTEOPATHIC MEDICINE

**Assistant Professor Microbiology** - The discipline of microbiology invites applications for a tenure-track (with a five-year review process) beginning fall, 1998. A Ph.D. is required. The candidate is expected to teach medical microbiology to first- and second-year osteopathic medical students. Major emphasis is on teaching and service to the college, but research is encouraged. Closing date is January 31, 1998.

Applicants should submit curriculum vitae, transcripts, three letters of recommendation, and a statement of teaching philosophy and career objective to: **Chairman, Microbiology Search Committee, Western University of Health Sciences, 309 E. Second Street, Pomona, CA 91766.**

**Assistant/Associate Professor Biochemistry and Molecular Biology** - The Basic Science Department invites applications for this 12-month tenure-track (5-year review) faculty position. Candidates should hold a Ph.D., have at least two years of postdoctoral training, and an excellent record in publications. We are seeking outstanding scientists who are addressing important biological questions at the level of basic mechanisms. Areas of emphasis include but are not limited to, signal transduction, membrane transport, and eukaryotic molecular biology. The position offers a competitive salary, start-up package, and new research facilities. The selected candidate will be expected to develop a vigorous independent research program; teach in the curriculum for osteopathic medical students and pharmacy students; possess an ability to communicate clearly and effectively; be committed to working in a multicultural environment that fosters diversity; and possess interpersonal skills necessary to interact effectively with other faculty, students, staff, and external constituents.

Applicants should send a curriculum vitae, including publication list, a summary of research accomplishments, future research plans, and three (3) letters of reference to: **Dr. Dennis Klick, Search Committee Chair, Western University of Health Sciences, 309 E. Second St., Pomona, CA 91766.** Review of applications will begin immediately and continue until the position is filled. Faculty Position.

### COLLEGE OF PHARMACY

Western University of Health Sciences invites applications for a 12-month, tenure-track faculty position. Candidates should possess a Ph.D. in pharmacology, a commitment to excellence, ability to communicate clearly and effectively, commitment to working within a multicultural environment that fosters diversity, and interpersonal skills necessary to interact effectively with other faculty, students, staff, and external constituencies. The successful candidate is expected to teach in the curriculum for pharmacy students and for osteopathic medical students as well as establish an extramurally funded research program. Salary and rank are negotiable and commensurate with qualifications and experience. Application materials should include a letter of interest, a full curriculum vitae, and three letters of reference. Review of application materials will begin immediately and continue until the position is filled. Western U is committed to the education and professional development of generalist/primary care oriented health professionals. The successful applicant for this position will be expected to contribute to the advancement of this mission by ensuring humane and caring service to people from all walks of life. Complete applications should be sent to: **Krishna Kumar, Ph.D. Chair, Search Committee, Western University of Health Sciences, College of Pharmacy, 309 East Second Street, Pomona, CA 91766-1854, Telephone : 909/469-5554, Fax: 909/469-5539, E-mail: kkmargwesternu.edu.**

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

### DIRECTOR OF THE MUSEUM OF NATURAL HISTORY UNIVERSITY OF GEORGIA, ATHENS

The University of Georgia, Athens seeks to fill the position of Director of the Museum of Natural History and Associate Professor/Professor in the Institute of Ecology. The expected start date for this position is July 1, 1998. The Museum maintains comprehensive archeological, biological, and geological collections that are used for research, instruction, and outreach. The Director will play a major role in integrating the Museum into plans for a new Environmental Complex. The position is open to all fields of vertebrate ecology and systematics. Candidates must have significant experience in museum administration and an outstanding record of research. The incumbent is expected to maintain an active research program, contribute (at less than a full load) to the instructional program, and promote the educational and service outreach functions of the museum. The responsibilities of this position are apportioned equally between administration/service with a reporting line to the Office of the Vice President for Service and research/instructional with a reporting line to the Dean of the Franklin School of Arts and Sciences. Applications should include a curriculum vitae, a statement of their view of the research, service, and instructional role of the museum in the university, their administrative philosophy, and names, addresses, e-mail addresses, and telephone numbers of four references. Review of applications will begin February 15, 1998. Please send applications to **Prof. C. Ronald Carroll, Institute of Ecology, University of Georgia, Athens GA 30602, <rcarroll@sparrow.ecology.uga.edu>.** For additional information, see the Museum's website <museum.nhm.uga.edu>

*The University of Georgia is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

### Agricultural Research Service

#### FIELD ENTOMOLOGIST

The U.S. Department of Agriculture, Agricultural Research Service, Pest Management and Agricultural Systems Research Laboratory located in Sidney, Montana is seeking a Research Entomologist, GS 12/13 (\$44,953 to 69,492 per annum, salary commensurate with experience) to conduct research on the biology and control of grasshoppers in agroecosystems. The scientist will serve as a member of a team conducting research on grasshopper ecology plus biological, chemical, and cultural tactics for their suppression on rangeland and food/forage crops on the northern Great Plains. Research objectives include: the characterization of the damage potential of grasshoppers under standard and novel tillage systems, the development of monitoring techniques that detect grasshopper movements between non-crop and crop areas, and the development of efficient tactics that can suppress local sources of chronic infestations. A Ph.D. in entomology is highly desirable, however, all applicants for this position must have a degree with at least 16 semester hours in entomology and 1 year of specialized experience that has provided the knowledge, skills, and abilities to develop, conduct, and document a scientific research project concerning insect management. This is a competitive, permanent appointment and U.S. citizenship is required. *ARS is an Equal Opportunity Employer.* For information concerning the position, contact Neal Spencer, Research Leader, Northern Plains Agricultural Research Laboratory at (406) 482-2020. For application procedures/forms please contact Charlotte Anderson (406) 482-9432, Fax: (406) 482-9450, or E-mail: canderso@sidney.ars.usda.gov or write to USDA/ARS/HRD/WOB, 6305 Ivy Lane, Suite 200, Greenbelt, MD 20770-1435. Application must be postmarked by December 31, 1997.



### PROFESSOR

The MGH Cancer Center and the Department of Pathology, Harvard Medical School, invite applications for a tenure-level faculty position of PROFESSOR with research emphasis in cancer biology to work at the Cancer Center in MGH's Charlestown facilities. Candidates must have an active research program in some aspect of modern cancer research. In particular, special consideration will be given to candidates with an outstanding reputation in one of the following areas: the genetics or physiology of tumor development; cell processes that lead to division, differentiation, or apoptosis decisions; biochemistry of signal transduction; oncoprotein or tumor suppressor protein function; development of animal models for cancer; or use of simple genetic systems to study cell decision processes. The appointed candidate will also be expected to make a commitment toward the teaching of both medical students and graduate students. Applicants must have a Ph.D. and/or an M.D. degree and a minimum of 10 years of teaching and/or research experience. Women and minority candidates are especially encouraged to apply.

*Candidates should provide a curriculum vitae including a full list of publications, six selected reprints, and a brief statement of research and teaching interests. These materials should be forwarded to:*

**Ed Hartlow  
Chair of Search Committee  
MGH Cancer Center  
149 13th Street  
Mailcode 149-7330  
Charlestown, MA 02129**

*Massachusetts General Hospital and Harvard University are  
Equal Opportunity/Affirmative Action Employers.*





ARIZONA STATE UNIVERSITY  
MAIN CAMPUS

Faculty Position in Ecology  
Tenured or Tenure-Track

The Department of Biology invites applications from broad ecologists interested in collaborating on a newly funded study of Central Arizona and Phoenix, which is part of NSF's Long-Term Ecological Research (LTER) program. The appointment will begin in August 1998 and can be made at any rank (assistant-full). Salary, rank, and tenure status will be commensurate with experience and qualifications. We are seeking a creative, productive scientist with a willingness to work collaboratively (as a member of an interdisciplinary team) and to commit over the long term to **urban ecological research**. This is a regular faculty position. Successful candidate will be expected to teach undergraduate and graduate courses in biology and ecology, to supervise graduate research in ecology, and to develop a successful research program in ecology. Applicants must have a Ph.D. in a biological or environmental science at the time of appointment, and research experience and publication in ecology appropriate to rank. Research experience and publication in urban ecology desired.

To apply, please submit a curriculum vitae; three reprints; a statement of teaching experience, interests, and philosophy; a research statement; and three letters of recommendation. The research statement must show how past training, experience, and interests can be adapted to ecological studies and/or in urban environments. Send materials to: **Dr. Stuart Fisher, Chair, Urban Ecology Search Committee, Department of Biology, Arizona State University, Tempe, AZ 85287-1501; FAX 602-965-2519.** For further information see: <http://lsvl.la.asu.edu> and <http://caplter.asu.edu> or contact [biology@asu.edu](mailto:biology@asu.edu).

Applications from two individuals wishing to share this appointment will be considered. Application deadline is 1 February 1998 with applications reviewed weekly thereafter until the position is filled. *Arizona State University is an Affirmative Action/Equal Opportunity Employer.*

## FACULTY POSITION

### COMMUNITY/ECOSYSTEM ECOLOGY

The Department of Biological Sciences at the University of Pittsburgh anticipates making one full-time tenure-track faculty appointment in the area of community ecology beginning July 1999, to continue expansion of the Department. Applications are invited from candidates with research interest at the community/ecosystem interface. Work centering on resource flux and its translation through communities, or its influence on community structure is especially valued. This appointment is expected to be made at the starting Assistant Professor level, but under exceptional circumstances experienced candidates with outstanding records will be considered at higher rank. Our expanding ecology and evolution program has excellent research and teaching facilities on campus and at the University's Pymatuning Laboratory of Ecology (<http://www.pitt.edu/~blueeye/ee2.html>). The successful candidate must have a Ph.D. and extensive postdoctoral experience and will be expected to establish an extramurally funded research program, train graduate students, and participate in undergraduate education. In order to ensure full consideration, applications must be received by January 16, 1998. Applicants should send a curriculum vitae along with a summary of research interests and goals, and arrange to have at least three letters of reference sent to:

**Dr. Stephen Tonsor  
Ecology Search Committee  
Department of Biological Sciences  
University of Pittsburgh  
Pittsburgh, PA 15260  
(412) 624-5491**

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



Vitamins

# Biotech

Your expertise belongs at  
our Center of Excellence.

Take biotechnology and your career in a new direction at Roche Vitamins, Inc., an industry leader for human and animal health and nutrition. At the new home of our global center of excellence in biotechnology at Nutley, NJ, we are developing new products and processes in a range of areas, including vitamins, carotenoids, food ingredients, enzymes, and medicated feed additives.

Our team of experienced professionals will focus on developing and optimizing microbes for producing metabolites and enhancing large-scale fermentation processes. Right now, we have outstanding opportunities for **research leadership** and **senior research scientists** at the **PhD** and **MSc** level.

## Fermentation

To qualify, you must have an extensive background in developing microbial fermentation processes as well as experience in research-oriented fermentation. Pilot plant working experience and knowledge of metabolic flux analysis a plus. **Dept. FS.**

## Molecular Biology

To qualify, you must have a proven track record in the genetics of bacteria and/or lower eucaryotes. A strong background in molecular biology with emphasis on gene expression regulation required. Experience in the use of chip based methods to monitor and study gene expression is desired. **Dept. MOB.**

## Protein Chemistry/Enzymology

To qualify, you must have extensive experience in protein purification and analysis, enzymology, or protein modification and optimization. Molecular biology experience is desirable. Experience in the analysis of enzymes of the central metabolic pathway, and of specific enzymes of secondary pathways, is highly desirable. **Dept. CE.**

## Microbiology

To qualify, you must have a strong background in microbial genetics and extensive experience with mutation, selection and screening approaches. A background in molecular biology and/or biochemistry is a definite asset. **Dept. MIB.**

## Biotransformation

To qualify, you must have a solid background in enzymology. Biotransformation experience in apolar solvents and modification/stabilization of enzymes is a definite asset. **Dept. BT.**

## Analytics

To qualify, you must have demonstrated experience analyzing organic compounds using advanced techniques. A background in protein analytics and enzyme assay is an asset. **Dept. AS.**

We offer an excellent compensation package commensurate with your qualifications, and a progressive environment that's conducive to professional growth. For immediate consideration, send your resume or cv, indicating salary requirements and appropriate dept, to: **Human Resources Dept., Roche Vitamins, Inc., 45 Waterview Blvd., Parsippany, NJ 07054-1298.**

An equal opportunity employer.



## POSITIONS OPEN

### BIOLOGY FACULTY CELL AND MOLECULAR

Salem State College is seeking to fill a tenure-track position in cell and molecular biology for the fall of 1998. Responsibilities include teaching both general biology and upper-division courses in the area of molecular biology. Required qualifications include a Ph.D. in biology or a related field, two years of successful full-time college-level teaching at an accredited institution; and demonstrated experience using a variety of current molecular biological techniques. Preferred are college-level teaching in both general biology and upper-division courses in molecular biology and experience in and/or commitment to working in a multicultural, multiracial environment with students of diverse backgrounds and learning styles. All faculty are expected to serve as role models and mentors for a diverse student body. Salary is competitive and commensurate with education and experience.

Application review will begin January 5, 1998, and continue until the position is filled. Please apply immediately. Letters of reference sent not included in application package should be sent directly to the Biology Department.

To apply, send letter of application specifying the Department and position for which you are applying, résumé, appropriate transcripts, and three letters of reference to:

Office of Equal Opportunity and Human Rights  
Salem State College  
352 Lafayette Street  
Salem, MA 01970

*Salem State College is an Equal Opportunity/Affirmative Action Employer. Persons of color, women, and persons with disability are strongly urged to apply.*

### FACULTY POSITION IMMUNOLOGY, HOST RESISTANCE

The Department of Microbiology/Immunology, Tulane University School of Medicine invites applications for a tenure-track faculty position in immunology at the ASSISTANT PROFESSOR level. Applicants must have a Ph.D. or M.D. degree and two to three years of postdoctoral experience in immunological areas. A particular interest in host responsiveness to fungi would be desirable, but we welcome applications from candidates whose interests encompass important questions pertaining to host resistance to other microbes as well. The successful candidate will be expected to develop an externally funded research program and to participate in medical and graduate student teaching. The Department and School of Medicine encompass a broad set of research interests and excellent opportunities exist for collaboration. For further information about the Department and Tulane Medical School visit our website: <http://www.mcl.tulane.edu/departments/microbiology>. Applicants should submit a curriculum vitae, brief description of research program and career objectives, and the names of three qualified references to: Faculty Search Committee, Department of Microbiology/Immunology (SL38), 1430 Tulane Avenue, New Orleans, LA 70112. The search will remain open until a successful candidate is named. Tulane University is an Equal Opportunity/Affirmative Action Employer.

### FACULTY POSITIONS IN CELL AND MOLECULAR BIOLOGY

Applications are invited for tenure-track positions (ASSISTANT through FULL PROFESSOR) in the Department of Cell and Molecular Biology at Northwestern University Medical School. Candidates must have a Ph.D. or equivalent degree and significant research experience in cell and molecular biology. The department is particularly interested in individuals with a strong record of productivity in molecular/genetic studies of the cytoskeleton/cell motility, the cell cycle, nuclear architecture and function, and cytoskeletal/cell surface interactions. Applicants will be screened with respect to their ability to carry on vigorous, independent research and to participate in departmental teaching programs.

Send a complete curriculum vitae and a brief description of research interests to: Dr. Robert Goldman, Chair, Department of Cell and Molecular Biology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.

*Northwestern University is an Equal Opportunity/Affirmative Action Educator and Employer and invites applications from all qualified individuals. Applications from women and minorities are especially sought.*

## POSITIONS OPEN

### THREE TENURE-TRACK ASSISTANT PROFESSOR POSITIONS—FALL 1998 DEPARTMENT OF BIOLOGICAL SCIENCES St. Cloud State University

**MICROBIOLOGIST** position. Shared teaching responsibilities include: introductory microbiology, general microbiology, medical microbiology or virology, and immunology laboratory. Required: Ph.D. in microbiology or related area; postdoctoral or equivalent experience.

