

## AAAS Members Distinguished for Contributions to Science

In September the AAAS Council elected 283 members as Fellows of AAAS. These individuals will be recognized for their contributions to science at the Fellows Forum to be held on 15 February 1997 during the AAAS Annual Meeting in Seattle, Washington. The new Fellows will receive a certificate and a blue and gold rosette pin as a symbol of their distinguished accomplishments. Presented by section affiliation, they are:

### Agriculture, Food, and Renewable Resources

Leon H. Allen, Jr., USDA-ARS, Univ. of Florida • H. Roger Boerma, Univ. of Georgia • Francis F. Busta, Univ. of Minnesota • Wanda W. Collins, The World Bank • Dennis D. Focht, Univ. of California, Riverside • A. E. Freeman, Iowa State Univ. • Clifford J. Gabriel, Office of Science and Technology Policy • John Letey Jr., Univ. of California, Riverside • William J. Mitsch, Ohio State Univ. • Albert L. Page, Univ. of California, Riverside • Hugo H. Rogers, USDA-ARS, National Soil Dynamics Lab. • Morris Soller, The Hebrew Univ. of Jerusalem • Neal K. Van Alfen, Texas A&M Univ. • Lawrence P. Wilding, Texas A&M Univ.

### Anthropology

Michael H. Crawford, Univ. of Kansas • Jere D. Haas, Cornell Univ. • Allen Johnson, Univ. of California, Los Angeles • Patrick V. Kirch, Univ. of California, Berkeley • Carlos G. Velez-Ibanez, Univ. of California, Riverside

### Astronomy

Claude R. Canizares, Massachusetts Institute of Technology • Louis D. Friedman, The Planetary Society • Martha L. Hazen, Harvard College Observatory • Sidney van den Bergh, Dominion Astrophysical Observatory, Victoria

### Atmospheric and Hydrospheric Sciences

Ferdinand Baer, Univ. of Maryland • Rana A. Fine, Univ. of Miami • Carl A. Friehe, Univ. of California,

Irvine • Mark R. Schoeberl, NASA/Goddard Space Flight Center

### Biological Sciences

James W. Ammerman, National Science Foundation • Dorairajan Balasubramanian, Centre for Cellular and Molecular Biology, Hyderabad, India • David L. Balkwill, Florida State Univ. • John A. Beardmore, Univ. of Wales • Joel Berger, Univ. of Nevada • Gene D. Block, Univ. of Virginia • Brian W. Bowen, Univ. of Florida • Robert A. Browne, Wake Forest Univ. • William B. Busa, Johns Hopkins Univ. • Cheryl Ann Butman, Woods Hole Oceanographic Institution • Colleen M. Cavanaugh, Harvard Univ. • Joseph J. Cech Jr., Univ. of California, Davis • Kerry B. Clark, Florida Institute of Technology • Jonathan J. Cole, Institute of Ecosystem Studies • Murray P. Deutscher, Univ. of Miami • Laurence D. Etkin, Univ. of Texas M. D. Anderson Cancer Center • E. Imre Friedmann, Florida State Univ. • Greta A. Fryxell, Univ. of Texas • Jed A. Fuhrman, Univ. of Southern California • Darrell J. Grimes, U.S. Dept. of Energy • Glenn I. Hatton, Univ. of California, Riverside • Raymond L. Hayes, Howard Univ. • Samuel B. Horowitz, Ann Arbor, MI • Jerome A. Jackson, Mississippi State Univ. • Peter R. Jutro, U.S. Environmental Protection Agency • Robert J. Marquis, Univ. of Missouri • Kathleen Shive Matthews, Rice Univ. • Steven G. Morgan, State Univ. of New York, Stony Brook • William E. Newton, Virginia Polytechnic Institute and State Univ. • Lewis W. Oring, Univ. of Nevada • Valerie J. Paul, Univ. of Guam • Esther C. Peters,

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### Chemistry

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Marc W. Heft, Univ. of Florida

### Education

Jerry A. Bell, AAAS • Joseph D. McInerney, Biological Sciences Curriculum Study • Gerald Skoog, Texas Tech Univ.

### Engineering

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#### **Geology and Geography**

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#### **History and Philosophy of Science**

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#### **Industrial Science and Technology**

David Roessner, Georgia Institute of Technology • Barry G. Silverman, George Washington Univ.

#### **Information, Computing, and Communication**

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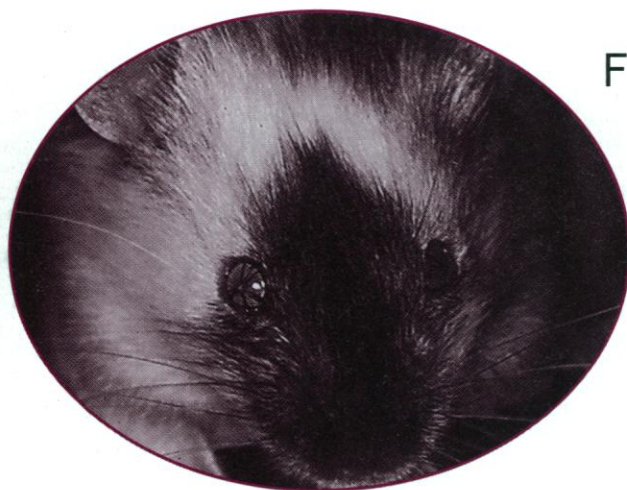
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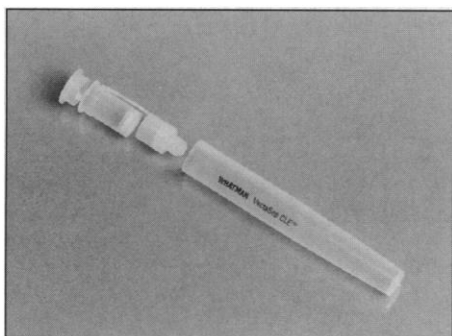


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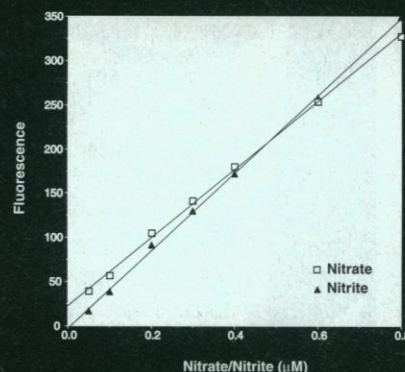
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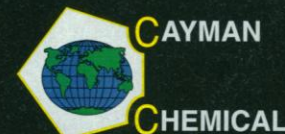
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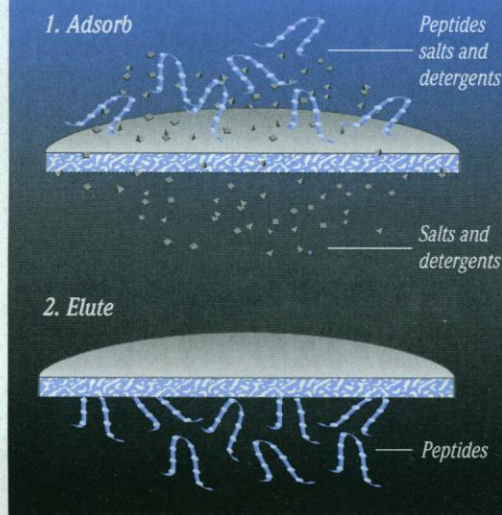
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C	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
D	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
E	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
F	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
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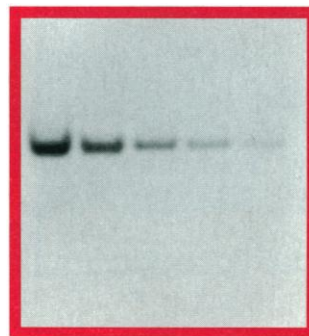
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\* Lennon, G., Auffray, C., Polymeropoulos, M., Soares, M.B. 1996. The I.M.A.G.E. Consortium: An Integrated Molecular Analysis of Genomes and their Expression. Genomics 33, 151-152.