**PHYSIOLOGIST/ANATOMIST** position. Shared teaching responsibilities include: human anatomy and/or physiology, possibly general education human biology. Expertise in neurobiology is desirable. Required: Ph.D. in a related biological science; postdoctoral experience preferred.

**POPULATION/COMMUNITY ECOLOGIST** position. Teaching responsibilities: introductory botany; undergraduate and graduate-only courses in ecology and population biology; and participation in a one-semester core course—organismal diversity. Required: Ph.D. in ecology, botany, or related area with field botany experience; postdoctoral or equivalent experience.

Preference to candidates with successful post-secondary teaching experience and a strong commitment to teaching (B.S./M.A.) and research programs involving undergraduate and graduate (M.A.) students. Advising and committee participation is expected. Send: letter of application including statements of research plans and teaching philosophy, curriculum vitae, transcripts (copies acceptable for initial screening) and the name, telephone number, postal and e-mail address of three references. We will contact references to comment specifically upon your teaching ability, experience, and professional preparation. All materials must be postmarked by 23 January 1998. Submit materials to: Chair, Department of Biological Sciences, St. Cloud State University, 720 4th Avenue South, MS-262, St. Cloud, MN 56301-4498. You may contact us by Telephone: 320-255-4736; FAX: 320-255-4166; e-mail: [biology@stcloudstate.edu](mailto:biology@stcloudstate.edu). Materials received after the deadline date are not guaranteed consideration.

*St. Cloud State University is committed to excellence and actively supports cultural diversity. To promote this endeavor, we invite individuals who contribute to such diversity to apply, including minorities, women, the disabled, and veterans.*

### PATHOPHYSIOLOGY/PHARMACOLOGY FACULTY POSITION SCHOOL OF PHARMACY Southwestern Oklahoma State University

Applications are invited for a tenure-track academic year position as an ASSISTANT PROFESSOR in the Department of Pharmaceutical Sciences beginning June 1, 1998. Summer-term teaching is usually available. Responsibilities at this time include teaching within the pathophysiology sequence as well as service and scholarly activity. A Ph.D. in pharmacology/physiology is required. A B.S. and/or Pharm.D. in pharmacy is desirable. Salary is regionally competitive with excellent fringe benefits. Review of applications will begin January 8, 1998, and continue until the position is filled. Applicants should send a letter of interest, a current curriculum vitae, and three letters of recommendation to:

Personnel Office  
Southwestern Oklahoma State University  
100 Campus Drive  
Weatherford, OK 73096

### FACULTY POSITION IN PLANT DEVELOPMENTAL GENETICS WAKSMAN INSTITUTE, RUTGERS

The Waksman Institute at Rutgers University is inviting applications for a tenure-track ASSISTANT or ASSOCIATE PROFESSOR position in plant developmental genetics. The academic appointment of the position is in the newly formed Department of Genetics. The successful applicant will be expected to develop a successful, externally funded research program and to teach at the undergraduate and graduate level. Applicants should send a curriculum vitae, list of publications, three letters of reference, and a summary of research plans by February 28, 1998, to:

Chair, Search Committee  
Plant Developmental Genetics  
The Waksman Institute  
Rutgers, The State University of New Jersey  
190 Frelinghuysen Road  
Piscataway, NJ 08854-0820

*An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### MEHARRY MEDICAL COLLEGE SCHOOL OF MEDICINE Research Centers in Minority Institutions (RCMI) and the Department of Biochemistry

Faculty positions are available in 1997-98 at the ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR, or PROFESSOR levels in the area of cell signaling, which has been targeted for expansion at the College. Initial funding for these positions is provided by an NIH-funded RCMI program at the College and support from the School of Medicine.

Recruitment of four individuals is expected, in an effort to develop a critical mass of investigators studying cell signaling at the institution. We are seeking scientists who merit primary appointment in the Department of Biochemistry. Joint appointments in clinical or other basic sciences departments are expected. Preference will be given to applicants who have an interest that complements one of our clinical science departments. Selected individuals must have potential or demonstrated competence in the use of molecular biological or biophysical approaches to conducting research in cellular signaling and must also be capable of, and committed to making significant contributions to, the teaching and administrative functions of the appointing department(s). Successful applicants will be expected to develop/maintain a funded research program of high quality and to substantially participate in the graduate and professional (medical, dental, and applied health) school teaching programs of the Department of Biochemistry or other appointing department(s). They will also be required to participate in the further development of molecular neuroscience at the College. Applicants should send curriculum vitae, a statement on teaching interests, names of four individuals who may be contacted for reference, and a summary (not exceeding four pages) of potential research project(s) to either: Fred Jones, Ph.D., RCMI Program Director, and Vice President for Research, or A. Cherrie Epps, Ph.D., Dean, School of Medicine, (both at) Meharry Medical College, 1005 D.B. Todd Boulevard, Nashville, TN 37208. Applications will be evaluated by the search committee appropriate for the targeted area of cell signaling as well as by the appointing department(s). Meharry Medical College is an Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL POSITION IN EXPERIMENTAL HEMATOLOGY

A position is available in the research laboratory of Dr. Ian McNiece of the Bone Marrow Transplant Program at the University of Colorado Health Sciences Center. The laboratory has basic and applied projects in experimental hematology with a focus on stem cell biology. This position will study the signaling events involved in proliferation and differentiation of hematopoietic stem cells. Experience in basic cellular and molecular biology is required with a background in hematopoiesis and second messenger signaling events. Starting salary will be commensurate with experience.

Please submit a letter of interest and curriculum vitae to: Lance Goudzwaard, Administrator, University of Colorado Health Sciences Center, Bone Marrow Transplant Program, Box B-190, 4200 East Ninth Avenue, Denver, CO 80262. FAX: 303-732-9003.

*University of Colorado Health Sciences Center is an Equal Opportunity and Affirmative Action Employer; we encourage minorities and women to apply for this position.*

### COLUMBIA UNIVERSITY COLUMBIA GENOME CENTER ASSOCIATE RESEARCH SCIENTIST

To direct DNA sequencing of bacterial genomes and conduct sequence-based mutation analysis on candidate disease genes. Successful applicant should have a doctorate, either M.D. or Ph.D., and at least two years of experience in automated sequencing and editing, including use of sequence alignment and assembly software packages. Ability to do shotgun cloning, primer selection, and primer walking for directed sequencing required. Familiarity with UNIX, Windows, and Mac operating systems is preferred; programming ability a plus. Some experience directing others is desirable. Candidate should be available to begin employment on April 6, 1998. Three letters of reference and a detailed curriculum vitae should be sent no later than January 15, 1998, to: James J. Russo, Ph.D., Columbia Genome Center, Columbia University, BB-1611, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.



## St. Jude Children's Research Hospital

**ALSAC • Danny Thomas, Founder**

**St. Jude Children's Research Hospital**, a premier treatment and research center for pediatric oncology, invites applications for postdoctoral fellowships in Pediatric Hematology/Oncology. The training program is certified by the ACGME for subspecialty certification and will benefit from the recruitment of Michael Kastan, M.D., Ph.D., as incoming Chair of Hematology/Oncology. This three-year program includes one year of comprehensive clinical training in both hematology and oncology, followed by two years of intense research experience. The goal of our program is to train the future leaders in academic Pediatric Hematology/Oncology in the United States. With this goal in mind, we have also established a four-year program that includes three years of supported research specifically designed to train physician scientists. Opportunities for research are available within many internationally recognized programs, including Cancer Prevention and Control, Hematological Malignancies, Molecular Oncogenesis, Neurobiology and Brain Tumors, Signal Transduction, Solid Malignancies, Transplantation and Gene Therapy, and Viral Oncogenesis and Tumor Immunology.

Applicants should contact:

**Jeffrey E. Rubnitz, M.D., Ph.D.**  
**Director, Hematology/Oncology**  
**Fellowship Training Program**  
**St. Jude Children's Research Hospital**  
**332 N. Lauderdale St.**  
**Memphis, TN 38105**  
**Telephone: 901-495-2388**  
**Fax: 901-521-9005**  
**E-mail: jeffrey.rubnitz@stjude.org**  
**Visit our web site at: [www.stjude.org](http://www.stjude.org)**

SJCRH is an Affirmative Action/Equal Opportunity Employer

## Careers in Structural Biology

**San Francisco Bay Area**

Headquartered in a 60,000 square foot, state-of-the-art research facility, **Tularik Inc.** is a rapidly growing, privately-held biopharmaceutical company dedicated to the discovery and development of novel therapeutic agents that regulate gene expression. Tularik has ongoing projects in the following areas: immune disorders, inflammation, obesity, hypercholesterolemia, viral diseases, bacterial diseases, and cancer.

The establishment of a multi-disciplinary structural biology department, as part of the continued growth of our outstanding research organization, has created a rare opportunity for a select group of dedicated professionals to join our team and help us shape the future of human therapeutics. We are seeking qualified candidates for the following positions:

### Protein Biochemist

Job responsibilities will include the isolation, purification and characterization of proteins for use in X-ray crystallography & NMR spectroscopy. This individual will join a team of highly motivated scientists in our Structural Biology Department in determining the structure of novel proteins of medicinal interest and studying their interactions with other proteins or small molecules as part of the drug discovery process. Suitable candidates will possess a Ph.D. and 2+ years of postdoctoral experience or an MS and a minimum of 5 years of relevant experience in biochemistry or protein chemistry. (Position Code SB1)

### Protein Crystallographer

Job responsibilities will include the production of single crystals of proteins and protein/ligand complexes and the elucidation of their structures utilizing modern X-ray crystallographic and computational methods. These efforts will form the basis for structure-based drug design efforts in various cutting-edge research projects at Tularik. Suitable candidates will possess a Ph.D. in Chemistry, Biochemistry or a related field and a minimum of 5 years of hands-on experience in all aspects of protein crystallography. (Position Code SB2)

### NMR Spectroscopist

Job responsibilities will focus on the development and application of NMR techniques to drug discovery, including the determination of protein 3-D structures and dynamics, and the characterization of protein-ligand interactions. This information will be integrated into ongoing drug discovery projects at Tularik. The successful candidate will also be responsible for establishing a state-of-the-art NMR laboratory. Suitable candidates will possess a Ph.D. in Biophysics, Chemistry or a related field, with a minimum of 5 years of experience in the application of NMR spectroscopy to macromolecular structure determination. (Position Code SB3)

In addition to an attractive total compensation package, including competitive salary, comprehensive benefits and equity participation, Tularik offers experienced leadership and a stimulating research environment that recognizes achievement. To apply, please send, fax or e-mail your resume to:

**Tularik Inc.**  
**Human Resources**  
**Attn Position Code: \_\_\_\_\_**  
**Two Corporate Drive**  
**So. San Francisco CA 94080**  
**Fax: (650) 829-4303**  
**email: [resume@tularik.com](mailto:resume@tularik.com)**

**[www.tularik.com](http://www.tularik.com)**



**Tularik**

*equal opportunity  
employer*

## POSITIONS OPEN

### ASSISTANT/ASSOCIATE PROFESSOR OF ENVIRONMENTAL SCIENCE/STUDIES

Applications are invited for a newly created tenure-track position in environmental science/studies at the Assistant/Associate Professor level, commencing August 1998. Ph.D. (in environmental science or a related area) required, and additional teaching, research, and/or practical experience (such as with environmental agencies or consulting firms) desirable. Successful candidate is expected to teach a broad-based introductory (freshman/sophomore-level) course in environmental science/studies, two upper-level courses in area of expertise (e.g., a course in environmental problem-solving using local examples, and a special skills course involving environmental assessment/evaluation and/or widely used technology applications including but not limited to GIS or remote sensing), a general education course, and a senior seminar in environmental science/studies. We seek an individual who can (1) chair a new Environmental Science and Studies Department which has strong interdisciplinary ties to several other supporting departments, (2) help the Director of the College's Raystown Field Station improve programmatic use of the station, and (3) engage students with various academic backgrounds in field-oriented environmental projects, including undergraduate research.

Juniata College is a co-educational, liberal arts college with an enrollment of 1,200 in rural central Pennsylvania, highly regarded for academic excellence. It has long had an outstanding reputation of educating young scientists.

Send letter of application, curriculum vitae, three letters of reference, one-page descriptions of teaching philosophy and research interests, and additional supporting materials (e.g., syllabi, teaching evaluations, etc.) to: **Gail Leiby Ulrich, Director of Human Resources, Juniata College, Huntingdon, PA 16652.** Review of applications will begin January 1, 1998, and will continue until the position is filled.

*Affirmative Action/Equal Opportunity Employer.*

### THEODORE ROOSEVELT PROFESSORSHIP IN ECOSYSTEM MANAGEMENT UNIVERSITY OF MICHIGAN School of Natural Resources and Environment

The Theodore Roosevelt Professorship is a new, endowed Professorship dedicated to fostering research, learning, and practice in ecosystem management. It will be awarded for fixed periods of two to five years to a person who has contributed significantly to this field as a leader, scholar, teacher, and/or practitioner. An advanced academic degree and demonstrated leadership skills are essential; the disciplinary focus is open. Preference will be given to candidates with credentials equivalent to a Full Professor, and to individuals with practical experience in ecosystem-scale research, management, or policy work. Candidates should submit a statement of interest, résumé including publications, and references to: **Ecosystem Management Search Committee, The University of Michigan, School of Natural Resources and Environment, 430 East University, Ann Arbor, MI 48109-1115.** Application review begins on January 15, 1998. Applications will be considered until a suitable candidate is found. *The University of Michigan is an Equal Opportunity/Affirmative Action Employer.*

The Department of Psychiatry at the University of Connecticut Health Center invites applications for an **ASSISTANT/ASSOCIATE PROFESSOR** faculty position for a Behavioral Neuropharmacologist whose research interests will complement those of our current faculty. Applicants must have a Ph.D. and/or M.D. degree, postdoctoral experience in behavioral neuropharmacology involving primates, and be working in the general field of alcohol/drug abuse and addiction. The successful candidate is expected to have extramurally funded independent research programs that are immediately interactive with ongoing projects within the Alcohol Research Center and the Neuroscience Program at University Connecticut Health Center. The successful candidate will also be expected to participate in the teaching and training of medical and graduate students. Interested candidates should submit a current curriculum vitae, bibliography, a statement of research interests, and three letters of recommendation to: **Shirley Crall, Department of Psychiatry, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-1410.** (Search Code 98-232)

*An Affirmative Action/Equal Opportunity Employer. Minorities/Females/Persons with Disability/Veterans.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR MOLECULAR PHYSIOLOGY

The Department of Physiology at the University of Maryland School of Medicine is seeking a tenure-track Assistant Professor with research interests in molecular and cellular physiology. Individuals employing molecular techniques to investigate mechanisms of signal transduction are particularly encouraged to apply. Ph.D. or M.D., at least two years of postdoctoral experience, and the ability to develop an independent research program required. Research interests should complement one or more existing departmental strengths in cardiovascular, neural, renal, and reproductive physiology (see our website: <http://physiomed.ab.umd.edu>).

The position offers competitive start-up funds, laboratory space, salary, and benefits. Send curriculum vitae, statement of research interests, and names of three referees to: **R. J. Bloch, Ph.D., Physiology Search Committee, Department of Physiology, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201.** Submit by January 5, 1998, for full consideration; position available July, 1998. *The University of Maryland, Baltimore is an Affirmative Action/Equal Opportunity Employer and has a strong institutional commitment to the principle of diversity in all areas.*

### McGILL UNIVERSITY FACULTY POSITIONS IN ENVIRONMENTAL AND MATERIALS CHEMISTRY

The Departments of Atmospheric and Oceanic Sciences and of Chemistry, McGill University, will make a joint, tenure-track appointment in environmental (atmospheric or oceanic) chemistry at the **ASSISTANT PROFESSOR** level. The Department of Chemistry will also make a tenure-track **ASSISTANT PROFESSOR** appointment in materials/polymer chemistry. Applicants should have a Ph.D. degree and postdoctoral or industrial experience in a research field of interest to the hiring department(s). The latest starting date will be September 1, 1998.

The successful applicants will teach at the undergraduate and graduate levels (and, in the case of the joint appointee, in the new undergraduate McGill School of the Environment) and establish a vigorous research program. Candidates should forward a curriculum vitae, a research proposal (including details of start-up funds necessary), and arrange to have at least three letters of recommendation sent to:

**Professor Ian S. Butler, Chair  
Department of Chemistry  
McGill University  
801 Sherbrooke Street West  
Montreal, Quebec H3A 2K6 Canada**

### MOLECULAR GENETICIST DEPARTMENT OF PSYCHIATRY University of California, Irvine

The Department of Psychiatry is seeking to identify qualified individuals for a molecular genetic program at the rank of **ASSISTANT, ASSOCIATE, or FULL PROFESSOR**, tenure-track. Level commensurate with qualifications. The position involves the application of molecular genetic techniques to psychiatric diseases. Excellent laboratory space in a new constructed building dedicated to the neurosciences, start-up funds, and a tenure-track FTE available. The University of California, Irvine College of Medicine is committed to the development of a major program in molecular genetics and a psychiatric component is considered an essential part of this research agenda. Successful candidates must have an M.D. and/or Ph.D. degree with research experience in the field of psychiatric molecular genetics. A proven track record in this field must be evidenced by receipt of peer-reviewed grant funding.

Please send curriculum vitae to: **William E. Bunney, M.D., University of California, Irvine, College of Medicine, Department of Psychiatry, Medical School 1 Room D438, Irvine, CA 92697.** E-mail: [webunney@uci.edu](mailto:webunney@uci.edu).

*The University of California is an Equal Opportunity Employer committed to excellence through diversity.*

## POSITIONS OPEN

### ASSISTANT/ASSOCIATE PROFESSOR OF PATHOLOGY UNIVERSITY OF PENNSYLVANIA

The Department of Pathology is the School of Dental Medicine, University of Pennsylvania is seeking an outstanding scientist(s) for tenure-track faculty positions at either the **ASSISTANT or ASSOCIATE PROFESSOR** level. The candidate(s) must have a Ph.D. or a combined D.M.D./Ph.D. degree or equivalent qualifications and postdoctoral training. The successful candidate is expected to develop, or have previously established, a high quality, independent research program in cellular and molecular pathogenesis of disease. Areas of interest include infectious disease and diseases associated with connective tissue, growth and development and neoplasia. Also of interest are individuals whose research focuses on the relationship between disease, cell cycle abnormalities, and molecular aspects of the cell death. The School of Dental Medicine and the University offer opportunities for collaborative research in many areas. The successful candidate will participate in the teaching program of the Department of Pathology which includes teaching of general and oral pathology to dental students. Applicants should send a letter that includes a statement of research interests, curriculum vitae, and bibliography. The candidate should also include a list of three referees. The completed application should be received by March 1, 1998, and should be sent to:

**Dr. Bruce J. Shenker  
Professor and Chair  
Department of Pathology  
School of Dental Medicine  
4010 Locust Street  
Philadelphia, PA 19104-6002**

*University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Applications are encouraged from qualified females and minorities.*

### IMMUNOLOGIST DEPARTMENT OF MEDICINE University of California, San Francisco (UCSF)

The Department of Medicine at UCSF is seeking qualified applicants for a faculty position at the **ASSISTANT PROFESSOR** level who will primarily be engaged in immunologic research. Qualified applicants should hold an M.D., Ph.D., or M.D.-Ph.D. Preference will be given to applicants with research interests and experience in the fields of rheumatology, allergy, and transplantation. Interested applicants should send a curriculum vitae, summary of research experience/future interests, and three (3) letters of recommendation to:

**Arthur Weiss, M.D., Ph.D.  
Chair, Search Committee  
Department of Medicine  
Box 0724**

**University of California, San Francisco  
533 Parnassus Avenue  
San Francisco, CA 94143-0724**

To receive full consideration, applications should be received by January 31, 1998. *UCSF is an Equal Opportunity/Affirmative Action 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.*

### ASSISTANT PROFESSOR COMPUTATIONAL NEUROSCIENCE

The University of Maryland at College Park announces a new position in computational neuroscience, to begin in the fall semester of 1998. This appointment bridges programs and departments in neuroscience and cognitive science, and one of the following areas: engineering, mathematical biology, computer science, physics. We seek candidates with established records of research excellence who are capable of integrating both experimental and theoretical approaches in their work and who can teach courses in computational neuroscience as well as their appropriate specialty area. We are looking for applicants for tenure-track at the Assistant Professor level. However, exceptional Senior applicants will also be considered. Submissions of applications are strongly encouraged before February 1, 1998. Applicants should send a complete dossier (letter of application, curriculum vitae, samples of published work) and arrange to have three letters of recommendation sent to: **Dr. Shihab Shamma, Chair, Search Committee, Electrical Engineering Department, University of Maryland, College Park, MD 20742.** *The University of Maryland is an Equal Opportunity/Affirmative Action Employer.*

## Postdoctoral Research at The Wistar Institute

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

**Postdoctoral Researcher In Transcriptional Regulation** - Function of histone acetylation by the adapter GCN5 in transcriptional activation. Studies include genetic and biochemical approaches both in *S. cerevisiae* and in humans, focusing on the mechanism and biological role of protein complexes containing GCN5. **Please reply to Shelley L. Berger, Ph.D.**

**Postdoctoral Researcher** - Conduct molecular virology study of herpes simplex virus latency utilizing a mouse model system. We are also studying the use of HSV in gene therapy and cancer therapy. **Please reply to Dr. Nigel Fraser.**

**Postdoctoral Researcher** - Study the effects of simulated microgravity on growth and differentiation of cultured human osteoblast-like cells and vascular cells, as well as on cardiovascular development in a murine model system. The candidate selected will participate in a Multidisciplinary Program on Cells, Tissues, and Mammalian Development headquartered at Wistar and encompassing the efforts of seven major labs at Wistar and the University of Pennsylvania. **Please reply to Dr. Elliot Levine.**

**Postdoctoral Researcher** - RNA editing of GluR ion channel gene transcripts in mammalian brain; the molecular mechanism and its relevance to neurological disorders such as Alzheimer's and epilepsy. Previous experience in molecular techniques required. Degree received within last three years preferred. *Mol. Cell Biol.* 17:2413 (1997). *EMBO J.* 15:34 (1996). **Please reply to Dr. Kazuko Nishikura.**

**Postdoctoral Researcher** - Two positions available. Includes synthesis, biochemical, biophysical and immunological characterization of model as well as "real-life" glycopeptides and phosphopeptides. Some peptides will be further modified to obtain compounds with the highest biological activity and stability. The properties of the peptides corresponding to natural phosphoproteins and glycoproteins will be compared with those of the full-sized proteins. We are also going to launch a new line of investigations involving the chemistry and applications of peptide nucleic acids. Strong organic chemistry skills and knowledge or peptide analysis, chromatography and spectroscopy are required. The candidates should have a Ph.D. in Organic Chemistry or, less preferably, in Biochemistry. **Please reply to Dr. Laszlo Otvos.**

**Postdoctoral Researcher** - Biochemical characterization of the RNA polymerase II complexes in human cells by using a fully defined *in vitro* transcription system. We are also characterizing the connection of the basal transcription machinery to that of DNA repair. Motivated scientists with Ph.D. in any discipline of biological sciences with experience in molecular biological techniques and protein purification preferred. **Please reply to Dr. Ramin Shiekhattar.**

**Postdoctoral Researcher** - Signal transduction studies using mice lacking Src-family tyrosine kinases. Current research focuses on the role of these kinases in epithelial differentiation as well as T cell function. **Reply to Dr. Paul Stein.**

**Postdoctoral Researcher** - Postdoctoral position available to study T cell development, including the formation and function of the thymic microenvironment, and thymus involution and aging. Training in immunology a plus. **Please reply to Dr. Lisa Spain.**

Interested applicants are requested to send a C.V. and three letters of reference to the appropriate faculty member's attention:

THE WISTAR  
INSTITUTE, 3601  
Spruce Street,  
Philadelphia, PA  
19104. Equal  
Opportunity Employer.



## Genentech, Inc.

*incredible people*  
**extraordinary science**

*What does your work mean to you? At Genentech, our work represents a commitment to progress and a quest for discovery. something incredibly simple - bettering human health. You'll play a critical part to make our vision a reality. Each day we make it more real. And if you share that passion for life, imagine what we could do with your help. It's incredible, and extraordinary.*

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

### Postdoctoral Opportunity - Toxicology

A position is available to assess the safety and mechanism of toxicity of exogenously administered human growth factors on tumor initiation, promotion, growth and metastasis. Experience or knowledge of tumor biology, laboratory techniques, animal handling, and with *in-vivo* and *in-vitro* tumor models is required. See *Cancer Res.* 56:921-924 (1996); *Ann Intern Med.* 122:54-59 (1995); *Cancer Res.* 55:249-252 (1995); *J. Clin. Invest.* 95:1789-1797 (1995); *Am. J. Clin. Pathol.* 92:415-423 (1989); *J. Histochem Cytochem* 36 (4): 383-389 (1988). Manager: Dr. Jeanine Bussiere.

Our progressive benefits package includes full medical/dental/vision, 3 weeks vacation, a sabbatical program, a stock purchase plan and health club membership. For consideration, send your resume to Genentech, Inc., Human Resources, Job Code SCI535, P.O. Box 1950, South San Francisco, CA 94083-1950. Please avoid bold, underline or italic type faces. You may also e-mail your resume indicating Job Code to [jobs@gene.com](mailto:jobs@gene.com) (ASCII files only with a maximum line width of 76 characters). Genentech is an Equal Opportunity Employer. We value the contributions of our diverse workforce.

### Environmental Engineering Faculty Positions

#### 1. Environmental Biotechnology

#### 2. Environmental Chemistry

*Environmental Engineering (EnvE) Program*  
*School of Civil & Environmental Engineering*  
**GEORGIA INSTITUTE OF TECHNOLOGY**

The School of Civil & Environmental Engineering invites applications for two (2) tenure-track positions. Positions are available in **Environmental Biotechnology** and **Environmental Chemistry** at the Assistant Professor level. Appointment at the Associate or Full Professor level will be considered depending on the candidate's experience and qualifications. Successful candidates will teach graduate and undergraduate courses and conduct research in the School's Environmental Engineering Program.

**Environmental Biotechnology.** Applicants with specialization in one or more of the following areas are desired: Environmental microbiology and biotechnology; biochemistry and molecular biology of xenobiotic transformations; microbial ecology. We are particularly interested in applicants with a science and/or engineering background and expertise in the development and use of modern techniques for identification and enumeration of specific microbial species, as well as delineation of community structure in both natural and engineered systems. The above areas reflect an interest in applicants who will complement the research activities of current faculty and expand the science base of the program. This position is interactive with bioscience initiatives being made in several campus colleges.

**Environmental Chemistry.** Applicants with expertise in one or more of the following areas are desired: Environmental chemistry; biochemistry; analytical chemistry; computational chemistry. We are particularly interested in applicants with a science and/or engineering background and expertise in the development and use of innovative techniques for studying the transformations of chemical contaminants in both natural and engineered systems, and have an in-depth knowledge of instrumental analysis.

Applicants for either position should possess an earned doctorate by the time of appointment and provide a clear demonstration of successful pursuit and conduct of independent research. Applicants for advanced-level appointments should document their current research and teaching activities. The positions are available as early as September 1, 1998. Evaluation of applications will begin in December 1997 and applications will be accepted until the positions are filled. Applicants should submit a curriculum vitae, a statement of teaching and research interests, and names, addresses, and phone numbers of at least three references to: **Dr. Michael D. Meyer, Professor and Chair, School of Civil & Environmental Engineering, Georgia Institute of Technology, Atlanta, GA 30332-0355.** Inquiries regarding the EnvE program and specifics of the positions can be directed to **Dr. A. Amirtharajah, EnvE Group Coordinator** at [appiah.amirtharajah@ce.gatech.edu](mailto:appiah.amirtharajah@ce.gatech.edu) or visit our website at <http://environmental.gatech.edu/envel/>.

*The Georgia Institute of Technology is an Equal Education/Employment Opportunity Institution.*



## POSITIONS OPEN

### ASSISTANT PROFESSOR IN ENVIRONMENTAL SCIENCE

Hampshire College, an independent, innovative liberal arts institution and member of the Five College consortium, is accepting applications for an Environmental Scientist (Assistant Professor) with an emphasis in the chemical or physical sciences, such as environmental toxicology or other applied areas of chemistry or physics.

Hampshire College offers a stimulating and supportive environment for interdisciplinary teaching and collaborative research in a wide variety of fields. We seek a scientist whose innovative teaching engages students in genuine research at the introductory and advanced levels. We emphasize discussion, projects, and written evaluations rather than lectures, exams, demonstrations, or grades. All Hampshire students are expected to engage in intellectual issues pertinent to the Third World or United States minorities at some point in their college studies.

A Ph.D. or the equivalent is required. The candidate's ability to combine undergraduate teaching and research in exciting ways will be weighed more heavily than their specific disciplines. Candidates should briefly discuss their ideas for teaching in their letters of application. We offer a comprehensive benefit program. Application review begins on February 1, 1998. Send letter of application, curriculum vitae, and three letters of reference to:

Ms. Laurie Smith  
Environmental Science Search Secretary  
Hampshire College  
School of Natural Science  
Amherst, MA 01002-5002  
E-mail: ljsns@hampshire.edu  
Website: <http://www.hampshire.edu>

*Equal Opportunity Employer committed to a vigorous Affirmative Action Program. Minorities and women are encouraged to apply.*

### PHYSIOLOGIST ASSISTANT PROFESSOR

The Department of Biology and Microbiology, University of Wisconsin-La Crosse invites applications for an academic year, tenure-track position at the Assistant Professor level to start August 31, 1998. The University of Wisconsin-La Crosse has a strong allied health emphasis. Departmental concentrations include biomedical sciences and cellular and molecular biology. The applicant must have a strong commitment to undergraduate education. The successful candidate will be expected to teach a rigorous two-semester undergraduate course in human anatomy and physiology, develop an upper-level undergraduate/graduate course in the area of neuroscience, and teach an introductory biology course one semester per academic year. The successful candidate will be expected to participate in externally funded research and direct undergraduate and graduate (Master's of Science) research. A Ph.D. in physiology or a closely related discipline is required. The applicant must be well trained in systemic physiology with an emphasis in neurophysiology. Send curriculum vitae, statements of teaching philosophy and research interests, graduate and undergraduate transcripts, and three letters of recommendation to: Dr. Thomas O. Claffin, Chair, Department of Biology and Microbiology, University of Wisconsin-La Crosse, La Crosse, WI 54601. Deadline: All materials including letters of recommendation must be received by February 16, 1998. *The University of Wisconsin-La Crosse is an Affirmative Action/Equal Opportunity Employer. Women, persons of color, and individuals with disability are encouraged to apply.*

The Department of Pharmacology and Toxicology at the Medical College of Virginia of Virginia Commonwealth University seeks applications for a non-tenure-track ASSISTANT PROFESSOR. Primary responsibility will be to conduct immunotoxicological research on the ability of drugs and chemicals to suppress the immune system. Applicant will participate in and assist in directing the NIEHS-sponsored immunotoxicology research program. Must secure extramural research support in immunotoxicology and teach to graduate and professional students. Candidate must have a Ph.D. in pharmacology, toxicology, microbiology, or immunology and at least two years of related postdoctoral training in immunotoxicology is preferred. Send a curriculum vitae, statement of interests, and list of three references, by December 31, to: Dr. George Kunos (F6150), P.O. Box 980613, Richmond, VA 23298-0613. Position description available. *Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities, and persons with disability to apply.*

## POSITIONS OPEN



### ROLE OF ENDOGENOUS FORMED NO IN CANCER TREATMENT

A POSTDOCTORAL POSITION is available to investigate the potential roles of nitric oxide in different modalities of cancer treatment. This project involves the evaluation of various cellular/molecular mechanisms involved in the influence of NO redox chemistry produced in immune and tumor cells. Experience in signal transduction mechanisms, molecular/cell biology, and immunohistochemical staining of cell and tissue samples is desirable. The applicant must have broad experience in molecular biologic methodology including experience in determining expression of mRNA and protein products. Applicant should submit a curriculum vitae and names of three references sent directly to: Dr. David A. Wink, Radiation Biology Branch, National Cancer Institute, National Institutes of Health, 10 Center Drive, MSC 1002, Building 10, Room B3B69, Bethesda, MD 20892-1002. NIH is an Equal Opportunity Employer.