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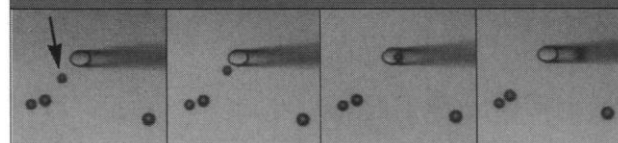
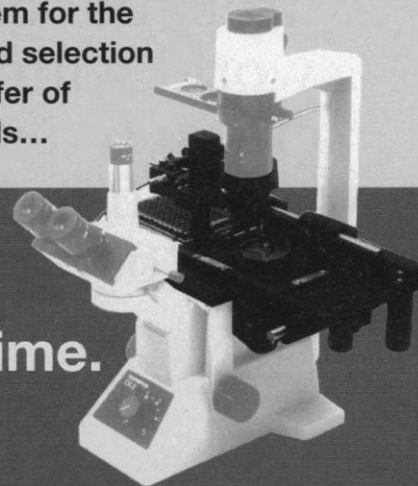
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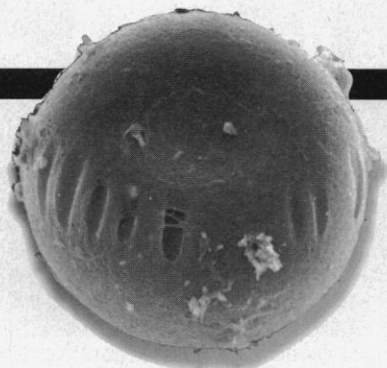
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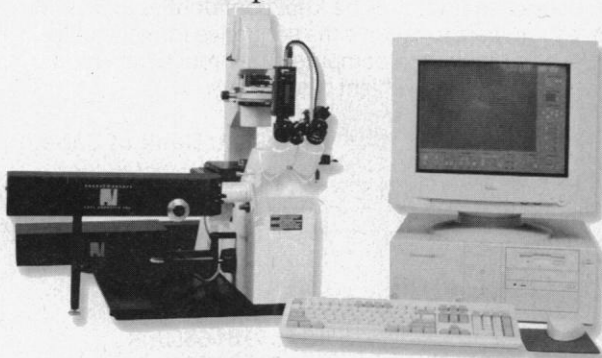
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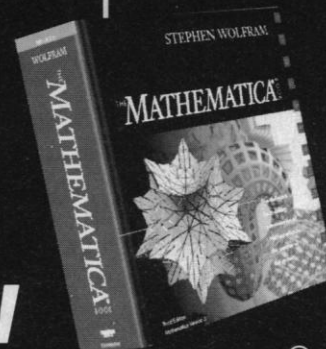
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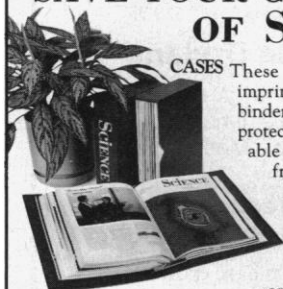
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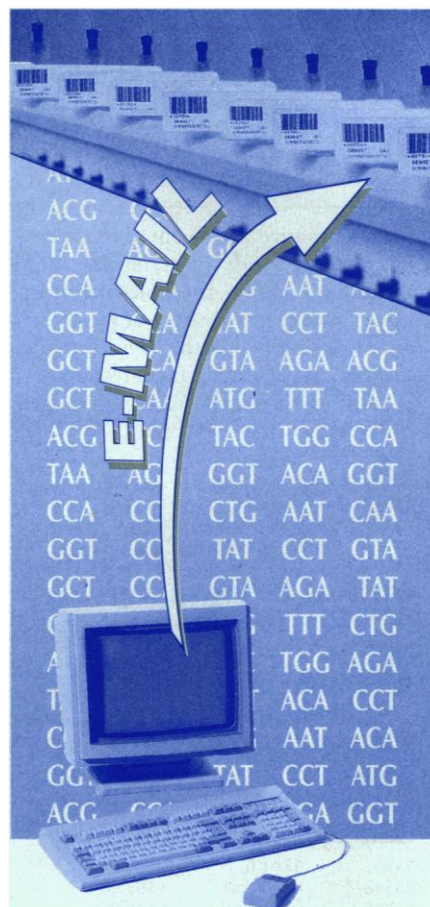
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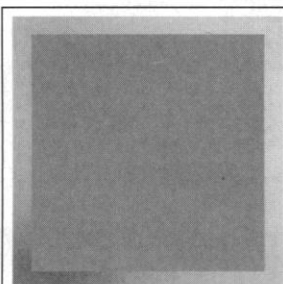
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## HEAD OF BIOINFORMATICS GROUP

Your charge will be to establish and direct a group to develop a bioinformatics infrastructure to support the application of GeneChip technology in gene expression, mapping, polymorphism screening, gene discovery and diagnostic algorithm development. In addition, you will interact with internal scientific users and outside collaborators to define requirements and to design and implement database structures, analysis tools and data mining techniques.

The ideal candidate will possess a PhD in a physical science, computer science or mathematics and a minimum of 5 years' experience in large scale systems development. In addition to technical expertise in data analysis, programming, and database development, you should have previous experience with bioinformatics development and/or management of an informatics group. Familiarity with principles of molecular biology and chemistry is highly desirable; excellent oral and written communication skills are crucial.

Additional positions are also available in the Bioinformatics Group.

Offering a small company atmosphere with big scientific potential, Affymetrix provides attractive salaries, comprehensive benefits, and the exhilarating synergy of our world-class multidisciplinary team. For consideration, please send or fax your resume to **Affymetrix, Human Resources, 3380 Central Expressway, Santa Clara, CA 95051; Fax (408) 481-0422.** We are an equal opportunity employer.



AFFYMETRIX



The University of Texas at Dallas, School of Natural Sciences and Mathematics

## Tenure-Track Faculty Position in Neurobiology

The Molecular and Cell Biology Department of the University of Texas at Dallas invites applications for a tenure-track faculty position in the general area of molecular neurobiology to begin September 1, 1997. The preference is for candidates for the Assistant Professor level, but highly qualified applicants for more advanced levels will also be considered. The Department is actively involved in basic research, graduate training at the doctoral level, and educating a select group of undergraduate students. Applicants should have at least two years of postdoctoral experience and demonstrate a vigorous and independent research program capable of obtaining external support. Teaching responsibilities will include participation in appropriate graduate and undergraduate courses. Start-up packages, salary, and teaching requirements are competitive. Applicants should forward a curriculum vitae and short descriptions of research plans and teaching interests, and have three letters of reference sent to: **Academic Search #2028, The University of Texas at Dallas, P.O. Box 830688-MP 1.2, Richardson, TX 75083-0688.** Review of applications will begin immediately and applications will be accepted until January 31, 1997. Indication of sex and ethnicity for affirmative action statistical purposes is requested as part of the application but not required. *The University of Texas at Dallas is an Affirmative Action/Equal Opportunity Employer and strongly encourages applications from candidates who would enhance the diversity of the University's faculty and administration.*

CELGENE



Celgene Corporation, a biotechnology company, continues to expand their interdisciplinary research and development programs aimed at the production of proprietary therapeutic agents and the application of biocatalysis for the production of chemicals. Recent growth and success have created the following positions in research and development. These are exceptional opportunities for highly motivated individuals who desire to be integral members of a multidisciplinary team in an entrepreneurial environment.

## GROUP LEADER/MANAGER, Corporate Molecular Biology

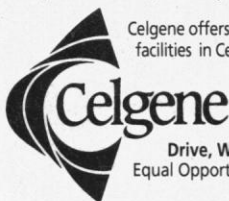
Responsible for the management of a newly formed central molecular biology group, which is to support on-going projects and programs for the corporation as a whole. This bench level position will also oversee the generation and development of new technology and skills and interface with existing R&D groups. We require a Ph.D. in Molecular or Cell Biology and a working knowledge of protein engineering, with experience in managing projects and people. Practical experience in gene isolation and expressions from eukaryotic organisms and protein isolation via affinity chromatography are preferred. **(Position 96-47)**

## RESEARCH SCIENTISTS, Corporate Molecular Biology

To aid in the efforts of a central molecular biology group, supporting on-going projects and programs for the corporation as a whole. These positions involve enzyme engineering to generate improved biocatalysts and gene isolation and over expression from a variety of organisms, primarily prokaryotic. Requires a Ph.D. in Molecular Biology or Biochemistry, good project management skills, and strong technical backgrounds in these areas. **(Position 96-45/46)**

## SENIOR RESEARCH ASSOCIATE, Corporate Molecular Biology

To provide technical assistance to one or more projects in the group. Responsible for maintenance and on-going development of group assets, such as strain/vector collections. Requires a BS with significant and relevant experience or MS in Molecular or Cell Biology with industrial experience, good problem solving skills, and an ability to work independently or as part of a team, and good communication skills. **(Position 96-44)**



Celgene offers competitive salaries and generous benefits including a 401(k) program. Our modern facilities in Central NJ, between NYC and Philadelphia, provide an attractive environment conducive to personal growth and achievement.

Qualified applicants should send a detailed resume, indicating position # and salary requirements, to: **HR Manager, Dept. SCI, Celgene Corporation, 7 Powder Horn Drive, Warren, NJ 07059, or fax it to (908) 271-4184.** No phone calls or agencies, please. Equal Opportunity Employer.



The University of Texas at Dallas  
School of Human Development  
Faculty Position in Neuroscience

The Cognition and Neuroscience Program in the School of Human Development at the University of Texas at Dallas seeks candidates at the Associate or Full Professor level to complement its training and research programs. The appointment would begin with the 1997-98 academic year. Teaching in graduate and undergraduate programs is expected, and evidence of the ability to sustain an extramurally funded program is essential. We seek candidates with a primary research program in developmental neurobiology. Preference will be given to candidates with an interest in mnemonic, sensory, or other behavioral phenomena. However, strong candidates in all areas of neuroscience are encouraged to apply. The Cognition and Neuroscience Program has an interdisciplinary emphasis and brings together basic scientists utilizing neural, computational and behavioral models. Outstanding candidates should send a curriculum vitae and a list of five references to **Academic Search #561, The University of Texas at Dallas, P.O. Box 830688-MP 1.2, Richardson, TX 75083-0688.** Indication of sex and ethnicity for affirmative action statistical purposes is requested as part of the application but not required. Review of applicants begins November 20, 1996, and will continue until the position is filled or the search closed. *The University of Texas at Dallas is an Affirmative Action/Equal Opportunity Employer and strongly encourages applications from candidates who would enhance the diversity of the University's faculty and administration.*



# DRUG DISCOVERY RESEARCH at Schering-Plough

At the Schering-Plough Research Institute insightful scientists like you are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. If you are seeking an opportunity to be on the cutting edge of pharmaceutical discovery, become part of an advanced multidisciplinary research group in one of the following areas:

## **Principal Scientist - Allergy**

The senior level scientist we seek will lead a group of scientists in progressing ongoing research of preclinical programs in the areas in allergic and pulmonary disorders. PhD and at least 5 years of postdoctoral experience in leading pharmaceutical research required. The successful candidate will also possess a strong background in pulmonary pharmacology and drug development research, as well as expertise using *in vitro* pharmacological methodologies. First-hand experience with *in vivo* models of pulmonary obstructive disorder highly desirable. Strong oral and written communication skills, and an established publication record are also required. To be considered for this position, please respond to Dept. DD96-40.

## **Senior Scientist - Computer Assisted Drug Design**

An excellent opportunity is available for a Computational Chemist to join our Computer Assisted Drug Design team. This scientist will participate in our drug discovery programs, interacting with a team which includes biophysical and synthetic chemists, crystallographers, spectroscopists and other CADD scientists. This position requires a PhD in Chemistry, Biophysics or a related discipline and 0-4 years of postdoctoral experience. Strong UNIX and programming skills, in addition to familiarity with computer hardware and major modeling software are required. To be considered for this position, please respond to Dept. DD96-61.