### ASSISTANT PROFESSOR

The Department of Biological Sciences at the University of Alabama in Huntsville (UAH) invites applications for a tenure-track Assistant Professorship in molecular biology beginning in August 1998. The successful candidate is expected to participate in teaching at the undergraduate and graduate levels while maintaining an active, funded research program. We are particularly interested in outstanding candidates capable of identifying, cloning, and overexpressing targets for structural-based drug design. The successful candidate is expected to work closely with UAH's crystallography group in the Laboratory for Structural Biology as well as with UAH's Natural Products Group. A Ph.D. with appropriate training and expertise in molecular biology to support these thrust areas is required. Postdoctoral experience is highly desirable. Salary is competitive. Send letter of application, curriculum vitae, statement of teaching philosophy and research interests, and have four letters of reference forwarded to: Molecular Biology Search Committee, Department of Biological Sciences, Wilson Hall, The University of Alabama in Huntsville, Huntsville, AL 35899. Applications will be accepted for review until a suitable candidate is identified, but screening of applicants will start soon after publication of this announcement. For further information about the university and the department, visit our website: [www.uah.edu](http://www.uah.edu). Additional information about the position can be requested by e-mail: [campbellp@email.uah.edu](mailto:campbellp@email.uah.edu). UAH is an Affirmative Action/Equal Opportunity Institution.

### UNIVERSITY OF FLORIDA

Seeks ASSOCIATE PROFESSOR and CHIEF/PROFESSOR and CHIEF for the Department of Medicine, Division of Gastroenterology, Hepatology, and Nutrition. M.D. degree, B.C. in internal medicine and gastroenterology, research experience. A Physician Investigator who has a well-established research program and who can direct the existing research training grant in gastroenterology is being sought. Existing program is well balanced in respect to providing excellent clinical care and performing both basic and clinical research. Qualified candidates should possess the abilities to lead and develop programs in research, education, and health care delivery. This is a tenure-track position. Salary and benefits commensurate with experience. Recruiting deadline: February 28, 1998. Anticipated starting date: July 1, 1998. Please submit curriculum vitae and other information to: Dr. Frederick Southwick, Professor and Chief, Box 100277 JHMC, Gainesville, FL 32610. *An Affirmative Action/Equal Opportunity Employer.*

Biology Faculty. Tenure-track ASSISTANT PROFESSOR position beginning fall term, 1998, to teach introductory-level courses in plant kingdom, ecology, and research methods. Candidates should also be prepared to teach introductory biology course and interdisciplinary course, "Science and Our Global Heritage." Ph.D. in botany or ecology required. Send curriculum vitae and three references to: Personnel Director, Thiel College, Greenville, PA 16125. *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### CONSERVATION BIOLOGY

The Department of Environmental Studies at the University of California, Santa Cruz seeks a Conservation Biologist for a tenure-track faculty appointment at the ASSISTANT PROFESSOR level (salary range: \$41,200 to \$45,900, nine months; commensurate with qualification and experience). We seek applicants who use ecological techniques (experimental and observational), theories, and quantitative methods and who are applying them to further the conservation of biological diversity; an emphasis on animal taxa is preferred. Applicants must demonstrate a clear record of past excellence and future directions in both fundamental research and the application of such research to real-world conservation problem-solving. Applicants should possess a Ph.D. in biology, zoology, wildlife management, or other relevant natural science and are expected to show evidence of teaching ability and an established research program. Send a letter of application discussing research agendas and teaching interests, three confidential letters of recommendation, and a curriculum vitae to: Chair, Search Committee, Environmental Studies Department, University of California, Santa Cruz, CA 95064 by January 31, 1998 (review of files will begin immediately after deadline). Refer to provision #262. Appointment contingent upon final budgetary approval. Write or FAX for complete description (FAX: 408-459-4015). *Affirmative Action/Equal Opportunity Employer.*

Faculty Positions. The Department of Pharmacology at the Temple University School of Medicine invites applications for tenured or tenure-track positions at the ASSOCIATE or FULL PROFESSOR level. Candidates must have a Ph.D., M.D., or equivalent degree, an interest in teaching medical and graduate students, a strong record of research productivity, demonstrated competitiveness for externally funded peer-reviewed grants, and a significant portion of their salary derived from external funding. Individuals with NIH-funded research in the area of actions of drugs of abuse in the brain, functions of endogenous receptor systems and their interactions with neuropeptide/cytokine systems in the brain are encouraged to apply. This is an exciting opportunity to interact with a multidisciplinary group of scientists. Send curriculum vitae, names of three references, and a concise statement of research interests to: Dr. Martin W. Adler, Chairperson, Search Committee, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, PA 19140. *Temple University is an Affirmative Action/Equal Opportunity Employer and strongly encourages applications from women and minorities.*

### ASSISTANT PROFESSOR PROTEIN CRYSTALLOGRAPHY

Applications are invited for a tenure-track position in the Department of Biological Structure at the University of Washington School of Medicine. Applicants must have a Ph.D. degree, or the foreign equivalent, with at least three years of postdoctoral experience focusing on all aspects of protein crystallography. The successful candidate will be expected to establish a vigorous, externally funded research program in the area of structural biology, in particular crystallography of proteins involved in cellular, developmental, or neurobiology. Applicants will be expected to contribute to team-taught courses for health professionals and to participate in graduate student training programs. Candidates should send curriculum vitae, a description of research interests, and three letters of reference by February 1, 1998, to: Dr. Wim G. J. Hol, Search Committee Chair, Department of Biological Structure, University of Washington, Box 357742, Seattle, WA 98195-7742. *The University of Washington is an Affirmative Action/Equal Opportunity Employer.*

University of Florida seeks a CLINICAL ASSISTANT/CLINICAL ASSOCIATE PROFESSOR in the Department of Medicine, Division of Internal Medicine. M.D. degree, B.C./B.E. in internal medicine with experience in primary care. The position involves developing teaching programs for medical students and house officers, plus patient care and research in primary care internal medicine. Salary and benefits commensurate with experience. Recruiting deadline December 18, 1997. Anticipated starting date January 1, 1998. Please reply with curriculum vitae to: Dr. Caranasos, Professor and Chief, Internal Medicine, Box 100277 JHMC, Gainesville, FL 32610. *An Equal Employment/Affirmative Action Employer.*

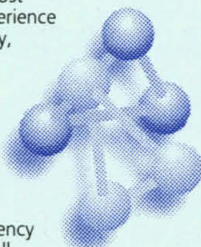


Opportunity, advancement, growth, benefits, location...all the elements of a world-class career come together at a world-class company, Promega. A leader in biotechnology, Promega offers all of the above, including on-site fitness and daycare, so you can balance your life with career success. Pursue your dream of discovery with us as:

### R&D SENIOR SCIENTIST/ BIOLUMINESCENCE



As a key member of R & D, you'll lead the lab for product development for quantitative analysis of gene expression, based on reporter technology. Qualifications include a Ph.D. with post-doctoral experience in cell biology, molecular biology or biochemistry. Must possess proficiency in molecular biology techniques, (gene cloning, mutagenesis, PCR, hybridization probing, etc.), along with proficiency in cell culture, creation of stable transgenic cell lines, and assay design/validation. Strong word



processing, quantitative analysis and presentation skills are also required. Prior industrial experience as well as a working knowledge of intracellular signal transduction and reporter gene analysis a definite plus. Solid leadership and customer service skills are required. Job Code: 11104KW

### PRODUCTION MANAGER/ SHANGHAI

In this permanent position in Shanghai, China, you'll be responsible for developing specifications, systems and requirements for the manufacturing process. In addition, you'll supervise and mentor the production staff, while working closely with Promega's Madison Manufacturing and QA staff. In addition to strong verbal and written English and

fluency in Mandarin Chinese, qualifications include a degree in Molecular Biology, Microbiology, Biochemistry, Chemistry, Engineering or related field; four years' experience in lab preparation or manufacturing biological or chemical reagents; two years' supervisory experience; and standardization/production planning experience. Job Code: CHINA

### FIELD APPLICATION SPECIALISTS

NIH (Bethesda, MD) • St. Louis, MO  
Midwest (WI-MN) • Los Angeles, CA  
Utah • New Jersey • Northern New England

As a principal representative of our technical sales program, you'll serve a specific geographic territory to assure that Promega's sales objective is met, provide technical field support to customers and provide Promega with new product ideas based on discussions with customers. Qualifications include a Ph.D. in Biological Sciences and working knowledge of molecular biology techniques and materials. Experience in sales, marketing, customer service, technical service or a similar area would be a plus. Job Code: 16102P

### TECHNICAL SERVICES SCIENTIST

*English speaking and bilingual positions  
(Chinese/English, Japanese/English & Spanish/English)*

The Technical Service Scientist plays a key role by providing technical support for all Promega products and applications related to our complete product line via phone, fax and Internet to domestic, international and internal customers. In addition to providing technical support and troubleshooting customer inquiries, responsibilities include writing and editing technical literature, providing technical training to domestic and international staff and customers as well as acting as a liaison between researchers and Promega Corporation. A minimum of a BS, MS or Ph.D.; 3 years' laboratory experience broad and deep knowledge of molecular biology, cell biology, protein biochemistry or related field as well as excellent written and verbal communication skills are required. Job Code: 16100D

### PRODUCTION SCIENTIST/ NUCLEIC ACID CHEMISTRY

Assist with manufacturing, quality testing and provide support for new product transfers in the nucleic acid purification and OEM biochemical product areas. Qualifications include BS or MS degree in Molecular Biology, Microbiology, Biochemistry or related field with at least 4 years' experience in manufacturing within the biotech industry. Chromatography and lab experience in nucleic acid purification and knowledge of molecular biology techniques are also required. Job Code: 12100CY

### PRODUCTION SCIENTIST/ OLIGONUCLEOTIDE SYNTHESIS

You'll be responsible for synthesis, purification and quality testing of a variety of oligonucleotides. A BS or MS in Chemistry and/or related discipline or equivalent experience is required. HPLC (FPLC) and 2-4 years' experience in a manufacturing environment are essential. Job Code: 12100DL

### PRODUCTION SCIENTIST/NAC AMPLIFICATION

You'll manufacture, quality test and support new product transfer in the amplification product line. Qualifications include a BS or MS in Molecular Biology, Biochemistry, Microbiology or related field, and a minimum of 4 years' experience in a manufacturing position. Also required are extensive laboratory experience using and troubleshooting PCR techniques (RT-PCR, quantitative PCR, primer design, in situ PCR or other amplification applications); laboratory experience in nucleic acid purification and cloning; a strong working knowledge of molecular biology techniques; and experience performing radioisotope-based assays. Job Code: 12100CY

### R & D SCIENTIST-EUKARYOTIC EXPRESSION

You will support our R&D of eukaryotic expression systems. An MS in Biology or Chemistry or a BS and 2+ years of pertinent work experience in molecular biology is required. Experience with characterization, cloning and sequencing of DNA; a background with general methods used in molecular biology; and knowledge of tissue culture and sterile techniques are essential. Preference will be given to candidates with experience in maintaining eukaryotic cell lines and reporter gene assays and experience with viarl systems. Job Code: 11100ES

### R&D SCIENTIST-MAMMALIAN EXPRESSION

You will support our R&D of mammalian expression systems. A Ph.D. or equivalent experience in Molecular Biology or related field is required. Two plus years in a project leadership position; and 3-5 years' laboratory experience including tissue culture, transfection, mammalian expression, regulation and nucleic acid manipulations are also required. Excellent communication and presentation skills are essential. Job Code 11104ES

For confidential consideration, please mail or e-mail your resume with salary requirements, indicating the JOB CODE of interest, to: **Promega Corporation, P.O. Box 7879, Madison, WI 53707-7879. E-mail:**

**hr@promega.com.** To find out about other opportunities at Promega please call our Career Opportunities Line at **(800) 356-9526 option 9** or visit our website at **www.promega.com** EOE



**Promega**



## POSITIONS OPEN

The Department of Microbiology and Immunology and the Center for Excellence in Cancer Research, Treatment, and Education at Louisiana State University Medical Center invite applications for a tenure-track position at the **ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR, or PROFESSOR** level. Applicants for the rank of Associate Professor or Professor must have a record of national research funding. The successful candidate must establish a strong, independent research program that focuses on an area of cancer research such as oncogenes, tumor suppressors, cell cycle control, mechanisms of carcinogenesis, tumor biology, virology, immunology, etc. Responsibilities include teaching medical and graduate students and participation in the training of the 40 departmental doctoral and postdoctoral students. The Cancer Center promotes research and interactions among basic and clinical faculty members in a variety of disciplines. Start-up funds, research incentive plan, and excellent facilities are offered. Applicants should submit a curriculum vitae, description of research support and ongoing research, and three letters of reference to: **Dennis J. O'Callaghan, Ph.D., Professor and Head, Department of Microbiology and Immunology, Louisiana State University Medical Center, 1501 Kings Highway, Shreveport, LA 71130. Louisiana State University Medical Center is an Affirmative Action Employer.**

### ASSISTANT/ASSOCIATE PROFESSOR PHARMACOLOGY/PHYSIOLOGY

The Division of Pharmaceutical Sciences at the University of Cincinnati, College of Pharmacy invites applications for a tenure-track faculty position from individuals with a Ph.D. degree in pharmacology, physiology, or a related biological science. The successful candidate will establish an independent research program in a relevant field and will teach an introductory anatomy/physiology course as well as participate in graduate education. A full description of the position and the method for application can be found at [website: http://inpharmatics.uc.edu/job.html](http://inpharmatics.uc.edu/job.html). Application letters, curriculum vitae, statement of research plan, and the names and addresses of three references should be sent to: **Gary A. Gudelsky, Ph.D., Search Committee, University of Cincinnati, College of Pharmacy, 3223 Eden Avenue, Cincinnati, OH 45267.** In order to assure consideration, application materials should be received by February 2, 1998. *University of Cincinnati is an Equal Opportunity/Affirmative Action Employer.*

### WILDLIFE SCIENCE/ CONSERVATION BIOLOGY VIRGINIA TECH

**ASSISTANT/ASSOCIATE PROFESSOR.** Tenure-track, twelve-month faculty position available July 1998. Successful applicant will bring a broad, integrative perspective on resource management issues, attract extramural funding, and teach senior-level class in integrative wildlife resource management and graduate course. Ph.D. degree in wildlife or related field. Experience in mechanistic modeling and interdisciplinary research are desired. For information on position and programs, see [website: www.fw.vt.edu/fisheries/](http://www.fw.vt.edu/fisheries/). Send letter, statement of teaching/research interests, curriculum vitae, transcripts, and names/addresses of four references by February 15, 1998, to: **Donald J. Orth, Search Committee Chair, Department of Fisheries and Wildlife Sciences, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061-0321. Telephone: 540-231-5919; e-mail: dorth@vt.edu. An Equal Opportunity/Affirmative Action Institution.**

The Gertrude H. Sergievsky Center of Columbia University, a research center devoted to epidemiologic investigation of neurodevelopmental disorders throughout the life span, seeks applications for a **MOLECULAR BIOLOGIST** at the **ASSISTANT PROFESSOR or ASSOCIATE PROFESSOR** level. A doctorate (Ph.D./Dr.PH./D.Sc.) in molecular biology, molecular genetics, or the equivalent, or an M.D. with equivalent postgraduate training is required. The successful applicant must have demonstrated evidence of high productivity, ability to obtain independent research funding, and enthusiasm for collaborating with an active group in basic and applied research on the molecular bases of neurodevelopmental and neurodegenerative disorders. Send letter of interest and curriculum vitae with the names of three referees to: **Dr. Ruth Ottman, Sergievsky Center, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity Employer and encourages applications from qualified women and minorities.**

## POSITIONS OPEN

### EXPERIMENTAL RESEARCH POSITION IN THE PHYSICAL SCIENCES RESEARCH DIVISION The NEC Research Institute

The NEC Research Institute, which conducts long-term basic research in the physical and computer sciences, anticipates having an open position in the fall of 1998 for an outstanding Experimental Scientist. The successful candidate will be expected to generate a basic research program of international stature. We are seeking appropriate candidates, with special emphasis on those active in the science of small functional structures of relevance either to molecular biophysics, electronics, or materials science. The position will be at the **JUNIOR LEVEL, Ph.D. required, postdoctoral experience expected.** Please send your curriculum vitae, the names, (mail and e-mail) addresses, and telephone numbers of three references, and a two-page statement of proposed research directions to: **PSR Search Committee, NEC Research Institute, 4 Independence Way, Princeton, NJ 08540. The NEC Research Institute website: <http://www.neci.nj.nec.com/>. NEC is an Equal Opportunity Employer.**

### ASSISTANT PROFESSOR OF BIOLOGY

The University of Evansville seeks to fill a tenure-track position to begin August, 1998. Teaching responsibilities include bacteriology, immunology, microbiology, and general biology. The position involves supervision of undergraduate research projects and academic advisement. A Ph.D. degree is required. Teaching and postdoctoral experience are preferred, as is expertise in molecular biology and bioremediation/environmental sciences. Send a current curriculum vitae, official transcripts, three letters of reference, and statements describing teaching experience/philosophy and research interests. Apply to: **Dr. Michael Cullen, Biology Department, University of Evansville, 1800 Lincoln Avenue, Evansville, IN 47722.** To ensure consideration, application materials must be received by January 5, 1998. *The University of Evansville is an Equal Opportunity and Affirmative Action Employer. Women and minorities are strongly encouraged to apply.*

**ASSISTANT PROFESSOR** of biometeorology, tenure-track, nine-month, in the Department of Environmental Science, Policy, and Management, Division of Ecosystem Sciences, and the Agricultural Experiment Station, at University of California, Berkeley, available July 1, 1998. Applicant should have a strong background in micro- to meso-scale meteorology and terrestrial ecosystem sciences. A Biometeorologist investigates how vegetation and meteorological processes affect energy and material transfers between the terrestrial environment and the atmosphere. Applicants should submit a curriculum vitae, statement of research and teaching interests, and names and addresses of three references to: **Chair, Biometeorologist Search Committee, Ecosystem Sciences Division, 151 Hilgard Hall MC3110, University of California, Berkeley, CA 94720-3110. Telephone: 510-642-2210.** Applications must be received by January 31, 1998. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

Longwood College seeks a tenure-track **ASSISTANT PROFESSOR** in biology beginning August 1998. Ph.D. required, teaching experience preferred. Commitment to quality teaching at the Bachelor's (biology) and Master's (environmental studies) levels. Areas of specialty desired: field, ecosystem, and population ecology (plant emphasis); floristics; biostatistics. Direction of Master's thesis work possible. Send complete application including curriculum vitae, statement of teaching philosophy and research goals, transcripts, and telephone numbers of three references to: **Dr. Carolyn Wells, c/o Human Resources, Longwood College, Farmville, VA 23909.** Review begins January 2, 1998. *An Affirmative Action/Equal Opportunity Employer.*

### SCIENTISTS

NERAC, Inc., a growing information retrieval company, seeks individuals with scientific degrees and a minimum of five years of industrial/laboratory experience to assist America's leading high tech and manufacturing companies explore solutions. A commitment to customer satisfaction essential. Package includes comprehensive benefits, competitive salary, but no relocation allowance. Early retirees welcome. Review details on our website: [www.nerac.com](http://www.nerac.com). **NERAC, Inc., One Technology Drive, Tolland, CT 06084. Personnel, JCM FAX: 860-871-7835. Affirmative Action/Equal Opportunity Employer.**

## POSITIONS OPEN

### ASSISTANT PROFESSOR COLLEGE OF PHYSICIANS AND SURGEONS COLUMBIA UNIVERSITY

A tenure-track Assistant Professor position with a generous recruitment package has become available for a joint appointment in the Department of Ophthalmology and a basic science department. The candidate should have a strong background in basic research utilizing techniques in molecular biology, molecular genetics, or immunochimistry, have an interest in degenerative diseases of the retina, and have publications in journals of the first rank. Please submit curriculum vitae, reprints of your two most important papers, and three reference letters sent directly to: **Abraham Spector, Ph.D., Chair, Search Committee, Department of Ophthalmology, College of Physicians and Surgeons of Columbia University, 630 West 168th Street, New York, NY 10032.** Responses should be received no later than January 31, 1998. *Columbia University takes Affirmative Action to ensure Equal Opportunity.*

### ASSISTANT PROFESSOR

The Department of Biology invites applications for a tenure-track position in plant biology/ecology beginning fall, 1998. A Ph.D. is required. The candidate is expected to teach undergraduate courses in plant biology and ecology, as well as undergraduate and graduate courses in the area of specialty. Development of an active research program, pursuit of extramural support, and supervision of M.S. students is also required. Application deadline: Review of applications will begin on January 20, 1998. Submit résumé, copies of transcripts, and three letters of reference to: **Dr. Klaus R. Brasch, Chair, Department of Biology, California State University, San Bernardino, 5500 University Parkway, San Bernardino, CA 92407-2397. Cal State is an Equal Opportunity Employer committed to a diversified work force.**

### SCIENCE WRITER/EDITOR

A large (200-plus attorneys), full-service, New Jersey-based law firm, is seeking a Science Writer/Editor to assist our Science Group in its work relating to toxic tort and products liability litigation. Responsibilities will include literature surveillance, article review, and science/medical writing and editing. We need an enthusiastic individual with a minimum of a B.S. in biology or life science or a B.A. in journalism. Previous writing experience required. Excellent salary and benefits package. Send résumé and cover letter to: **B. Dencker, McCarter and English, IV Gateway Center, 100 Mulberry Street, Newark, NJ 07101. FAX: 973-624-7070.**

**RESEARCH ASSOCIATE.** Ph.D. in toxicology, neuroscience, or hearing research to study mechanisms of cell death, injury, and neuroprotection. Experience with primary cell culture, quantitative fluorescence microscopy (Ca imaging), cochlear electrophysiology/histopathology helpful. Excellent salary and position stability. Send curriculum vitae, three references, publications, and statement of research interests to: **Laurence Fechter, Ph.D., Director, Oklahoma Center for Toxicology, University of Oklahoma Health Sciences Center, Box 26901, Oklahoma City, OK 73190. FAX: 405-271-7477; e-mail: fechter@ouhsc.edu.**

### SCIENTIST FOR RICE FOUNDATION INSTITUTE FOR WILDLIFE INFECTIOUS DISEASE RESEARCH

**GRANT POSITION** starting July 1998 at Lincoln Park Zoo. Develop and implement studies of infectious disease as it relates to conservation. Ph.D. in epidemiology or related science. D.V.M. or disease research experience preferred. Demonstrated interest in infectious disease required. Curriculum vitae by February 15, 1998, to: **Lincoln Park Zoo, Human Resources—EPI, P.O. Box 14903, Chicago, IL 60614.**

Positions available at the **INSTRUCTOR/ASSOCIATE RESEARCH SCIENTIST** levels in the Molecular Cardiology Program at Columbia University. Applicants must have a Ph.D. or M.D. and extensive experience in molecular and cellular biology or in electrophysiology. Send curriculum vitae, reprints of publications, and three letters of recommendation to: **Dr. Andrew R. Marks, Director, Molecular Cardiology Program, Columbia University College of Physicians and Surgeons, 630 West 168th Street, Box 93, New York, NY 10032. Columbia University is an Affirmative Action/Equal Opportunity Employer.**



# **TENURE-TRACK FACULTY POSITIONS DEPARTMENT OF GENETICS**

The Genetics Department of the University of Pennsylvania School of Medicine is continuing its recent expansion and plans to make appointments in the molecular genetics of higher eukaryotes, including developmental genetics and human genetics. Attractive new laboratory space and resources are available. The deadline for applications is Feb. 1, 1998. Applications should include a curriculum vitae and a statement of research interests. In addition, candidates should arrange for 3 letters of recommendation to be sent to:



**Chair, Search Committee  
Department of Genetics  
University of Pennsylvania  
475 Clinical Research Bldg.  
415 Curie Boulevard  
Philadelphia, PA 19104-6145**

An equal opportunity/affirmative action employer

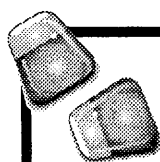
## **DIRECTOR UC DAVIS CENTER FOR VECTOR-BORNE DISEASE RESEARCH College of Agricultural and Environmental Sciences and School of Veterinary Medicine University of California, Davis**

Applications and nominations invited for position of Director, UC Davis Center for Vector-Borne Disease Research, new joint venture of the School of Veterinary Medicine and the College of Agricultural and Environmental Sciences of the University of California, Davis. The Director will hold a joint administrative and professorial appointment in an appropriate department. Salary and level commensurate with qualifications.

The objective of the Center is to foster collaboration among approximately 20 faculty in different institutional units on the Davis Campus in order to advance the detailed understanding of vector-borne pathogens and to use that knowledge to prevent disease. Responsibilities of the professorial appointment will include developing a successful research program, teaching undergraduate and graduate courses, involvement in curricular development and supervision of graduate students. The Director will be responsible for management of the Center and for developing and presenting the vision of this unique partnership between the School of Veterinary Medicine and the College of Agricultural and Environmental Sciences focused on vector-borne diseases.

Candidates must have Ph.D., D.S.c., D.V.M., or M.D. degree and an active and distinguished record in the area of vector-borne diseases. Criteria for selection include: (1) a broad understanding of biological sciences; (2) demonstrated administrative/leadership skills; (3) excellent communication skills, the willingness to work closely with faculty, and the ability to facilitate multidisciplinary research; (4) demonstrated excellence in teaching; (5) a nationally recognized reputation for career achievement and leadership; (6) experience in the acquisition of extramural funding and a commitment to work in securing additional funding for the programs of the Center and (7) potential for integration with State of California vector-borne management programs. The Director is expected to qualify for and be appointed to a senior professorial position in an appropriate department in the School of Veterinary Medicine or the College of Agricultural and Environmental Sciences.

Submit a letter of interest, a brief statement of vision for the Center, a statement on teaching and research, a curriculum vitae, and the names and addresses of three professional references to: **Jean A. Kevern, Personnel Officer, School of Veterinary Medicine, University of California, Davis, CA 95618-8734. (Telephone: 916-752-1384; fax: 916-754-9337).** Nominations should be sent to the same address. Applications will be accepted through February 2, 1998, or until a candidate is identified. *Affirmative Action/ Equal Opportunity Employer.*



## **Post-Doctoral Research Associate**

Pioneer Hi-Bred International, a global leader in the field of agricultural genetics, currently seeks an individual with exceptional communication skills to improve hybrid prediction statistical models. Key among your responsibilities will be to formulate algorithms to simplify and improve model accuracy, and develop/implement methodology to incorporate marker trait associations or candidate gene information into prediction models. Additional objectives will be quantification of mixed linear models by comparing predicted and realized results.

We require a Ph.D. in statistical or quantitative genetics, plant/animal breeding or related field. Background in statistical/quantitative genetics and mixed linear models is desired. SAS or S-Plus software experience is a plus.

We offer a competitive salary and excellent benefits. For prompt consideration, please send your resume and cover letter by January 15, 1998 to: **Employment Services, Job#97-00223, Pioneer Hi-Bred International, Inc., 400 Locust Street, Suite 700, P.O. Box 14454, Des Moines, IA 50306-3454. E-mail: jobs@phibred.com.** Resumes formatted for scanning are preferred.



**PIONEER HI-BRED INTERNATIONAL, INC.**

Pioneer is an Equal Opportunity Employer

## **GRADUATE PROGRAM**

### **Graduate Program in Biochemistry**



**St. Jude Children's  
Research Hospital**  
ALBAC · Danny Thomas, Founder



### **University of Tennessee, Memphis St. Jude Children's Research Hospital**

Applications are invited to the PhD Graduate Program in Biochemistry. The Program combines the strengths of both the University of Tennessee, Memphis and St. Jude Children's Research Hospital. Competitive stipends are provided along with tuition waivers. Both institutions provide students with an outstanding opportunity to perform cutting-edge research in a variety of topics. Examples of the major research areas include:

**Signal Transduction    Cancer Genetics  
Molecular Biology    Enzymology  
Structural Biology    Cell Biology**

For further information about the program, contact: Director of Admissions, Graduate Program in Biochemistry, University of Tennessee, Memphis, TN 38163. Tel: (901) 448-6150, Fax: (901) 448-7360, E-mail: pyuen@am.utm.edu. Applications for Fall semester are due March 1 and can be filed on the world wide web: <http://www.utm.edu/admiss/application.html>. UT Memphis and St. Jude are Equal Opportunity/Affirmative Action Institutions.



## POSITIONS OPEN

### CURATOR AMERICAN MUSEUM OF NATURAL HISTORY

The Department of Invertebrates invites applications for a tenure-track Curatorial position in invertebrates to be available January 1, 1999. The prime requisite is an outstanding research program in collections-based research in metazoan invertebrates, extinct and/or extant, including active fieldwork and appropriate laboratory and analytic approaches. The focus should be in one or more of the following areas: systematics, phylogenetic analysis, biogeography, analyses of life history, or other aspects of evolution. The new Curator will also be responsible for managing part of the Department's large collection of invertebrates in addition to participating in Museum committees, educational programs, and exhibition programs. In addition to the collections, the department maintains a new histology laboratory, part of a molecular systematics laboratory, and a sponsorship program for graduate students and postdoctoral fellows. The salary will be commensurate with qualifications and experience. The successful candidate must have the Ph.D. by time of appointment. Applications should include a brief statement of research interest, curriculum vitae, complete bibliography, and three letters of recommendation from persons familiar with the applicant's qualifications. Applications must be submitted by February 15, 1998, to: **Dr. Neil H. Landman, Chairman, Search Committee, Department of Invertebrates, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024.** An Equal Opportunity Employer.

**CHEMIST.** Sarah Lawrence College, a coeducational liberal arts college dedicated to individualized education, is recruiting a broadly trained Chemist for a **TENURE-TRACK POSITION** beginning August 1, 1998. The successful candidate will teach general chemistry and other undergraduate courses of interest to general liberal arts students as well as upper-level students. Teaching experience as well as an interest and ability in teaching biochemistry are desirable. Working closely with students on an individual basis is essential. Please send résumé, copy of graduate transcript, three letters of recommendation (at least one addressing candidate's teaching strengths), and a statement of teaching interests to: **Dr. Mali Yin, Sarah Lawrence College, Bronxville, NY 10708.** Deadline for receipt is January 15, 1998. An Equal Opportunity Employer, Sarah Lawrence College encourages applications from minorities and women.

### PROTEIN CHEMIST

Corixa Corporation is a biotechnology company dedicated to the development of T cell vaccines and therapies for cancer and infectious diseases. An **ASSOCIATE SCIENTIST/SCIENTIST** position is available in antigen discovery. Requires Ph.D. in chemistry or biochemistry and two to five years of experience in recombinant protein purification. Extensive knowledge of protein isolation and characterization required. Competitive salary and benefits, including equity options. Please send curriculum vitae, statement of research interests and experience, with names of three references by December 31, 1997, to: **Corixa Corporation, Attn: HR299, 1124 Columbia, Suite 200, Seattle, WA 98104.** FAX: 206-667-5715. Equal Opportunity Employer.

### POSTDOCTORAL POSITION

Available immediately to study the genetics of RNA processing in *Bacillus subtilis*. Strong background in molecular biology, preferably including experience with RNA work, is desirable. Send curriculum vitae plus names and telephone numbers of three references to: **Dr. David Bechhofer, Department of Biochemistry, Box 1020, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.** We are an Equal Opportunity Employer fostering diversity in the workplace.