## **Senior Scientist - Organic Chemistry**

We have an opening in our expanding Solid Phase Synthesis group. The successful candidate will have a PhD in Organic Chemistry, extensive experience in modern synthetic chemistry, and a desire to make contributions to the rapidly developing field of combinatorial/parallel chemistry as applied to medicinal chemistry research. Postdoctoral experience and previous experience with solid phase synthesis of small organic molecules are highly desirable. To be considered for this position, please respond to Dept. WG/CC.

## **Scientists - Molecular Neurobiology**

Several exceptional opportunities exist in our Central Nervous System drug discovery organization. The successful candidates will have either a BS degree and 4-10 years or an MS degree and 2-8 years of laboratory experience. Candidates must have a background in molecular biology and/or molecular pharmacology, as well as strong technical and interpersonal skills. Experience in all basic molecular biology techniques, particularly DNA cloning, PCR, DNA sequencing, and maintenance and transfection of mammalian cells is essential. Experience in the design and execution of radioligand binding assays is highly desirable. To be considered for these positions, please respond to Dept. CNS.

## **Postdoctoral Fellow - Central Nervous System Pharmacology**

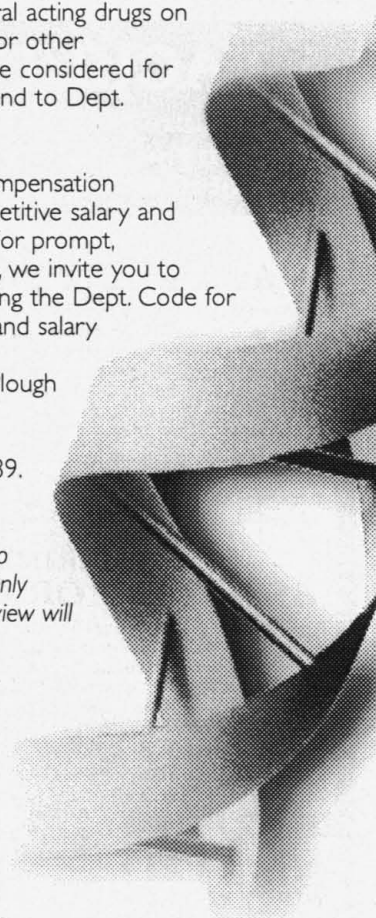
The researcher we seek will have the opportunity to study *in vivo* pharmacology of novel selective dopamine antagonists for schizophrenia and/or to characterize the behavior of potential *in vivo* models of Alzheimer's disease. This fellowship project will provide the opportunity to generate novel, publishable data and conclusions. The successful will possess a PhD in Pharmacology or related discipline. Experience should include the study of central acting drugs on operant procedures and/or other behavioral measures. To be considered for this position, please respond to Dept. PDF/VC

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume indicating the Dept. Code for your position of interest and salary requirements to: Human Resources-BG, Schering-Plough Research Institute, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



**Schering-Plough  
Research Institute**

*Using Science For Human Advantage*





**THE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN  
An Initiative in Molecular, Cellular, and Physiological Biology  
Three Positions at the Assistant, Associate, or Full Professor Level**

These positions represent the first in a series of hires to be made during the next five years.

**Developmental Biology (Position #1)**

The Department of Cell and Structural Biology encourages scientists with interests in the molecular, cellular, and genetic basis of development to apply. The successful applicant will join a young, expanding department with groups studying development in *Drosophila*, *C. elegans*, *Xenopus*, chick, and mouse model systems.

**Microbial Diversity (Position #2)**

The Department of Microbiology invites applicants with research interests in the physiology, biochemistry, or molecular genetics of prokaryotic microorganisms that further expand the Department's breadth of microbial diversity to apply. Extensive interdepartmental interactions exist in microbial and eukaryotic cell and molecular biology, immunology, developmental biology, evolution, biochemistry, and biophysics.

**Physiology (Position #3)**

The Department of Molecular and Integrative Physiology invites applicants with interests in integrative physiological issues, especially adaptational physiology, who also have a good command of diverse modern biological approaches, including molecular techniques, to apply. The appointee will join a strong department with broad interests and expertise in molecular, cellular, and systems/integrative physiology.

All three positions are full-time, tenure track. The starting date for all positions is August 1997. The successful candidates, at the Assistant Professor level, are expected to develop a vigorous and independently funded research program. A Ph.D. with postdoctoral experience is required. Applicants with qualifications that merit higher level appointments will also be considered but such appointments will require evidence of outstanding research accomplishments including extramural funding and national recognition. Applicants at all levels would be expected to contribute to undergraduate/graduate teaching. Substantial start-up funds and laboratory facilities will be provided. Salary commensurate with experience. Applicants should submit a statement describing their research interests and plans, curriculum vitae, and list of publications, and should arrange for three letters of reference to be sent to:

Position #:

**Ann Zielinski, Search Coordinator  
B107 Chemical & Life Sciences Laboratory  
601 S. Goodwin Ave.  
Urbana, IL 61801  
(217) 333-4469**

(Please indicate position number in cover letter as well.)

To ensure full consideration, applications should be received by December 1, 1996. Interviews may be conducted before the closing date, but no final decisions will be made before that time.

The University of Illinois at Urbana-Champaign offers an outstanding and exciting academic research environment including a Biotechnology Center providing subsidized state-of-the-art services in: hybridoma production, DNA and peptide synthesis, DNA sequencing, flow cytometry, electron microscopy, X-ray crystallography, and computer analyses.

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

## FACULTY POSITIONS

Tenure-track positions are available at the  
**University of Medicine and Dentistry of New Jersey—  
School of Osteopathic Medicine for the following...**

### DEPARTMENT OF MOLECULAR BIOLOGY ASSISTANT PROFESSOR POSITIONS

Applications are invited from candidates utilizing modern technologies to study issues applicable to the human condition. At this time, the department is especially interested in individuals whose research is in the areas of cancer, microbial pathogenesis, aging and molecular biology of retinal receptors and membrane fusion processes. The successful candidate will be expected to develop an independent, extramurally-funded research program and participate in the teaching of osteopathic medical students and graduate students. Exceptional salary, start-up and support packages are available to the successful candidates.

Interested individuals should send their C.V., a statement of research interests, and the names of three individuals willing to write a letter of reference to: **Sal J. Caradonna, Ph.D., Chair, Department of Molecular Biology, UMDNJ-SOM, Two Medical Center Drive, Stratford, NJ 08084. Web address: [www3.umdj.edu/mobioweb/molebio.html](http://www3.umdj.edu/mobioweb/molebio.html).**

### DEPARTMENT OF CELL BIOLOGY ASSISTANT OR ASSOCIATE PROFESSOR

Applicants should have significant post-doctoral research accomplishments and demonstrated ability to attract extramural funding. Successful candidates will be expected to have a track record of research excellence and be able to establish independent research programs; interact with groups of researchers from a broad spectrum of disciplines related to cell biology, vascular biology, heart and lung disease, hypertension, tissue injuring, inflammation and oxidant stress; and participate in medical and graduate teaching. Research interest in: 1) neurobiology, 2) cardiovascular biology, and 3) cell and molecular biology are preferred.

Salary commensurate with qualifications. Applicants should submit a C.V., a statement of future research interests and objectives and three letters of recommendation to:

**Patrick Y-K Wong, Ph.D., Professor and Chairman, Department of Cell Biology, UMDNJ-SOM, Two Medical Center Drive, Stratford, NJ 08084.**

UMDNJ is an Affirmative Action/Equal Opportunity Employer, m/f/d/v, and a member of the University Health System of New Jersey.



## Postdoctoral Fellowships

The newly established Cancer and Developmental Biology Laboratory (CDBL), under the leadership of Dr. Colin L. Stewart at the ABL-Basic Research Program, has several POSTDOCTORAL FELLOWSHIPS immediately available. The Laboratory has two major areas of interest: 1) the role of growth factors in early mammalian development, and 2) the phenomena of genomic imprinting, particularly with regard to its involvement in regulating the cell cycle and cellular proliferation in the mammalian embryo.

We seek motivated individuals with a background in molecular biology. Experience in working with growth factors, cell cycle analysis, ES cell technology and mouse development would be an advantage.

The ABL-Basic Research Program at the Frederick Cancer Research and Development Center is located in Frederick, MD (45 miles north of Washington, DC) and offers a full complement of benefits, competitive postdoctoral stipends, and an excellent work environment. Please send a curriculum vitae, an introductory letter containing a brief description of research experience, and contact information for three references to:

**Personnel Department/CDB-Sc  
ABL-Basic Research Program  
NCI-FCRDC  
P.O. Box B, Building 428  
Frederick, MD 21702-1201**

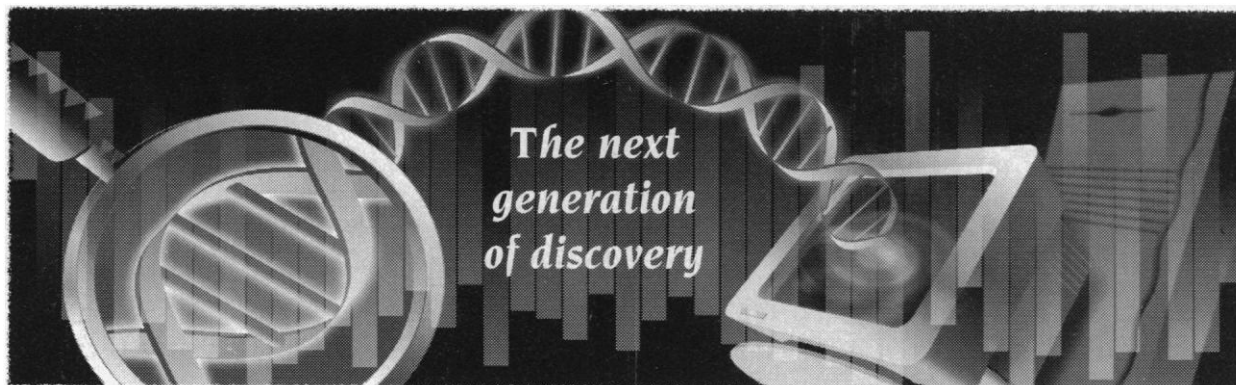


Previous applicants  
need not reapply

*An Equal Opportunity/  
Affirmative Action Employer*



# MILLENNIUM



## At Millennium Pharmaceuticals,

we're not only asking medicine's most pressing questions for the new Millennium, we're answering them. By applying our expertise in genetics, genomics and bioinformatics, we're identifying genes responsible for common, major diseases such as obesity, type II diabetes, oncology, CNS disorders, cardiovascular disease and asthma. Using this knowledge, we employ comprehensive approaches to understand how genes function in disease initiation and progression. We're developing a new generation of diagnostic and therapeutic products capable of addressing major diseases at their root cause, rather than merely identifying and treating symptoms.