**RESEARCH AND DEVELOPMENT SCIENTIST** for Raman spectroscopy of proteins and toxins. Immediate opening requires Ph.D. plus two to five years of relevant experience or equivalent, and strong communication skills. Experience with RRS or SERS a plus. U.S. citizenship mandatory. Unusual opportunity to profit from growth of new company; attractive benefits and incentives package. Send résumé and sample of technical writing to: **Recruitment, Biopraxis, Inc., P.O. Box 910078, San Diego, CA 92191-0078.** FAX: 619-452-2416. Equal Opportunity Employer.

## POSITIONS OPEN

### UNIVERSITY OF FLORIDA

Seeks an **ASSISTANT SCIENTIST** for the Department of Medicine, Division of Infectious Disease. Ph.D. degree and a thorough knowledge of *Pseudomonas* genetics and molecular biology is mandatory for this position. Specifically, expertise in the following areas is desirable: Recombinant DNA techniques; DNA cloning; transformations and electroporations; DNA and protein gel electrophoresis; PCR; techniques to make specific chromosomal knockout mutations in *Pseudomonas* genes of interest; Southern, Northern, and Western blot procedures; use of different gene-expression systems to express and purify *Pseudomonas* proteins; screening of cosmid libraries by colony hybridization; promoter analysis; computer analysis of DNA sequences; computer experience of using graphic software in order to create publication quality diagrams. This is a non-tenure-track position. Salary and benefits commensurate with experience. Recruiting deadline December 11, 1997. Anticipated starting date December 26, 1997. Please reply with curriculum vitae to: **Kenneth Rand, M.D., Division of Infectious Disease, Box 100277 JHMC, Gainesville, FL 32610.** An Affirmative Action/Equal Opportunity Employer.

**ECOSYSTEM/COMMUNITY ECOLOGIST** with an organismal background necessary to develop an upper-division/graduate course in benthic invertebrates. The major teaching responsibility is a sophomore/junior general ecology course required of biology and environmental science majors. Must participate in the M.S. program and establish a fundable research program. Close proximity to National Wildlife Refuges, the Adirondack Mountains, and Lake Ontario offers many research opportunities. Position begins August 1998. Required: Ph.D., organismal background in benthic invertebrates, ability to work with culturally diverse population, and computer skills appropriate to the discipline. Submit a letter of application, statements of teaching philosophy and research goals, curriculum vitae, transcripts, and three letters of reference by the beginning review date January 9, 1998, to: **Richard Meade, Faculty/Staff Recruitment Office, SUNY Brockport, 350 New Campus Drive, Brockport, NY 14420-2929.** Affirmative Action/Equal Opportunity Employer.

### POSTDOCTORAL POSITION

A Postdoctoral position in brain imaging is available. Candidates with a Ph.D. degree either in psychology, neurobiology, or neuropharmacology needed to join a research team to study central nervous system dopamine and serotonin receptors, and amyloid aggregates in Alzheimer's disease. Major emphasis will be *in vivo* SPECT imaging of brain after intravenous injection of radioactive ligands to study specific brain function. Experience in neuropharmacology, neuroanatomy, and handling primates will be helpful. Send résumé to: **Dr. Hank F. Kung, Departments of Pharmacology and Radiology, University of Pennsylvania, 3700 Market Street, Room 305, Philadelphia, PA 19104.** E-mail: [kunghf@sunmac.spect.upenn.edu](mailto:kunghf@sunmac.spect.upenn.edu); website: <http://sunmac.spect.upenn.edu>.

### ASSOCIATE SCIENTIST CARDIOVASCULAR CHEMISTRY

Apply physical organic principles to design biologically active compounds; carry out multistep synthetic organic procedures to produce target molecules; purify intermediates and final compounds using standard chromatographic techniques (TLC, HPLC, flash column chromatography); collect spectroscopic and physical data (NMR, IR, MS) to characterize compounds; interpret data; suggest solutions in independent manner. Master's in synthetic organic chemistry and minimum two years of experience in job offered; 40 hours per week, \$45,000 per annum. Send résumé to: **JO#5015083, PA Job Center, 1931 New Hope Street, Norristown, PA 19401.**

**POSTDOCTORAL POSITIONS** to study genetics of complex traits in the mouse. One project concerns the QTL analysis of genes involved in complex behavior (see *Caldarone et al. Nature Genetics* 17:335, 1997). The second project concerns the study of polycystic kidney disease. State-of-the-art molecular genetic core facilities available. Federally funded salary (through Health Research, Inc.). Send curriculum vitae and names of three references to: **Dr. Lorraine Flaherty, Director, Molecular Genetics Program, Wadsworth Center, P.O. Box 22002, Albany, NY 12201-2002.** E-mail: [flaherty@wadsworth.org](mailto:flaherty@wadsworth.org). Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### UNIVERSITY OF ILLINOIS AT CHICAGO NUTRITION SCIENTIST

The Department of Human Nutrition and Dietetics (HND) at the University of Illinois at Chicago is seeking applications for a tenure-track faculty position, rank open. Senior scientists with an interest in helping to shape an emerging doctoral program are encouraged to apply. Promising junior faculty will also be given serious consideration. The position requires a Ph.D. and/or M.D. degree and a record of funded research and publication in nutritional biology. The successful candidate's responsibilities will include effective undergraduate and graduate teaching in nutritional sciences, advising on M.S. and Ph.D. theses, and the development or continuation of an externally funded research program. Research interests should complement existing strengths within HND, or other departments in the University, in areas of micronutrient metabolism, free radical injury, cancer biology, lipid and lipoprotein metabolism, diabetes, and obesity. Candidates interested in clinical studies as well as those interested in applying modern biomedical technologies are encouraged to apply. Interested applicants should submit a cover letter and curriculum vitae by January 31, 1998, to: **Charles L. Baum, M.D., M.S., University of Illinois at Chicago, Department of Human Nutrition and Dietetics, 1919 West Taylor, (M/C 517), Chicago, IL 60612.** FAX: 312-413-0319. University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

### RESEARCH SCIENTIST AND POSTDOCTORAL FELLOW

ABS Inc. is a rapidly growing company that provides pharmaceutical and biotechnology companies with custom bioreagents and cell culture services. Positions are available to work on the development of a new liposome polymer-based biosensor technology directed at the rapid detection of enzyme inhibitors and receptor agonists and antagonists. A Ph.D. in the biological sciences is required. The successful applicant will have experience in receptor binding, enzyme analysis, and assay development. Competitive salary and benefits, plus the possibility for rapid advancement. Please forward curriculum vitae to: **Dr. Sarah A. Sporn, ABS Inc., 701-4 Cornell Business Park, Wilmington, DE 19801.**

### POSTDOCTORAL RESEARCH ASSOCIATES COLLEGE OF MEDICINE University of California, Irvine

Openings for individuals with Ph.D. or equivalent degrees to investigate the role of antimicrobial peptides in epithelial cell biology and innate immunity in mice. Areas of investigation include (a) analysis of mechanisms regulating defensin biosynthesis and gene activity at specific sites of expression and (b) structure: function relationships in defensin peptides and their precursors. Expertise in molecular biology is required. Send curriculum vitae and names of three references to: **Andre J. Ouellette, Ph.D., Department of Pathology, College of Medicine, University of California, Irvine, CA 92697-4800.** E-mail: [aouellet@uci.edu](mailto:aouellet@uci.edu).

### POSTDOCTORAL POSITION

Postdoctoral position available for candidates with background in protein folding and experience in protein chemistry and spectroscopic techniques. For details, see website: <http://www2.uchc.edu/~mbb/mbbfac/peng.html>. Please send a letter of interest, curriculum vitae, and names of three references to: **Dr. Zheng-yu Peng, MC3305, Department of Biochemistry, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030.** Telephone: 860-679-2885; FAX: 860-679-3408; e-mail: [peng@sun.uchc.edu](mailto:peng@sun.uchc.edu).

An Affirmative Action/Equal Opportunity Employer. Minorities/Females/Persons with Disability/Veterans.

**POSTDOCTORAL POSITION** to investigate the molecular mechanism(s) regulating the expression of the rat hepatic sulfolipid transferase multigene family is available January 1, 1998. Experience with cell culture, molecular cloning, transient transfection, and gene expression techniques required. Send letter, curriculum vitae, and three references to: **M. Runge-Morris, M.D., Institute of Chemical Toxicology, Wayne State University, 2727 Second Avenue, Detroit, MI 48201.** Wayne State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply. Wayne State University—People working together to provide quality service.

# Computational Chemist

Merck Sharp & Dohme is part of Merck & Co., Inc., one of the world's leading multi-national pharmaceutical companies (<http://www.merck.com>). Merck discovers, manufactures and markets a broad range of products to improve human and animal health and has an unparalleled reputation for innovative fundamental research. Our Neuroscience Research Centre on the Herts/Essex border is one of the largest dedicated Neuroscience research facilities in the UK.

We are currently expanding our Molecular Modelling group and wish to attract an additional scientist with experience in at least one of the following areas:

- Molecular similarity and diversity and their application to combinatorial chemistry and the identification of trends in large datasets
- "Power" programming, particularly in delivery of analyses via the Web
- Use of bioinformatics to relate genetic to structural information.

Awareness of areas such as property calculations for drug-sized molecules,

Modern QSAR methods, modelling barrier transport or metabolic processes etc. would be an advantage.

Applications are invited from those with a background in physical organic and/or theoretical chemistry, with recent strong emphasis on molecular modelling-related tasks. Some post-doctoral experience is desirable although it is possible that an exceptional candidate with less experience might fulfil the role. Good communication skills, the ability to contribute in a team environment and a strong customer focus are essential.

We offer superb laboratories equipped with the latest technology and an internationally competitive salary and benefits package which includes health care insurance, contributory pension, life assurance, relocation assistance and on-site childcare facilities.

For further information email: [hbro@merck.com](mailto:hbro@merck.com) or please write with full CV, quoting ref: CH975020, to the Personnel Department, Merck Sharp & Dohme Research Laboratories, Terlings Park, Eastwick Road, Harlow, Essex CM20 2QR.



## MERCK SHARP & DOHME

Research Laboratories

**UPSA FRANCE CENTER OF EXCELLENCE IN  
PAIN RESEARCH FOR THE BRISTOL-MYERS  
SQUIBB PHARMACEUTICAL RESEARCH INSTITUTE.  
WE ARE SEEKING OUR**

## HEAD OF BIOLOGY

**to join our drug discovery division dedicated to pain**

### The position

- Located in Paris - France, in relationships with other divisions in Princeton, New Jersey and Wallingford, Connecticut research facilities.
- Plan and manager early pre-clinical development of NCE.
- Develop and apply new approaches and methodologies to drug development in order to increase its speed and efficiency.
- Work closely with chemistry and pharmacokinetics.
- Report directly to the VP R&D France, supervising the biology department (50 persons) on new programs of research in pain.

### The candidate

- Phd or MD degree with an established record in research and high level of knowledge in pain or related disciplines (Neurosciences, inflammation...).
- Written and verbal communication skills necessary to facilitate productive interactions in a multi disciplinary research team environment.
- Experienced in pharmaceutical industry.
- Fluent in English and some French.



If your experience matches our needs, please send your resume to quoting reference ALG/HB/S2 to: **UPSA**, DRH, 128 rue Danton, 92500 RUEIL-MALMAISON. Fax 01 47 16 88 37

**UPSA is an equal  
opportunity employer**

### Max-Planck-Institut für Eisenforschung GmbH

At our institute, there is an opening of a

**C4-position (full professor)  
Member of the Scientific Board,  
Scientific Member, and Director at the Institute.**

(successor of **Professor D. Oskar Pawelski** retiring at May 1, 1998). The candidate will be heading the division of Metal Forming. The institute is carrying out application-oriented basic research on steels and related materials and is looking for an internationally known scientist, whose research is focused in the broadest sense on

**metal forming,  
continuum mechanics, or  
plasticity of metals.**

### We offer:

- An excellent research environment
- Research co-operations on a regional, national, and international basis
- The possibility of interdisciplinary research
- Knowledge transfer via well-established contacts to industry

*The Max-Planck-Society promotes the employment of women and explicitly asks female scientists of the appropriate scientific background to apply for the position.*

Please send your application before **January 31, 1998**, to the **\*Geschäftsführung des Max-Planck-Institute für Eisenforschung GmbH, Max-Planck-Str. 1, 40237 Düsseldorf.**

## POSITIONS OPEN

Three **POSTDOCTORAL POSITIONS** are available: Laboratory of Immunobiology, Dana Farber Cancer Institute and Harvard Medical School.

### BIOCHEMIST/CRYSTALLOGRAPHER

Interested in investigating the structural basis of T cell receptor recognition of peptide/MHC ligands. Experience in recombinant protein expression, immunoaffinity purification, and conventional chromatographic techniques is required. Prior crystallographic training is desirable but not essential.

### MOLECULAR BIOLOGIST/ IMMUNOLOGIST

Interested in T cell differentiation using transgenic mice on defined genetic backgrounds to study negative and positive selection and associated signal transduction events. Familiarity with construction of cDNA libraries, PCR-based cloning methods, and general modern techniques of molecular biology is required. Experience with mouse transgenic technologies is desirable.

### VIROLOGIST/MOLECULAR BIOLOGIST

Interested in dissecting the structural basis of HIV-1 envelope interaction with CD4. Experience in molecular biology and protein expression is required. Strong background in retrovirology is preferred.

Please send a curriculum vitae, publications, and a list of three references to: **Prof. Ellis L. Reinherz, Dana Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. FAX: 617-632-3351; e-mail: ellis\_reinherz@dfci.harvard.edu.**

### POSTDOCTORAL POSITION STRUCTURE FUNCTION OF THROMBOSPONDIN-1 RECEPTOR

Immediate opening for individual holding Ph.D. or M.D. to clone and characterize thrombospondin-1 receptor in tumor cells. Experience in molecular biology required, protein cloning and purification, preparation of cDNA constructs and cell transfection, DNA methodologies including electrophoresis, and protein and DNA blotting. FAX, mail, or e-mail curriculum vitae and names of three references to: **Dr. George Tuszyński, Department of Surgery, MS 435, Allegheny University of the Health Sciences, Broad and Vine Streets, Philadelphia, PA 19102. FAX: 215-862-8787; e-mail: tuszynski@auhs.edu. Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** in neurophysiology available to study how oxidation affects ion channel and other neuronal properties. Electrophysiology experience using single-channel and macroscopic patch-clamp recordings as demonstrated by publication is required. Knowledge of molecular biology, optical methods, and organ-level physiology is desirable. Send curriculum vitae, names of references, and description of previous research experience to: **T. Hoshi, Ph.D., Department of Physiology and Biophysics, The University of Iowa, Iowa City, IA 52242. FAX: 319-335-7330. E-mail: toshinori-hoshi@uiowa.edu. The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.**

Two **POSTDOCTORAL FELLOW** positions to study the involvement of the beta adrenergic receptor-linked adenylyl cyclase/phosphodiesterase signal transduction system in the mediation of antidepressant activity. Position for a **MOLECULAR PHARMACOLOGIST** requires experience in molecular biology. Position for a **BEHAVIORAL PHARMACOLOGIST** requires experience with operant behavioral analyses. Send curriculum vitae, names of references, and description of previous research to: **James M. O'Donnell, Ph.D., Department of Pharmacology, Louisiana State University School of Medicine, Shreveport, LA 71130. FAX: 318-675-4757; E-mail: jodonn@lsu.mc.edu. Louisiana State University Medical Center is an Affirmative Action Employer.**

### POSTDOCTORAL POSITION AT THE UNIVERSITY OF CONNECTICUT

Mutagenesis and DNA repair of carcinogen/antitumor agent-DNA adducts in mammalian cells. Applicants must have strong background in genetics and molecular biology with experience in mammalian systems. Apply with names of three references to: **Prof. Ashis Basu, U-60, Department of Chemistry, University of Connecticut, Storrs, CT 06269. Equal Opportunity/Affirmative Action Employer. (Search #98A-179).**

## POSITIONS OPEN

**RESEARCH FELLOWSHIP** in nephrology. Two research training positions, funded by a NIH National Research Service Award, are available July 1, 1998, in the Division of Nephrology at Mount Sinai School of Medicine New York, New York for individuals seeking an academic career in nephrology. Applicants must have M.D., Ph.D., or M.D.-Ph.D. degrees, completed residency training, and be U.S. citizens or holders of permanent resident cards. Training will be under the direction of faculty from Nephrology and multiple other Departments in the School of Medicine. Training will be available in five major areas: molecular genetics and development; immunology, virology, and gene therapy; cell cycle and signal transduction; adhesion molecules and matrix; and molecular basis of transport. Further information about the Division of Nephrology, the training grant faculty, and research training opportunities may be found at our website: <http://www.mssm.edu/medicine/nephrology/home-page.html>. For applications **Telephone: 212-241-8004.**

### EXPERIMENTALISTS AND THEORISTS POSTDOCTORAL AND RESEARCH FACULTY Physical Chemistry, Biophysics, and Physics

The Wilson group, at the University of California, San Diego, Department of Chemistry and Biochemistry, has positions available for exceptionally talented scientists in the following areas: ultrafast X-ray diffraction and absorption applied to chemical and biochemical dynamics and function, dynamics of biomolecular and biological processes (including interneuronal communication and function) imaged using ultrafast microscopy, and theoretical studies related to these areas. For more information about these positions and the group, or to receive application process information, visit our website: <http://www.wilson.ucsd.edu> or e-mail: [wjgibops@ucsd.edu](mailto:wjgibops@ucsd.edu). Positions commensurate with experience and qualifications, with salaries based on University of California pay scales. *Affirmative Action/Equal Opportunity Employer.*

## FELLOWSHIPS

### GRADUATE FELLOWSHIPS CENTER FOR THE STUDY OF EVOLUTION AND THE ORIGIN OF LIFE UCLA

Origin of the Universe . . .  
Formation of the Earth . . .  
Beginnings of Life . . .  
Evolution of the Biosphere . . .  
Advent of *Homo Sapiens* . . .

Center for the Study of Evolution and the Origin of Life (CSEOL) invites applications for five Graduate Fellowships for 1998-99. In addition to support provided by UCLA departments, CSEOL will grant each Fellow a stipend of \$5,000 per year, for each of the first two years of graduate study, with no teaching or other duties. Stipends may be used for any purpose the Fellow deems appropriate—travel, lodging, attendance at scientific meetings, purchase of books, computers, research equipment—for any purpose, without restriction. Fellows are included in a select group of graduate students invited to interact with Center faculty in a weekly dinner/seminar/discussion series. Applicants should be planning to carry out doctoral research under the direction of a CSEOL faculty member in a subject area relating to virtually any aspect of evolution—of the cosmos, of the solar system, of Earth, of the environment, of life, of humans. Areas of particular interest for 1998-99 include (1) planetary evolution and exobiology; (2) origin and early evolution of life; and (3) biochemical evolution and molecular phylogeny. Faculty are members of the UCLA Departments of Anthropology, Astronomy, Atmospheric Sciences, Biology, Chemistry and Biochemistry, Computer Science, Earth and Space Sciences, Economics, Geography, History, Microbiology, Philosophy, Psychology, and Sociology; the School of Medicine; the School of Public Health; the Institute of Geophysics and Planetary Physics; and the Molecular Biology Institute. Fellowship applicants must apply (preferably by 17 February 1998) both to an appropriate academic department and to CSEOL. For application forms and a list of CSEOL members, contact:

**CSEOL Fellows Committee**  
Geology Building, Room 5687  
University of California, Los Angeles  
Los Angeles, CA 90095-1567  
Telephone: 310-825-1170  
FAX: 310-825-0097  
E-mail: [mantonya@ess.ucla.edu](mailto:mantonya@ess.ucla.edu)

## POSITIONS OPEN

A **POSTDOCTORAL POSITION** at the University of Massachusetts Medical Center (UMMC) is available immediately to investigate the structural basis for catalysis by a multiprotein DNA repair complex. Purified component proteins and highly diffracting crystals of one of these proteins are already available, and interesting mutants also have been identified. The successful candidate will have demonstrated skills and experience in protein chemistry and X-ray structure determination by MIR and/or MAD approaches. The Structural Biology Group at UMMC consists of five faculty members and their affiliates. Three rotating anodes and area detectors and a wide range of SGI processors for computing and graphics are shared among the groups.

Send curriculum vitae and the names of three references to: **Professor L. W. Hardy, Department of Pharmacology and Molecular Toxicology, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655. FAX: 508-856-5080; e-mail: [larry.hardy@ummed.edu](mailto:larry.hardy@ummed.edu).**

**POSTDOCTORAL POSITION** available in early 1998 to study the molecular genetics of human gynecologic cancers. Candidates must have the Ph.D. degree and a strong background in basic techniques of cell and molecular biology and molecular genetics, such as cell culture, molecular cloning, PCR, sequencing, and mutation analysis. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. Jeff Boyd, Department of Surgery, Box 201, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Memorial Sloan-Kettering Cancer Center is an Equal Opportunity Employer.**

## COURSES & TRAINING

### 1998 COURSE ANNOUNCEMENT GENETIC ANALYSIS METHODS FOR MEDICAL RESEARCHERS

This intensive four-day course centers on mapping human genetic diseases with emphasis on the mapping of complex/common disease phenotypes. The curriculum covers the entire disease mapping process: developing and integrating clinical classification, pedigree collection, statistical genetic, and molecular analysis. The course emphasizes the global decision-making process and overall study design. A residential conference center setting promotes extensive interaction between the students and faculty.

Date and location: April 5-8, 1998, The R. David Thomas Center at Duke University, Durham, North Carolina.

Deadline for completed applications: February 3, 1998.

For information, write:

**Dr. Margaret A. Pericak-Vance**  
Box 3445  
Duke University Medical Center  
Durham, NC 27710

or contact:

**Ms. Valorie Roberts**  
Course Administrator  
Telephone: 919-684-2470  
FAX: 919-684-2275

or

E-mail: [genclass@genemap.mc.duke.edu](mailto:genclass@genemap.mc.duke.edu)  
Website: <http://www2.mc.duke.edu/dcpts/medicine/medgen/course/index.html>

**BECKMAN RESEARCH INSTITUTE—CITY OF HOPE NATIONAL MEDICAL CENTER PREDOCTORAL PROGRAM IN BIOLOGICAL SCIENCES** is accepting applications for admission to the September, 1998 class. Specialties are in molecular biology, macromolecular structure, neurosciences, and medically related areas. Students must have advanced coursework, research experience, or a Master's degree in biology or chemistry. Application deadline February 1, 1998. Contact: **Thomas R. LeBon, Ph.D., Graduate Education Coordinator, City of Hope Graduate School, Duarte, CA 91010-3011. Telephone: 626-359-8111, ext. 3641; FAX: 626-930-5440; e-mail: [tlebon@smtpink.coh.org](mailto:tlebon@smtpink.coh.org); website: <http://www.cityofhope.org/research/graduate/graduate.htm>.**



The world's leading Life Sciences company.  
Formed by the merger of Ciba and Sandoz.

new  
skills  
in the  
science  
of  
life



Novartis Crop Protection, Inc., a leader in the development, manufacture and marketing of agricultural chemicals, is seeking motivated individuals to join us at our Biotechnology and Genomics Center in the Research Triangle Park in North Carolina. Successful candidates will be interested in basic research and development of novel technologies in an industrial research unit.

### **Molecular Biologist** (Job # 9740)

The successful candidate will be an important part of a team working on Genetics and Molecular Biology of polyketides and other metabolites. Candidates should have a minimum of a Master's Degree with 2+ years experience in Bacterial Genetics, Molecular Biology or related field, superior gene cloning and analysis abilities, and strong communication skills. Ability to critically interpret data and work independently in a team environment is essential. Previous experience in manipulation of large DNAs is a plus.

Novartis offers a competitive salary commensurate with qualifications and experience, a comprehensive benefits package, and an environment conducive to professional achievement. Qualified candidates should forward a resume and cover letter (which should include the job number) and a list of three (3) references to: Novartis Crop Protection, Inc., Biotechnology and Genomics Center, HR, PO Box 12257, Research Triangle Park, NC 27709-2257. Principles only. We are an equal opportunity employer m/f/d/v.



## **PHYSIOLOGY** **INDIANA UNIVERSITY** **KOKOMO**

The Department of Natural, Information, and Mathematical Sciences invites applications for a tenure-track physiology position at the ASSISTANT PROFESSOR level commencing August 1998. Responsibilities include teaching, at the undergraduate level, basic human physiology (both lecture and laboratory) for nursing and allied health students, and, on an alternating basis, upper-level courses in cell physiology and vertebrate physiology for biology majors. Although teaching is a prime responsibility, service and research are also required. Research must be compatible with facilities at a small undergraduate campus. Experience with new instructional technologies is highly desirable. Publication is expected.

Desired qualifications include an earned doctorate (ABD's will be considered, but doctorate is required for tenure), and a strong commitment to undergraduate teaching, research, and publication. Salary is competitive and includes an excellent fringe benefits package. Although the review process will commence January 5, 1998, applications will be accepted until the position is filled.

Send résumé along with statements describing your teaching philosophy and your research goals for the next five years, copies of undergraduate and graduate transcripts, and the names, addresses, and telephone numbers of at least three references to **Dr. Robert Roales, Chairperson, Dept. Natural, Information & Mathematical Sciences, Indiana University Kokomo, P.O. Box 9003, Kokomo, IN 46904-9003.**

*Indiana University Kokomo is an Equal Opportunity Affirmative Action Employer.*

### **NORMAN COUSINS CHAIR & DIRECTOR OF THE CENTER FOR PSYCHONEUROIMMUNOLOGY UCLA NEUROPSYCHIATRIC INSTITUTE**

UCLA seeks a preeminent academician for the position of the Norman Cousins Professor and Director of the Center for Psychoneuroimmunology. The successful appointee to this endowed chair (in Psychology and Psychiatry) will hold a joint appointment in The Department of Psychology College of Letters and Sciences and in the Department of Psychiatry UCLA School of Medicine. Support and additional faculty positions for development of a Center for Psychoneuroimmunology will be provided through the Neuropsychiatric Institute of which the Center is an integral part. Candidates should possess: (1) a continuous record of innovative and creative research related to psychoneuroimmunology, including publications in nationally and internationally recognized journals; (2) demonstrated knowledge of the conceptual and clinical challenges inherent in determining the interactive links among neurobiological, immunological, and psychosocial systems; and (3) proven leadership to ensure the development of the proposed Center.

It is expected that the appointee will continue the University's focus on human clinical research in Psychoneuroimmunology and will promote basic research necessary to support further clinical studies.

Appointment of the successful candidate is anticipated in the Spring of 1998.

Applications or requests for further information about this position should be directed to: **Arnold Scheibel, M.D., (310) 825-9578.** To apply, please send C.V. with names and complete addresses of three references to: **Arnold Scheibel, M.D., Chair, c/o Marian Weissman, 300 Medical Plaza, Room 2422, Los Angeles, CA 90024-6824.**

*UCLA is an Equal Opportunity Employer.*

## **A New Generation of Disease Prevention**

### **Scientists/Senior Scientists** **Department of Carbohydrate Chemistry**

Prevention represents the optimal strategy against infectious disease. **North American Vaccine, Inc.** is a leader in the development of safe and effective vaccines - the cornerstone of this effort. Join us as we develop and market the next generation of vaccines for the next generation of children.

Appropriate candidates should possess a Ph.D. in Chemistry, Biochemistry or related field. Knowledge in all aspects of carbohydrate (especially polysaccharides), synthesis, isolation and characterization with two+ years of postdoctoral experience is required. Excellent verbal and written communication skills are required.

We are located in Maryland, 20 minutes north of Washington, DC, and offer competitive salaries and benefits. Interested candidates should send a curriculum vitae indicating position #820-F to:

**North American Vaccine, Inc.**  
**Human Resources Manager**  
**12103 Indian Creek Court**  
**Beltsville, MD 20705-4223**  
**FAX: (301) 470-6021**  
**e-mail: HR@nava.com**

Visit our website at:  
<http://www.nava.com>

Equal Opportunity Employer

**NORTH AMERICAN VACCINE, INC.**





## UNIVERSITY OF COPENHAGEN



## LUNDBECK FOUNDATION

# Research Professorship in Experimental Mammalian Molecular Genetics at University of Copenhagen Institute of Molecular Biology

The University of Copenhagen has made strategic plans for increased action in Biotechnology. As part of this plan the University will strengthen research into complex biological problems, at the level of whole animals. Thus applicants are invited for a 5 years research professorship granted by the LUNDBECK FOUNDATION in experimental mammalian molecular genetics.

The successful applicant will have demonstrated experience in manipulation of mammalian genotypes using molecular methods (transgenes, knock-outs, etc.) and will be expected to carry out original research within this field, and to promote interactions with other experimental and theoretical research groups in Copenhagen. Basic funding for a research group will be provided by the University.

The research professor must agree to teach or give seminars for THE LUNDBECK FOUNDATION and the companies, which are controlled by THE LUNDBECK FOUNDATION, i.e. H. Lundbeck A/S and Chr. Hansen Holding A/S for up to total 20 hours per year.

Appointment is made according to a new contract as agreed between the Ministry of Finance and the Danish Confederation of Professional Associations. The Lundbeckfond Research Professorship is classified in the so called executive salary level 4 with an annual salary of approx. DKK 483.000 after contribution to the pension scheme.

For the full text of the announcement of the position, including further information and specifications for applications, please contact: Head of the Institute of Molecular Biology, Jørgen Olsen by fax no. +45 32 21 28 or e-mail: jols@mermaid.molbio.ku.dk. The full text of the announcement can also be seen on the Institute's Homepage: <http://www.molbio.ku.dk>

The application and supplemental material must be received not later than December 22, 1997 at 12.00 am.

UNIVERSITY OF COPENHAGEN

## Pharmacokineticist Bioanalyst

Our Department of Clinical Pharmacokinetics at the Institute of Clinical Pharmacology within our Business Group Pharma in Wuppertal/Germany has an immediate opening for 2 scientists.

### Our Profile

Bayer is a globally active, research-based company in the fields of chemicals and life sciences, headquartered in Leverkusen/Germany. With total annual sales of DM 48.6 billion and an annual R&D budget of DM 3.6 billion in 1996, we can offer a very attractive working environment for highly motivated people. (For more details refer to <http://www.bayer.com>).

### Your Task

As part of the Department of Clinical Pharmacokinetics you will be responsible for pharmacokinetics from phase 1 to the market phase. You will contribute decisively to our drug development. The main field of your activity will be either the development of analytical methods for the determination of human biological samples and their use in our studies or the elaboration of new pharmacokinetic approaches and their use in the data analysis of pharmacokinetic studies.

### Your Profile:

1. **Bioanalytics:** Postdoctoral scientist with well-founded knowledge of trace analytics in biological matrices with HPLC, GC, MS, CZE, or immunological techniques.
2. **Pharmacokinetics:** Postdoctoral scientist with experience in pharmacokinetic data analysis or in the utilization of statistical procedures in clinical trials. The ideal applicant will be familiar with mixed effect modeling, nonlinear models, and Bayesian statistics.

For collaboration with our international teams you must have an excellent command of written and spoken English. You will take pleasure in multidisciplinary thinking, working on your own initiative, and meeting the challenges of frequently changing high-level problems. For further information, please contact: **Ms. Dr. Gertrud Ahr, phone no.: ++49-202-368919.**

### Our Offer

We offer excellent conditions and the opportunity to work with a young and dynamic team in one of the largest chemical-pharmaceutical companies. You will have an opportunity to participate in congresses and training courses. You will be based at our Pharma Research Center in Wuppertal. It is our European headquarters responsible for pharmacokinetics from phase 1 to the market phase.