As a rapidly growing, publicly held genomics company with significant medical and academic affiliations and pharmaceutical partnerships with Hoffman-La Roche, Eli Lilly, Wyeth-Ayerst, and Astra, Millennium is clearly poised to become the world's leader in gene-based drug discovery.

## BIOLOGY

**Human Pathologist:** Primary responsibilities are to oversee efforts in molecular histology, lead tissue-based research in conjunction with ongoing MPI disease programs, establish liaisons with outside pathology consultants and serve as the interface with our tissue banking collaborations. MD or MD/Ph.D., residency in pathology and an understanding of molecular techniques required. **JOB CODE: 96-SHGHP5**

**Postdoctoral Position-Vector Biology:** Utilizing your understanding of in vitro and in vivo systems, you will use viral-based systems for in vivo delivery of novel genes in experimental disease models for validation of their therapeutic potential, with an emphasis on human gene therapy applications. Ph.D. in Molecular Biology with 2-3 years' working with viral-based systems. Experience with murine (or other animal models) desirable. **JOB CODE: 96-SHGVBH**

**Postdoctoral Position-Yeast Genetics:** This Post-doc will be a member of our yeast genetics group. The researchers primary focus will be to study G-protein coupled receptor signal transduction in yeast. Ph.D. required. Experience in the mating signal transduction pathway desired. **JOB CODE: 96-SHGYGS**

**Postdoctoral Position-Mouse Models:** We are looking for a postdoctoral fellow with experience in the generation and analysis of mouse models. Ph.D. required. **JOB CODE: 96-SHGMMS**

**Postdoctoral Positions-Oncology:** We are seeking postdocs to identify new proteins that regulate apoptosis and elucidate the mechanisms of actions of genes involved in apoptosis. Ph.D. required. Lab experience in apoptosis, cancer or protease fields is preferred. **JOB CODE: 96-SHGOS**

## COMPUTATIONAL BIOLOGY

**Computational Structural Biologist:** Lead a group focused on the prediction of protein structure & function from primary sequence using computational methods. The group will interact with a well established bioinformatics group composed of software engineers, computer scientists & experimental scientists in molecular biology, cell biology, genetics and protein chemistry. The ideal candidate will have a background in computational & structural biology emphasizing protein structural, familial, and functional relationship. **JOB CODE: 96-SHGCBJ**

## BIOINFORMATICS

**Computer Scientist:** Participate in expanding our genetic analysis tool set. Experience developing signal and image processing algorithms for noise reduction and pattern matching. Feature detection, anti-aliasing, and adaptive algorithms experience a plus. Must be capable of working collaboratively and delivering maintainable, production-quality solutions. Experience in object-oriented design and development (Smalltalk & GemStone experience a big plus) and relational database technology. Ph.D. in Computer Science, or MS plus 5-10 years' post-graduate experience. **JOB CODE: 96-SHGCSJ**

## GENOMICS

**Human Genetics Associate Scientist/Lab Supervisor:** Responsibilities include laboratory management for our geneotyping facility. The job requires a perspective on high-throughput experimental settings, a capacity for innovative development work as well as strong leadership skills. Familiarity with standard molecular biological techniques and strong computer and organizational skills required. An MS with 3-5 years' experience preferred. **JOB CODE: 96-SHGHG1S**

**Statistical Geneticist:** Ph.D. with interest in parametric and non-parametric approaches to the analysis of complex traits. Ideal candidate will also have a strong interest and demonstrated experience in the area of genetic map construction and issues related to the analysis of linkage disequilibrium data. **JOB CODE: 96-SHSG1H**

We reward all individuals who sustain our collaborative process by providing them with a competitive compensation package that includes stock ownership. To apply, send your resume, indicating appropriate job code, to: **Millennium, Human Resources, 640 Memorial Drive, 5th Floor, Cambridge, MA 02139; FAX (617) 225-0884.**

Millennium seeks and cultivates a diverse workforce through equal opportunity employment and a collaborative team approach.

**Visit our exhibit at:  
A.S.H.G. from Oct., 29 - Nov. 1  
in San Francisco, CA**



**MILLENNIUM PHARMACEUTICALS, INC.**

# ANNOUNCING THE UNCF•MERCK SCIENCE RESEARCH FELLOWSHIPS

## GRADUATE SCIENCE RESEARCH DISSERTATION FELLOWSHIPS

12 awards will be made in 1997.

Each award consists of

- FELLOWSHIP STIPEND UP TO \$25,000
- DEPARTMENT GRANT UP TO \$15,000

*Applicants must be:*

- African American
- Enrolled full time in a Ph.D. or equivalent doctoral program in the life or physical sciences
- A third- or fourth-year graduate student in the academic year 1997-98
- A U.S. Citizen or permanent resident.

## POSTDOCTORAL SCIENCE RESEARCH FELLOWSHIPS

10 awards will be made in 1997.

Each award consists of

- FELLOWSHIP STIPEND UP TO \$40,000
- INSTITUTIONAL GRANT UP TO \$15,000

*Applicants must be:*

- African American
- Appointed as a postdoctoral fellow during the 1997 calendar year at an academic or a non-academic research institution (private industrial laboratories are excluded).
- A U.S. Citizen or permanent resident.

*For application packets, contact: Jerry L. Bryant, Ph.D., The College Fund/UNCF, 1-800-331-2244*

**Applications must be postmarked by January 15, 1997**

*"A mind is a terrible thing to waste."*

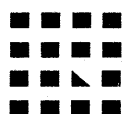
## VIROLOGY DIRECTOR

Quality Biotech Inc., a leading, international biotechnology service company, engaged in contract research and biosafety testing for the biopharmaceutical industry, has an opening for Director of our Virology Group.

You will be responsible for supervising a number of established assays under strict compliance with GLP/cGMP guidelines and for the development and implementation of new assays using novel and emerging technologies. You will also manage our virology lab operations which includes duties such as protocol development, management of technical staff, data interpretation/analysis and serving as Study Director. In addition, you will support our technical sales effort and interact with clients and regulatory authorities.

Qualified candidate should have a Ph.D. in Virology or a related field plus five to eight years' relevant experience managing a laboratory staff, a record of independent scientific leadership and excellent communication skills. Familiarity with FDA regulations and biotech drug development process is desirable.

Quality Biotech is located in the Greater Philadelphia region—an area rich in scientific, cultural and recreational diversity. We offer excellent opportunities for professional growth, a competitive salary, relocation assistance, health benefits and 401(k) plan. Please send resume, and salary requirements, to: Quality Biotech Inc., Human Resources-VSC1096, 1667 Davis Street, Camden, NJ 08104. Fax: 609-342-8078 EOE



**Quality Biotech\***  
Biotechnology Testing Services



**Faculty Positions in**

### BIOINFORMATICS AND COMPUTATIONAL BIOLOGY

As part of a major new programmatic initiative, the University of Pennsylvania seeks outstanding candidates at all levels for tenure-track faculty positions in bioinformatics and computational biology. Applicants should have demonstrated qualifications in research in any area of computational molecular or cellular biology, or genomics, and a commitment to working in a strongly interdisciplinary environment involving biologists, computer scientists, mathematicians and statisticians. The successful applicant will participate in an ongoing training program in bioinformatics at the graduate and post-graduate levels, with an undergraduate program expected in the near future. Appointments are expected to be in the Department of Genetics, School of Medicine with secondary appointments in other departments and institutes, as appropriate. Letters of interest, CV, and names of references should be sent to:



**G. Christian Overton, Ph.D.**  
**Chair, Bioinformatics**  
**Faculty Search Committee**  
**Dept. of Genetics, CRB 475/6145**  
**University of Pennsylvania**  
**422 Curie Blvd.**  
**Philadelphia, PA 19104-6145**

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER  
WOMEN, MINORITY, AND INTERNATIONAL CANDIDATES ARE  
ENCOURAGED TO APPLY



# TIGR Science Education Foundation's Genomic Science Series

## SMALL GENOMES: SEQUENCING, FUNCTIONAL CHARACTERIZATION, AND COMPARATIVE GENOMICS

Hyatt Regency Hilton Head, Hilton Head, SC - January 25-28, 1997

### Preliminary Agenda (All speakers confirmed except where noted)

#### Sunday, January 26, 1997

9:00 am- Noon	<b>Plenary Session I: Whole Genome Sequencing and Biology of Microbial Organisms</b>  Progress in microbial genome sequencing: an overview - <b>J. Craig Venter</b> , The Institute for Genomic Research  What have we learned from the sequence of <i>Saccharomyces cerevisiae</i> - <b>Andre Goffeau</b> , Universite Catholique de Louvain  Functional analysis of the genes in <i>Saccharomyces cerevisiae</i> - <b>Bernard Dujon</b> , Institut Pasteur  Complete genome sequencing of <i>Helicobacter pylori</i> - <b>Jean-Francois Tomb</b> , The Institute for Genomic Research  PCR-based analysis of DNA sequence diversity in the gastric pathogen, <i>Helicobacter pylori</i> - <b>Douglas Berg</b> , Washington University  Comparative genome analysis of the spirochetes, <i>Treponema pallidum</i> and <i>Borrelia burgdorferi</i> - <b>Claire M. Fraser</b> , The Institute for Genomic Research
Noon	Lunch
1:30 pm- 4:30 pm	<b>Plenary Session II: Whole Genome Sequencing and Biology of Microbial Organisms</b>  Completion of the <i>Escherichia coli</i> genome project - <b>Fred Blattner</b> , University of Wisconsin  Genome analysis of the <i>Cyanobacterium synechosystis</i> sp. PCC 6803 - <b>Satoshi Tabata</b> , Kazusa DNA Research Institute  Genome analysis of <i>Methanobacterium thermoautotrophicum</i> - <b>Douglas Smith</b> , Genome Therapeutics  Comparisons of the genomes of <i>Mycoplasma genitalium</i> and <i>Mycoplasma pneumoniae</i> - <b>Richard Herrmann</b> , University of Heidelberg  Phage transfer and the development of virulence in bacterial populations - <b>John Mekalonos</b> , Harvard University  Interspecies recombination in nature: insights from the study of <i>Neisseria gonorrhoeae</i> - <b>Brian Spratt</b> , University of Sussex
6:00 pm	Conference Dinner
8:00 pm- 10:00 pm	Poster Session

#### Monday, January 27, 1997

9:00 am - Noon	<b>Plenary session III: Microbial Ecology and Diversity</b>  Who's out there in the microbial world: prospects for a global genome survey - <b>Norman Pace</b> , Indiana University  Genomic characterization of uncultivated marine archaea - <b>Edward F. DeLong</b> , UC Santa Barbara  Comparative genome analysis of the archaea, <i>Methanococcus jannaschii</i> and <i>Archaeoglobus fulgidus</i> - <b>Hans-Peter Klenk</b> , The Institute for Genomic Research
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#### Monday, January 27, 1997 - continued

	Complete Genome Sequencing of <i>Aquifex</i> strain V5 - <b>Ron Swanson</b> , Recombinant Biocatalysis  Discovery of recombinant biocatalysts from uncultured organisms and extremeophiles - <b>Eric Mathur</b> , Recombinant Biocatalysis
Noon	Lunch
1:30 pm- 4:30 pm	<b>Plenary Session IV: Progress Reports on Microbial Genome Sequencing Projects</b>  <i>Rickettsia prowazekii</i> - <b>Siv Andersson</b> , University of Uppsala  <i>Streptococcus pneumoniae</i> - <b>Brian Dougherty</b> , The Institute for Genomic Research  The <i>Bacillus subtilis</i> genome: from sequence to function - <b>Antoine Danchin</b> , Institut Pasteur  <i>Neisseria gonorrhoea</i> - <b>Bruce Roe</b> (invited), University of Oklahoma  <i>Mycobacterium tuberculosis</i> - <b>Robert Fleischmann</b> , The Institute for Genomic Research  <i>Mycobacterium tuberculosis</i> - <b>Bart Barrell</b> (invited), The Sanger Centre  <i>Deinococcus radiodurans</i> - <b>Owen White</b> , The Institute for Genomic Research  Sequence analysis of <i>Pyrobaculum aerophilum</i> - <b>Sorel Fitz-Gibbon</b> , UCLA  <i>Sulfolobus solfataricus</i> - <b>Christoph W. Sensen</b> , National Research Council of Canada  Genome sequencing of <i>Pyrococcus furiosus</i> - <b>Robert B. Weiss</b> , University of Utah
	<b>Dinner on your own</b>
8:00 pm- 10:00 pm	Concurrent Discussion Sessions (chosen from submitted abstracts--see abstract information below)

#### Tuesday, January 28, 1997

9:00 am- 12:30 pm	<b>Plenary session V: Functional Genome Analysis</b>  Non-genic features of the <i>Haemophilus influenzae</i> Rd genome - <b>Hamilton O. Smith</b> , Johns Hopkins University  Utility of <i>Haemophilus influenzae</i> Rd genome in understanding pathogenesis - <b>Richard Moxon</b> , Oxford University  Functional analysis of the minimal genome of <i>Mycoplasma genitalium</i> - <b>Clyde Hutchison</b> , University of North Carolina  Microbial proteome analysis - <b>Ian Humphery-Smith</b> , University of Sydney  Function and ancestry of gene products in <i>E. coli</i> - <b>Monica Riley</b> , Marine Biological Laboratories  Prediction of metabolic pathways from whole genome analysis - <b>Peter Karp</b> , SRI International  Metabolism and evolution of microbial species deduced from whole-genome analysis - <b>Eugene Koonin</b> , NCBI
12:30 pm	Adjournment

**REGISTRATION:** Your registration fee pays for conference materials and meals provided by the conference. All registrations must be accompanied by a check made out to the TIGR Science Education Foundation, Inc., or by credit card information.

	Postmarked 9/2/96 - 12/19/96	Postmarked 12/20/96 - onsite
Individual	\$500	\$600
Student	\$300	\$350

Student registration must be accompanied by a letter from your thesis advisor

**ABSTRACTS:** Abstracts are still being accepted for poster sessions and will be included in the program and abstract book. Each participant is encouraged to submit one abstract, which must be accompanied by a registration form and registration fee.

Abstracts will not be accepted by FAX or without a registration fee. Submit your abstract by email (ASCII only) to [genome@tigr.org](mailto:genome@tigr.org) no later than November 15, 1996. You may also submit your abstract on a 3-1/2" disk with accompanying hard copy.

For additional information, updates, complete meeting logistics and a registration form, please contact our World Wide Web site <http://www.tigr.org>

OR Conference Office, TIGR Science Education Foundation, Inc., 9712 Medical Center Drive, Rockville, MD 20850-3319 • 301-838-3515 or 3509 • 301-838-0229 FAX • [genome@tigr.org](mailto:genome@tigr.org)

1997 Conference Cochairs: **Claire M. Fraser, Ph.D.**  
The Institute for Genomic Research

**E. Richard Moxon, M.D., Bchir, FRCP**  
University of Oxford

**Hamilton O. Smith, Ph.D.**  
The Johns Hopkins University

## POSITIONS OPEN

### DEAN, COLLEGE OF SCIENCE AND MATHEMATICS

Houston Baptist University is seeking to fill the **DEANSHIP** of the College of Science and Mathematics. The University is an urban, private Christian institution, affiliated with the Baptist General Convention of Texas, with a denominationally diverse Christian faculty of approximately 110 and a staff of 250. Undergraduate and graduate enrollment totals 2,200. The student body reflects the ethnic and cultural diversity of Houston. The College has 16 full-time faculty and about 400 undergraduate majors in biology, chemistry, mathematics, and physics. Candidates must hold an earned Ph.D. in one of the areas of the College, have significant administrative and teaching experience in a college or university consistent with the rank of professor, and must profess and personally the Christian faith. Applications and inquiries should be directed to: **Dr. Harold Raley, Chair, Search Committee, College of Arts and Humanities, Houston Baptist University, 7502 Fondren Road, Houston, TX 77074.** *Houston Baptist University does not discriminate on the basis of race, color, handicap, sex, age, national and ethnic origin.*

### UNIVERSITY OF CALIFORNIA, IRVINE ASSISTANT/ASSOCIATE PROFESSOR Two Positions, Ecology/Evolutionary Biology

The Departments of Ecology and Evolutionary Biology at the University of California, Irvine (UCI) solicits applications for two **FACULTY POSITIONS**. One will be in the area of ecology, the other in the area of evolutionary biology. Appointments will be made at the Assistant (tenure-track) or Associate Professor (tenured) level. The successful candidates will be expected to participate in both the undergraduate and graduate teaching programs in the Department. The deadline for receipt of applications will be December 1, 1996. Please submit curriculum vitae; description of research and teaching interests; relevant publications; and the names, addresses, and telephone numbers of at least three referees to: **Ecology Search Committee or Evolutionary Biology Search Committee, Department of Ecology and Evolutionary Biology, University of California, 321 Steinhilber Hall, Irvine, CA 92697-2525.**

*UCI is an Equal Opportunity/Affirmative Action Employer committed to excellence through diversity.*

### THE UNIVERSITY OF WESTERN ONTARIO

The Department of Zoology, The University of Western Ontario, seeks a **MOLECULAR BIOLOGIST** to fill a tenure-track position at the Assistant Professor level, beginning 1 July 1997. A minimum of two years of post-doctoral research experience using molecular approaches is required. The Department of Zoology offers courses in support of the BSc Biology Program, and Honors Programs in Zoology, Biology, Cell Biology, Genetics and Ecology, and Evolution. The successful candidate will be expected to teach introductory and advanced courses in Cell Biology and Molecular Genetics and to develop an independent research program. Applications and three letters of reference should be sent to: **Dr. J. S. Millar, Chair, Department of Zoology, The University of Western Ontario, London, Ontario N6A 5B7 Canada** by December 31, 1996.

Positions are subject to budget approval. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of Western Ontario is committed to employment equity, welcomes diversity in the workplace, and encourages applications from all qualified individuals including women, members of visible minorities, aboriginal persons, and persons with disabilities.