### Your Application

If your background and personal experience fits to this profile, please send your complete application (including a CV, a brief description of research experience, a list of publications, names of references) and ref.-No. 395 to:

**Bayer AG**  
Personalmarketing  
Hauptstraße 119  
D-51388 Leverkusen  
Germany



## DIRECTOR, FOGARTY INTERNATIONAL CENTER AND ASSOCIATE DIRECTOR FOR INTERNATIONAL RESEARCH, NIH

The John E. Fogarty International Center for Advanced Study in the Health Sciences (FIC), National Institutes of Health (NIH), located in Bethesda, MD, is recruiting for a person to serve as both the Director, Fogarty International Center and Associate Director for International Research, NIH.

The ideal candidate must possess at least a Bachelor's degree with major study in the biomedical or health sciences with a Ph.D. or an M.D. degree in a medical discipline appropriate to the NIH mission. In addition applicants must possess professional experience in the international medical research or international public health field at the senior level (GS-15 or equivalent) that meets the following mandatory knowledge, skills, and abilities as listed below.

1. Ability to provide visionary leadership in international medical research and research administration, as demonstrated through having achieved a leadership position and/or recognized stature in the medical/public research community;
2. Medical or scientific research expertise in illnesses that afflict the population of the world as demonstrated by a broad publication record in peer-reviewed journals; and,
3. Skill in representing the organization through interacting and negotiating with Federal, private sector and multinational leaders to develop international collaborative research opportunities.

This is a civil service position in the Senior Executive Service (SES) with an annual salary ranging from ES-1 to ES-6 (currently \$103,897 to \$123,100). A recruitment bonus of up to 25% of base pay may be paid to a non-Federal applicant or a relocation bonus of up to 25% of base pay may be paid to a Federal applicant selected for this position. Physicians may be eligible for a Physicians Comparability Allowance of up to \$20,000.

Applicants are required to submit a bibliography and curriculum vitae, resume or any other written format which addresses the requirements indicated in this announcement. *All applications are to be postmarked no later than close of business December 19, 1997.*

**Ms. Karen Webb, National Institutes of Health, NHLBI Personnel Office, Building 31, Room 5A28, 31 Center Drive, MSC 2484, Bethesda, MD 20892-2484.**

National Institutes of Health is an Equal Opportunity Employer

### GLOBAL CAREER OPPORTUNITIES



Singapore General Hospital

## MR PHYSICIST

Singapore General Hospital is looking for an MR Physicist to support ongoing research and develop independent projects. Research projects will tend to be head/neck and neuroscience weighted. The successful candidate should have experience in human brain mapping and MR spectroscopy. Previous or current work experience with Bruker systems is an added advantage and a network of contacts for collaborative work will be helpful.

The successful candidate can expect a competitive salary which will commensurate with qualifications and experience, in addition to an attractive benefits package such as relocation expenses, housing subsidy, medical and insurance coverage, vacation leave and yearly bonus.

Applicants should submit a curriculum vitae with a statement on research interest and two professional references to:

The Manager, Employee Relations  
**Singapore General Hospital**  
Block 6, Level 1, Outram Road  
Singapore 169608  
Fax No: 65-2242671  
E-mail: gpeggh@sgh.gov.sg

A TRADITION OF CARING AND  
EXCELLENCE



THE UNIVERSITY  
OF QUEENSLAND

Equal opportunity in employment is University policy.

## Reader/Senior Lecturer/Lecturer (Level D/C/B) in Histology/Cell Biology

(Fixed term: 5 years)

DEPARTMENT OF ANATOMICAL SCIENCES

Applications are invited for the position of histologist/cell biologist, at the level of Reader/Senior Lecturer/Lecturer depending upon qualifications and experience.

Applicants must have a strong commitment to teaching (undergraduate science, health science, graduate medical and postgraduate research students) with a particular emphasis on histology and cell biology. In addition, applicants must possess a proven research ability demonstrated by their capacity to attract significant recurrent research grant support. Applicants will be expected to establish an independent program of research at an internationally competitive level.

Period of appointment: Five year fixed term

Salary range: Reader A\$69,533 – A\$76,605 per annum; Senior Lecturer A\$57,748 – A\$66,587 per annum; Lecturer A\$47,142 – A\$55,981 per annum.

Further information, including particulars of the position, may be obtained by contacting Professor G.R. Campbell, Head, Department of Anatomical Sciences, telephone +61-7-3365-2722, facsimile +61-7-3365-7261 or email g.campbell@mailbox.uq.edu.au.

The University requires an original plus seven (7) copies of both an application and resumé. Applications, quoting **Reference No. 37997** and including the names, addresses and facsimile numbers of five referees, should be forwarded to the Personnel Officer, Faculty of Biological and Chemical Sciences, The University of Queensland, Brisbane Qld 4072 Australia.

Closing date for applications: 12 January 1998.

# MARKETPLACE

- Automated DNA sequencing
- Custom DNA/RNA synthesis
- Protein/peptide synthesis & sequencing
- Spectroscopy/calorimetry
- Mass spec services

**Commonwealth Biotechnologies, Inc.**  
Your one stop biotech shop

LET US QUOTE YOUR SPECIAL PROJECTS  
Comprehensive biotech services. For information please call:

1-800-735-9224

Visit our web page at:  
[www.cbi-biotech.com](http://www.cbi-biotech.com)

Fax: 804-648-2641 E-mail: CBI@i2020.net

Circle No. 9 on Readers' Service Card

## The National Youth Science Foundation

Every year, each state selects graduating high school students to attend the National Youth Science Camp, an intensive educational experience. Delegates are chosen based on their achievements in Science, Technology, Community Service and Leadership. NYSF funds both the Camp program and all costs of attendance for the delegates. NYSF is 501-(c) (3).

Please send your tax-deductible contribution to:  
NYSF, PO Box 3387, Charleston WV 25333  
NYSF@IBM.NET or <http://www.nywf.net/edu/nywf/nywf.html>

Circle No. 44 on Readers' Service Card

## Attention: Oxidative Stress Researchers

Why risk the non-specificity of thiobarbituric methods for evaluating lipid peroxidation when there's a better way?

The BIOXYTECH® LPO-586 assay offers:  
Specific results for malonaldehyde plus 4-hydroxyalkenals  
Simple, easy-to-use protocol

Other assays available:

Superoxide dismutase  
Human myeloperoxidase  
Glutathione  
Human lactoferrin  
Human pl. glutathione peroxidase

**OXIS**  
International, Inc.

voice: USA 1-800-547-3686

e-mail: [info@oxis.com](mailto:info@oxis.com)

home page: <http://www.oxis.com>

Circle No. 40 on Readers' Service Card

## custom PEPTIDES world wide

\$15/Res.. Purity > 75%. 20-40 mg

No setup fee, free a.a./HPLC analy.. Mass Spe.

PEPTIDE ANTIBODY: \$250/Rabbit

No charge if no antibody. Email: [tana@flash.net](mailto:tana@flash.net)  
TANA Lab, Inc., Tel: 800-400-0070. Fax 713-661-0849

Circle No. 24 on Readers' Service Card

NEW for 1997

Cell Systems

Serum-Free Human Cell Systems

Dermal Melanocyte Cells

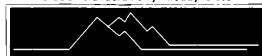
1-800-697-1211

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

Circle No. 10 on Readers' Service Card

# MARKETPLACE

Custom Primers - 48 hr turnaround: \$1.00/base  
5 ODU - Standard Purity - Ready to Use



ransom hill bioscience, inc.

<http://www.ransomhill.com>

no setup - no minimum - no baloney!

internet: [visla@ix.netcom.com](mailto:visla@ix.netcom.com) fax: (800) 597-8509

Circle No. 8 on Readers' Service Card

## Custom Peptides & Antibodies

Best Service & Price! Compare and Save!

Alpha Diagnostic (800) 786-5777

Fax (210) 561-9544; [info@4adi.com](mailto:info@4adi.com)

Web site: <http://www.4adi.com>

Circle No. 20 on Readers' Service Card

**XX-IDT®**  
INTEGRATED DNA TECHNOLOGIES, INC.

## Custom DNA Synthesis 95¢/Base

- 100 nmole Scale
- No Set-up Fee
- Column Purified
- 24 Hour Shipping

Ask About Our  
Group Discount Programs!

E-mail: [orders@idtdna.com](mailto:orders@idtdna.com)

Website: [www.idtdna.com](http://www.idtdna.com)

Fax: 1-319-626-8444

Phone: 1-800-328-2661

Circle No. 3 on Readers' Service Card

## CUSTOM DNA SYNTHESIS

PURE & SIMPLE

- Superb Technical Support

- Impeccable Quality

- World's Fastest Service

- Cap Gel & TOF Mass Spec

\* Some restrictions apply. Please call for details.

**MIDLAND**

STILL THE UNDISPUTED #1 CUSTOM DNA SYNTHESIS SERVICE

THE MIDLAND CERTIFIED REAGENT COMPANY

Phone 1-800-247-8766 FAX 915-694-2387

email [mcrc@oligos.com](mailto:mcrc@oligos.com)

Circle No. 6 on Readers' Service Card

Our Symbol Means  
**QUALITY ANTIBODIES**  
Custom MAbs/PABs/Hybridoma  
Many other services & products available  
Call for your new catalog today!  
1-800-824-8540 or Fax 1-916-758-6307  
Antibodies Incorporated  
Davis, CA

Circle No. 13 on Readers' Service Card

# MARKETPLACE

## EASY WEB ORDERING

<http://www.biosyn.com>  
[biosyn@onramp.net](mailto:biosyn@onramp.net)

## PRIMERS

PURIFIED

NO SET UP FEES  
**65¢**  
/base

50 nmole  
Full QC  
Guaranteed Quality  
Just order > 400 bases  
at the same time

## PEPTIDES

FREE MASS SPEC

NO SET UP FEES  
**15<sup>00</sup>**  
/residue

10-20 mgs  
8-15 residues  
Shipped in 5 days

ANTIPEPTIDES ANTIBODY  
PRODUCTION SERVICES & MORE

## BIO•SYNTHESIS

TEL: 800-227-0627 FAX: 972-420-0442

Circle No. 7 on Readers' Service Card

## DNA SEQUENCING

Longest reads available

Up to 1000 bp/read

Only \$50 per read

MacConnell Research 800-466-7949

Circle No. 39 on Readers' Service Card

## CUSTOM SHOTGUN DNA LIBRARIES

- BAC, PAC, P1, Cosmid or other large insert clones acceptable
- Random M13 or pUC18 plasmid library provided

- High quality; >95% insert ratio
- 1-2 week turnaround time
- Customer satisfaction guaranteed

DNA sequencing and mini-prep services available

**seqwright**  
THE GENE DISCOVERY SUPPORT LAB  
800-720-4363

TEL (713) 528-4363  
FAX (713) 528-6232  
[www.seqwright.com](http://www.seqwright.com)  
[seq@blkbbox.com](mailto:seq@blkbbox.com)

Circle No. 26 on Readers' Service Card

## Site-Directed Mutagenesis as low as \$500

1-800-654-4671

[info@ana-gen.com](mailto:info@ana-gen.com)

**ANA-GEN**  
Ana-Gen Technologies, Inc.

Circle No. 15 on Readers' Service Card

## Custom DNA

Purified & Delivered in 48 Hours

\$1.20 per base • Purified

<http://www.resgen.com>

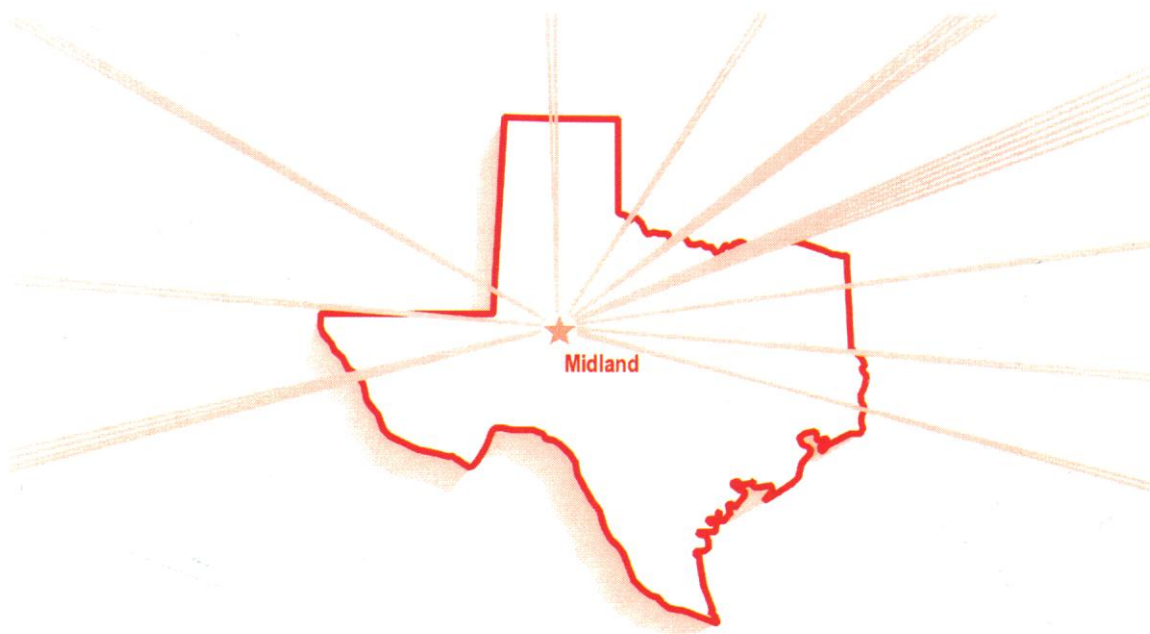
**Research Genetics, Inc.**

1-800-533-4363

Circle No. 2 on Readers' Service Card

***“When the DNA matters,  
I buy it from Midland.”***

This statement is a direct quote from one of our customers in response to a customer survey that revealed a greater than 99% rate of overall satisfaction with the DNA synthesis services rendered by The Midland Certified Reagent Company. Midland is the only DNA synthesis company that routinely does MALDI Time-of-Flight mass spectrometry to verify the molecular weight of every oligo made.



The Midland Certified Reagent Company is centrally located at 3112-A West Cuthbert Avenue, Midland, Texas, 79701. We welcome your technical and pricing inquiries at 800-247-8766. Contact us by FAX at 915-694-2387. Our e-mail address is [info@oligos.com](mailto:info@oligos.com) and our complete catalog is online at <http://www.mcrc.com>.



# Now you really can afford to automate DNA sequencing.



## The ABI PRISM® 310 System

Stop waiting for an affordable automated system. It's here. The ABI PRISM® 310 Genetic Analyzer expands upon proven ABI™ technology. Yet it's only half the price of our ABI PRISM® 377 system. And it's so easy to use, you'll save on training, labor, and operating costs, too.

You don't need a dedicated technician. The ABI PRISM 310 is designed so that multiple users, labs, and departments can easily share the system. And that makes it even more economical.

Find out how cost-effective automated DNA sequencing can be. Call your local PE Applied Biosystems representative, or visit our Web site.

The ABI PRISM 310 system. Affordable technology from the most trusted name in automated DNA sequencing.

***www.perkin-elmer  
•com/ga/310***

### **PE** Applied Biosystems

**Europe** Langen, Germany Tel: 49 (0)6103 708 301 Fax: 49 (0)6103 708 310

**Japan** Tokyo, Japan Tel: (047) 380-8500 Fax: (047) 380-8505

**Latin America** Mexico City, Mexico Tel: 52-5-651-7077 Fax: 52-5-593-6223

**United States** Foster City, US Tel: 1-800 345-5224 Fax: (650) 572-2743

**Australia** Melbourne, Australia Tel: 1 800 033 747 Fax: 61 3 9212-8502



Perkin-Elmer and ABI PRISM are registered trademarks and ABI, PE Applied Biosystems, PE, and Applied Biosystems are trademarks of The Perkin-Elmer Corporation. PE Applied Biosystems products are developed and produced under the quality requirements of ISO 9000.