### MAMMALIAN GENETICIST

A **TENURE-TRACK FACULTY** position is available in the Department of Molecular and Human Genetics at Baylor College of Medicine. Candidates working in any aspect of mammalian genetics will be considered. Work related to cancer genetics, complex traits, or disease genes is of particular interest. Candidates should hold a Ph.D., M.D., or M.D./Ph.D. degree; clinical training is not a requirement. Appointment at the Assistant Professor level is anticipated but the Associate Professor rank can be considered. Send curriculum vitae and three letters of reference to: **David Nelson, Ph.D., Chair Mammalian Genetics Search Committee, Baylor College of Medicine, Department of Molecular and Human Genetics, One Baylor Plaza, 902E, Houston, TX 77030.** *Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.*

## POSITIONS OPEN

### ASU ARIZONA STATE UNIVERSITY

The Department of Chemistry and Biochemistry at Arizona State University seeks applicants for a tenure-track **ASSISTANT PROFESSOR** with research interests in either supramolecular chemistry or environmental chemistry. Ph.D. in chemistry or related field required. Candidates must demonstrate potential for establishing a vigorous research program and excelling in teaching at the undergraduate and graduate levels. Candidates must send curriculum vitae, list of publications, brief description of research plans, and statement of teaching philosophy, and should arrange to have three letters of reference sent to: **Professor Robert E. Blankenship, Chair, Faculty Search Committee, Department of Chemistry and Biochemistry, P.O. Box 871604, Arizona State University, Tempe, AZ 85287-1604.** Review of applications will begin December 1, 1996, and every two weeks thereafter until the position is filled. *Arizona State University is committed to increasing faculty diversity. Arizona State University is an Equal Opportunity/Affirmative Action Employer.*

### FACULTY POSITION—OPEN RANK DEPARTMENT OF BIOLOGY Institute of Molecular Biology University of Oregon

The Department of Biology at the University of Oregon invites applicants at the junior or senior level for a **TENURE-TRACK** faculty position with affiliation with the Institute of Molecular Biology or the Institute of Neuroscience. We are particularly interested in candidates who are using genetic and/or molecular approaches to investigate fundamental issues in developmental biology. The successful applicant will have demonstrated the potential for excellence in both teaching and research. Applicants should submit, by December 1, 1996, a curriculum vitae, a bibliography, and a statement of research interests and plans; and should have four letters of recommendation sent to: **Molecular Biology Search Committee, Department of Biology, 1210 University of Oregon, Eugene, OR 97403-1210.** *The University of Oregon is an Affirmative Action/Equal Opportunity Employer committed to compliance with ADA and cultural diversity. We encourage women and minorities to apply.*

**Biology FACULTY POSITIONS**, Penn State: The Department of Biology, The Pennsylvania State University Commonwealth Educational System, invites applications for four tenure-track positions at the assistant professor level available August 1997. Abington-Ogontz Campus, Abington, Pennsylvania: two positions (with computer and multimedia skills desirable)—botanist and animal biologist to teach introductory courses in general biology, cell biology, genetics, development, and/or plant physiology. Both positions involve teaching upper-division courses in areas of specialization, non-majors biology, and participation in undergraduate research programs. Altoona Campus, Altoona, Pennsylvania: position requires teaching anatomy and physiology and general biology, and establishing interactive relationships with regional health institutions. Worthington-Scranton Campus, Dunmore, Pennsylvania: position requires teaching biology including human anatomy and physiology. Candidates must have Ph.D. degree. Continuing scholarly activity, including research and publication, will be required. Application deadline: December 15, 1996, or until suitable candidates are identified. Separate application materials are required for each campus. Send curriculum vitae, transcripts, statements of research goals and teaching philosophy, and three letters of reference to: **Search Committee, Box A, 208 Mueller Laboratory, University Park, PA 16802.** *An Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.*

Duke University is seeking a **FULL PROFESSOR** with tenure in Cognitive Neuroscience beginning fall 1997. Specialty areas to be considered for teaching and research contributions include, but are not limited to, attention, memory, motor control, and vision in humans. We hope to attract an internationally visible person who has some combination of computational, developmental, experimental, mathematical, or neuroscience perspectives. An interest in fMRI is preferred. Please send curriculum vitae and names of references to: **Search Committee, Department of Psychology: Experimental, Duke University, Durham, NC 27708-0086, U.S.A.** Applications received by January 1, 1997 are guaranteed consideration. *Duke University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### ASSISTANT OR ASSOCIATE PROFESSOR PHARMACOLOGY AND TOXICOLOGY The University of Kansas

Applications are invited for a **TENURE-TRACK** position as Assistant or Associate Professor of Pharmacology and Toxicology at the School of Pharmacy. The School at the University of Kansas ranks fourth nationally in total NIH research funding among all such schools. The Department of Pharmacology and Toxicology is recruiting a faculty member with expertise in any of the following areas: neuropharmacology, neurotoxicology, behavioral pharmacology or toxicology, molecular and cellular neurobiology, molecular aspects of signal transduction. The successful candidate must hold a Ph.D., M.D., or equivalent degree, and will be expected to have externally funded research or to establish a funded research program, to participate in collaborative research projects, and to teach at the graduate and undergraduate level. Excellent core facilities exist including those for DNA sequencing, large scale fermentation, cell culture and hybridoma production, confocal and electron microscopy, molecular modeling NMR, mass spectroscopy, and X-ray crystallography. Send curriculum vitae, a description of research plans, and the names of three references to: **Dr. Elias K. Michaelis, Department of Pharmacology and Toxicology, University of Kansas, Lawrence, KS 66045-2505.** Email: [EKM@smisssman.hbc.ukans.edu](mailto:EKM@smisssman.hbc.ukans.edu). Application deadline: December 2, 1996. *The University of Kansas is an Equal Opportunity/Affirmative Action Employer. Underrepresented minorities and women are encouraged to apply.*

### FACULTY POSITIONS Molecular Biology/Molecular Genetics

The Department of Medical Biochemistry of The Ohio State University College of Medicine plans to build a strong Molecular Biology group in the department, which will further broaden the existing well-recognized research in the department. To achieve this goal, we plan to recruit at least four new faculty. Two positions at the level of **ASSISTANT/ASSOCIATE PROFESSOR** are available immediately. We seek individuals with the ability to establish strong extramurally funded research programs in molecular biology/molecular genetics and a commitment to excellence in teaching molecular biology at the graduate level. The selected candidates will have ample opportunity to interact with numerous active research laboratories in the basic science departments and centers in the campus. An attractive start-up package will be available to the successful candidates.

Applicants should submit a curriculum vitae; selected reprints; a description of research interests and goals; and the names, addresses, and telephone numbers of three references to: **Chair, Faculty Search Committee, Department of Medical Biochemistry, 333 Hamilton Hall, 1645 Neil Avenue, Columbus, OH 43210-1218.** Review of the applications will begin December 16, 1996. *The Ohio State University is an Equal Opportunity/Affirmative Action Employer.*

**Computational Biologist, ASSISTANT/ASSOCIATE/FULL PROFESSOR.** The Department of Biology at The University of New Mexico (UNM) invites applications for a tenure-track or tenured position (depending on level) for application of state-of-the-art computing to research problems in some area of biology and involvement in computational biology at the departmental, campus, national, and international levels. The successful candidate will be able to take advantage of the University-owned Maui High Performance Computing Center (MHPCC) and High Performance Computing Education and Research Center, which manages MHPCC. The candidate also can benefit from the proximity of two national labs (Sandia and Los Alamos) and the Santa Fe Institute. Development of a strong research program in theoretical and/or experimental computational biology is expected in concert with teaching excellence at the undergraduate and graduate levels. Level of position and salary are negotiable. Ph.D. degree is required. Send curriculum vitae, reprints of three representative publications, and three letters of reference to:

**Chair, Computational Biologist Search Committee  
Department of Biology,  
The University of New Mexico  
Albuquerque, NM 87131-1901  
Telephone: 505-277-3411; FAX: 505-277-0304**

Complete applications must be received by December 31, 1996. *UNM is an Equal Opportunity/Affirmative Action Employer and Educator.*



# TUMOR BIOLOGY & INFECTIOUS DISEASES RESEARCH AND HIGH THROUGHPUT SCREENING at Schering-Plough

From molecules to medicines. At the Schering-Plough Research Institute, scientists are discovering and developing the novel therapeutics that challenge humankind's most debilitating diseases. To continue this important work, we seek talented scientists to join a multidisciplinary group focused on molecular targets relevant to the discovery of novel agents for the treatment of infectious diseases and anticancer therapies.

## TUMOR BIOLOGY

### Senior Scientist

As a member of our *in vivo* modeling group, you will contribute to the ongoing evaluation of anticancer therapies targeting oncogene signal transduction, tumor suppressors and tumor progression. Qualifications include a PhD in Biochemistry, Pharmacology or Molecular Biology and 2-3 years of postdoctoral experience in the development of *in vivo* cancer models. Position also requires strong hands-on experience in molecular cloning, ES cell culture generation of transgenic and knock out models and histopathology. The ability to carry out an independent research program in a collaborative environment is necessary. To be considered for this position, please reference Dept. DD-96-51.

### Assistant Scientists

We seek two Assistant Scientists to contribute to the development of *in vitro* systems for discovery and evaluation of novel cancer therapeutics targeting oncogene signal transduction and androgen-dependent growth of cancer cells. Positions require an MS degree with 2-3 years of strong hands-on experience in molecular biology including PCR techniques, cDNA cloning, and RNAase protection assays. Familiarity with bacterial, insect or mammalian protein expression systems and protein purification is required. Knowledge of enzymology is also highly desirable. To be considered for this position, please reference Dept. DD-96-55-56.

### Assistant Scientist

We also seek an Assistant Scientist to contribute to the ongoing evaluation of anticancer therapies targeting oncogene signal transduction, tumor suppressors and tumor progression. To qualify, you need an MS in the Biological Sciences and at least 2 years of experience in tumor biology models. Technical expertise in cell culture and *in vivo* models (tumor implantation, dosing, surgery and histopathology) is required. Experience with molecular biological techniques is highly desirable. To be considered for this position, please reference Dept. DD-96-54.

### Assistant Scientist

We also seek a Scientist to be responsible for the expression, purification and characterization of a variety of recombinant proteins. DNA cloning, DNA sequencing, RNASE protection assays, PCR, Nucleic Acid hybridization, cell culture and

conducting bioassays. Position requires a Bachelor's or Master's degree in Biology or a related field and 2 years of experience with a variety of biochemical and molecular biological techniques. To be considered for this position, please reference Dept. DD-96-60.

## H.T.S.

### Associate Scientist

We seek a talented Biochemist to join a team of professional scientists involved in the implementation of automated high throughput screens for novel therapeutic entities. To qualify, you need a BS in Biochemistry or a related discipline and 4-7 years or an MS and 2-4 years of experience. Background must include development of quantitative enzyme and/or receptor binding assays using state-of-the-art assay technologies. To be considered for this position, please reference Dept. DD-96-57.

## NATURAL PRODUCTS

### Assistant Scientist

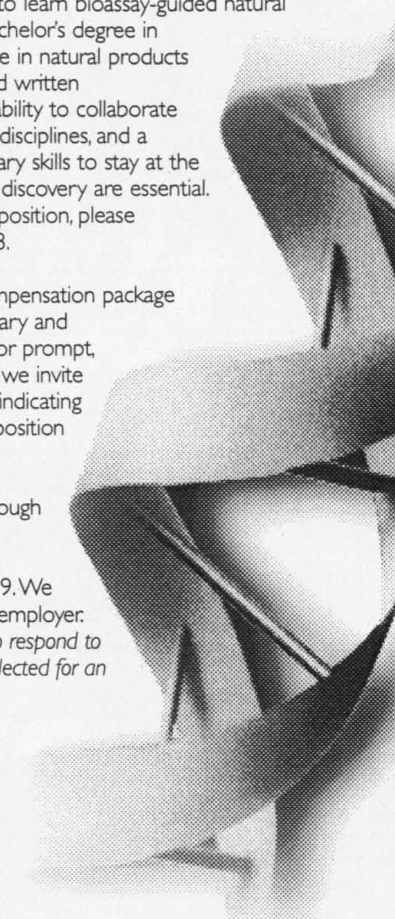
We seek a talented Chemist to conduct bioassay-guided isolation and structure elucidation of drug candidates from marine, plant and microbial sources. The ideal candidate will possess a Master's degree in Organic Chemistry with experience in or a desire to learn bioassay-guided natural products isolation; or a Bachelor's degree in Chemistry with experience in natural products isolation. Excellent oral and written communication skills, the ability to collaborate with scientists from many disciplines, and a desire to learn the necessary skills to stay at the leading edge of new drug discovery are essential. To be considered for this position, please reference Dept. DD-96-58.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume indicating the Dept. Code for your position of interest and salary requirements to: Human Resources-KB, Schering-Plough Research Institute, K-15-1, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*



Schering-Plough  
Research Institute

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## POSITIONS OPEN

### NORTH CAROLINA STATE UNIVERSITY Assistant Professor, Department of Genetics

The Department of Genetics at North Carolina State University invites applications for a tenure-track position in experimental quantitative genetics at the level of **ASSISTANT PROFESSOR**. Preference will be given to applicants with a research program focusing on the genetic basis of quantitative variation. Applicants should have a Ph.D. or equivalent degree and postdoctoral experience. The successful candidate is expected to participate in departmental teaching, develop a strong extramurally funded research program, train graduate students, interact with research faculty, and participate actively in the operations of the department. For further information about the Department of Genetics, see <http://www2.ncsu.edu/ncsu/cals/genetics/>. Applicants should submit curriculum vitae, a description of research plans and teaching interests, transcripts of graduate work, reprints, and three letters of reference by December 16, 1996 to: **Dr. Trudy F. C. Mackay, Department of Genetics, North Carolina State University, Raleigh, NC 27695-7614**. North Carolina State University is an Affirmative Action/Equal Opportunity Employer and is eager to identify minority persons and women with appropriate qualifications.

**Botanist**—The Department of Biology at Georgia Southern University seeks applications for a tenure-track position at the **ASSISTANT PROFESSOR** level for a Plant Biologist. Candidates must have completed a Ph.D. by January 1997. The position begins September 1, 1997. Salary is competitive and commensurate with experience and qualifications. See <http://www.bio.gasou.edu/> for additional information about the Department.

The successful candidate must be broadly trained in botany and should be able to teach general botany, plant physiology, and general biology along with a course in his or her specialty. The specific area of research is relatively open, but preference will be given to persons who can work in ecosystems of the Southeastern Coastal Plain. Applicants should send, by 2 January 1997, a letter of application, curriculum vitae, and statements of teaching and research interests, and should have three letters of reference sent to: **Dr. Donald Drapalik, Search Chair, Search 31787, Department of Biology, Georgia Southern University, Statesboro, GA 30460-8042, U.S.A.**

The names of applicants and nominees, vitae, and other general non-evaluative information are subject to public inspection under the Georgia Open Records Act. Georgia Southern University is an Equal Opportunity/Affirmative Action Institution. Persons who need accommodations in the application process under the Americans with Disabilities Act should notify **Dr. John E. Averett, Department Chair**.

Hartwick College invites applications for a full-time anticipated **TENURE-TRACK** position beginning September 1997. Successful candidates must demonstrate excellence in undergraduate teaching, the ability to establish an undergraduate research program, and a willingness to seek external funding. Ph.D. required. We are seeking a Plant Ecologist with extensive experience in microbiology. The successful candidate must be willing to teach microbiology and advanced courses in terrestrial and aquatic ecology, and to contribute to the Environmental Science and Policy Program, and must be committed to field research. Send statement of teaching and research interests, curriculum vitae, and three letters of recommendation to: **Dr. Linda A. Swift, Chair, Biology Department, Hartwick College, Oneonta, NY 13820**. Review of applications will begin immediately and continue until the position is filled. An Equal Opportunity Employer; women and members of underrepresented groups are especially encouraged to apply.

### BIOMETRIST ENTOMOLOGIST Information Technology/Human Biologist/ Science Education

The Department of Biological Sciences, San Jose State University (SJSU), seeks three **TENURE-TRACK FACULTY** for August 1997. Doctorate required. Positions require evidence of or potential for good teaching. Development of active research programs and professional contributions expected. Further information available at <http://www.sjsu.edu/depts/Biology> or write to: **Recruitment Chair, Biology, SJSU, San Jose, CA 95192-0100**. Email: [dorosoz@biomail.sjsu.edu](mailto:dorosoz@biomail.sjsu.edu). The Department seeks faculty with sensitivity to goals and needs of ethnically and culturally diverse students. San Jose State University is an Equal Opportunity/Affirmative Action/Title IX Employer.

## POSITIONS OPEN

### MOLECULAR GENETICIST AND DEVELOPMENTAL BIOLOGIST Arizona State University Main Campus

We invite applications for two **TENURE-TRACK** positions at the Assistant Professor level in the Department of Zoology, beginning fall 1997. Candidates for the molecular genetics position must have a primary research interest and record of accomplishment in the molecular genetics of eukaryotes. Candidates for the developmental biology position must use cellular, molecular, or genetic approaches to address fundamental problems in animal development using well-characterized model systems such as, but not limited to, *C. elegans*, *Drosophila*, zebrafish, *Xenopus*, sea urchin, and mouse.

The successful candidates will join an expanding group of cellular, developmental, and molecular biologists and will be expected to establish an active research program, participate in graduate and undergraduate teaching, supervise graduate students in the Zoology or Molecular and Cellular Biology graduate programs, and undertake professional service appropriate to rank. Arizona State University provides excellent research support including fully staffed facilities for DNA sequencing and oligonucleotide synthesis, peptide synthesizing and sequencing services, elemental analysis, confocal and ratio imaging microscopy, and biological electron microscopy with high pressure freezing; access to an off-campus transgenic mouse facility and cell sorter can be arranged. Generous space and start-up funds are available.

A Ph.D. is required and postdoctoral experience preferred. Applicants must submit a curriculum vitae, copies of selected reprints, a concise statement of present and projected research plans, and a statement of teaching interests, and should arrange to have three letters of reference sent directly to the Chair of either the **Molecular Genetics or Developmental Biology Search Committee, Department of Zoology, Arizona State University, Box 871501, Tempe, AZ 85287-1501**. Applications from two individuals wishing to share either appointment will be considered. Review of applications will begin December 15, 1996 and thereafter on the first day of each month until the position is filled. Arizona State University is an Affirmative Action/Equal Opportunity Employer.

The Cancer Research Center of Hawaii, an organized research unit of the University of Hawaii, invites applications for a tenure-track position at the **ASSISTANT or ASSOCIATE RESEARCHER (PROFESSOR)** level. An individual is sought to join the Natural Products Program, a multidisciplinary drug discovery group aimed at discovery and characterization of new anticancer agents. Applicants with an interest in angiogenesis are particularly encouraged to apply, although individuals with research interests in other areas of cancer pharmacology will also be considered. The successful applicant is expected to contribute to a screening/drug discovery program as well as to establish an independent research group that will complement the existing program in natural products. Opportunities exist for joint appointment in academic departments and for graduate training. Applicants must have the M.D. or Ph.D. degree and (for appointment at the Associate level) a strong record of extramural funding and published research. To apply, send letter of application, curriculum vitae, statement of current and future research interests, and the names and addresses of three references to: **Gregory M. L. Patterson, Ph.D., Cancer Research Center of Hawaii, 1236 Lauhala Street, Honolulu, HI 96813**. Inquiries: Telephone: 808-956-6031; Email: [cyano@gold.chem.hawaii.edu](mailto:cyano@gold.chem.hawaii.edu). Closing date: December 18, 1996. The University of Hawaii is an Affirmative Action/Equal Employment Opportunity Employer. Women and minorities are encouraged to apply.

### BIOLOGY/IMMUNOLOGY

The Department of Biology, Hofstra University, invites applications for an **ASSISTANT PROFESSOR** tenure-track position. Teach introductory biology and an immunology course for majors and maintain an active research program involving undergraduates and Master's degree students. Ph.D. required; postdoctoral experience preferred. Please submit curriculum vitae, statements of teaching goals and research interests (including a short description of plan to involve students in research), three representative reprints, and three letters of reference to: **Biology/Immunology Search, Dr. Dorothy E. Pumo, Professor and Chair, Department of Biology, 114s Hofstra University, Hempstead, NY 11550**. Deadline: December 31, 1996. Equal Opportunity Employer, Minorities/Females/Disabled/Veterans.

## POSITIONS OPEN

### RESEARCH FACULTY POSITIONS

Applications are being accepted for a position of **RESEARCH ASSISTANT PROFESSOR or RESEARCH ASSOCIATE** in the area of membrane protein structure-function. The Research Assistant Professor will work closely with an active, well-funded research group studying electron transport and energy transduction mechanisms at the molecular level, but will have the opportunity to develop his or her independent research program. Applicant should have a Ph.D. degree in a related discipline and experience in structure/function of membrane proteins, x-ray crystallography, or molecular biology. A competitive salary and fringe benefits will be negotiated, based on the qualifications and experience of the candidate. Interested individuals should send a current curriculum vitae with relevant publications and names of three references by November 1, 1996 to: **Professor Chang-An Yu, Department of Biochemistry and Molecular Biology, Oklahoma State University, 246 NRC, Stillwater, OK 74078-3035**. Search will continue until a suitable candidate is identified. Oklahoma State University is an Affirmative Action/Equal Opportunity Employer.

### PLANT MOLECULAR BIOLOGIST ASSISTANT PROFESSOR

The Department of Biological Science at Florida State University seeks applications for a **TENURE-TRACK** faculty appointment. We are seeking a person of outstanding promise who uses molecular and genetic approaches to investigate fundamental problems in plant biology. The successful candidate will join several new faculty representing the department's expanding presence in cellular/molecular biology. Opportunities include competitive salary and start-up funds and well-equipped departmental core facilities. Responsibilities include development of an extramurally funded research program and instruction at the undergraduate and graduate levels in a broad-based biology department. Send curriculum vitae, research plan, and three letters of recommendation to: **Dr. George W. Bates, Search Committee Chair, Department of Biological Science, Florida State University, Tallahassee, FL 32306-3015**. Applications will be reviewed after December 12, 1996. Visit <http://www.fsu.edu/~biology> for more information.

Florida State University is an Affirmative Action, Equal Opportunity Employer.

### ASSISTANT/ASSOCIATE PROFESSOR

The Wellman Laboratories of Photomedicine at the Massachusetts General Hospital, Harvard Medical School, invites applications from individuals with major research interests and experience in cell biology and desire to work in a highly interactive environment. The Laboratories conduct multidisciplinary research on the effects of UV, visible and IR radiation on cells and tissue and on the use of light to study biological systems. Current areas of interest include photodynamic therapy, membrane and DNA photochemistry, laser-induced stress transients and cavitation, ablation, photoaging, *in vivo* confocal microscopy, and development of diagnostic and therapeutic uses of pulsed laser radiation. Candidates should have a demonstrated record of accomplishment in research and obtaining peer-reviewed support. Please send a curriculum vitae, a brief statement of research plans, and names of three references to: **John A. Parrish, M.D., Wellman Laboratories of Photomedicine, WEL-224, Massachusetts General Hospital, 55 Fruit Street, Boston, MA 02114**. The Massachusetts General Hospital and Harvard Medical School are Equal Opportunity Employers. Minorities, disabled persons and veterans are encouraged to apply.

**MICROBIOLOGIST:** Tenure-track, Assistant/Associate Professor position for academic year beginning August 11, 1997, with summer teaching possible. Ph.D. and strong commitment to teaching required. Semester teaching load is 12 contact hours, including general microbiology, introductory molecular and cellular biology, and courses within area of specialization, varying from medical to environmental. Duties: advising, committees, supervising research of undergraduate/Master's students, and developing research program in area of specialization. Screening begins December 1, 1996 and continues until position filled. Send curriculum vitae; transcripts; letter stating teaching/research interests; and names, addresses, telephone numbers, and Email addresses (if available) of four references to: **Dr. David Saunders, Box 4050, Emporia State University, Emporia, KS 66801**. <http://www.emporia.edu/S/www/biosci/biology.htm>. Affirmative Action/Equal Opportunity Employer.



## SCIENCE AND MEDICINE AT FOX CHASE:

### WHERE TODAY'S DISCOVERIES LEAD TO TOMORROW'S HOPE

Research conducted by scientists and physicians at Fox Chase for nearly seven decades has led to ground-breaking discoveries that have an impact on science and medicine today.

Current faculty research programs are wide-ranging and include gene expression; molecular aspects of oncogenesis; viral molecular biology and pathogenesis; molecular structure and function analysis; pharmacology and therapeutics; regulation and development of the immune system; cell cycle control; and human genetics, including the Human Genome Project.

An energizing environment in suburban Philadelphia with research as its major focus, the Center has more than 60 independent laboratories where investigators enjoy a unique advantage—to pursue their passion for discovery full-time, with minimal distractions by administrative or teaching responsibilities.

#### Tenure Track Faculty Positions:

At this time we are welcoming applications from outstanding independent investigators to fill Assistant and Associate Professor-level positions in the areas of **genomics, human genetics, molecular epidemiology, and protein function and organization**. We are especially interested in people using human or model experimental systems capable of addressing important biological questions and exploiting the expanding genomic resources. Fox Chase offers excellent shared laboratory and animal facilities such as transgenic mouse, hybridoma, tissue culture, cell sorting, confocal microscopy and high through-put DNA sequencing, and an extensive array of core resources and computer support services.

As a new faculty member, you will receive a generous start-up package including funds for equipment, technical assistance and operating expenses. You will have the opportunity to recruit post-doctoral trainees through an intramural, competitive program and to interact as an adjunct faculty member at nearby universities.

Interested candidates should send a C.V., summary of research interests and at least three references to: Search Committee, c/o Dr. A.M. Skalka, Director, Institute for Cancer Research, Fox Chase Cancer Center, 7701 Burholme Ave., Philadelphia, PA 19111.

Visit us at: <http://www.fccc.edu>.

Fox Chase Cancer Center is an Affirmative Action/Equal Opportunity Employer.

## DISCOVERY IN PROGRESS

At SmithKline Beecham, our commitment to scientific excellence results in products that promote health and well-being throughout the world. Because innovative research is critical to our ability to deliver new healthcare solutions, we are seeking gifted and focused scientists who are dedicated to discovery.

### Molecular Biologists

The Department of Molecular Genetics has a challenging opportunity for a Scientist with molecular genetic experience. Responsibilities will encompass basic and applied research in a broad spectrum of therapeutic areas including hematopoiesis, bone, cardiovascular, pulmonary, renal, CNS and infectious diseases. Experience in standard RNA/DNA methodologies including recombinant DNA techniques, Northern and Southern blotting, Colony hybridization and PCR is required. Experience in the construction and screening of cDNA libraries and subtractive screening methodologies is preferred. Knowledge of computer systems or robotics is a plus. A Bachelor's degree with 3-5 years' experience or a Master's degree with 1-3 years' experience is required. Refer to Job Code H6-0498.

### Postdoctoral Scientist, Pharmacology

We seek a scientist with a background in molecular and cell biology for our Pharmacological Sciences division. The scientist will investigate transcriptional regulation of cardiac and vascular smooth muscle function. This will entail conducting studies on the discovery of important and novel genes that are involved in the pathogenesis of vascular and cardiac remodeling as well as exploring the role of nuclear/orphan receptors in the control of gene transcription using mobility shift assays and two-hybrid systems. Exploring the functional role of transcriptional activation of vascular and cardiac muscle will be a collaborative effort with intra- and extradepartmental scientists. The ideal candidate will be intent on gaining recognition in the scientific community through publication of scientific results and participation in national meetings. A PhD in Molecular Biology, Biochemistry, Pharmacology or related discipline, 0-3 years' postdoctoral experience and knowledge of standard molecular biology techniques required. Experience with standard techniques in cell biology, biochemistry, *in situ* hybridization, yeast genetics, gene transfer techniques and a background in cardiovascular pathology is preferred. Refer to Job Code H6-CVED.

SmithKline Beecham offers a competitive compensation/benefits/relocation package as well as opportunities for growth in a scientifically intense environment structured around creativity, teamwork and commitment. Please send your CV to SmithKline Beecham Pharmaceuticals, Job Code \_\_\_\_\_, P.O. Box 2646, Bala Cynwyd, PA 19004. Indicating Job Code is essential. We are an Equal Opportunity Employer M/F/D/V.



**SmithKline Beecham**  
Pharmaceuticals

Challenging the natural limits.

## POSITIONS OPEN

### MICROBIOLOGIST

Northern Illinois University anticipates a tenure-track **ASSISTANT PROFESSOR** position for fall 1997. A Ph.D. and postdoctoral experience are required. Will be expected to develop a vigorous externally funded research program, direct graduate (M.S. and Ph.D.) students, and teach introductory courses for majors and non-majors.

Expertise should complement programs in microbiology with preference given to individuals working in the field of microbial pathogenicity. Teaching will include a course in microbiology and an advanced course in candidate's area of expertise.

Send letter of interest, curriculum vitae, brief statement of research and teaching goals, and names of three references by November 30, 1996 to: **Dr. Patricia Vary, Chair, Department of Biological Sciences, Northern Illinois University, DeKalb, IL 60115-2861. Telephone: 815-753-1753; FAX: 815-753-0461; Email: micro@niu.edu. Affirmative Action/Equal Opportunity Employer.**

### HEAD, DEPARTMENT OF BIOLOGY

We are seeking a Department Head for the Department of Biology, University of North Carolina at Greensboro. This is a tenured position at the rank of **PROFESSOR** with duties to begin 1 July 1997. We seek an energetic academic leader with demonstrated excellence in teaching and research, effective interpersonal skills, and administrative ability. Our Department requires and supports faculty research and offers varied Bachelor's and Master's degree programs, including training in biotechnology. By 20 December 1996, send curriculum vitae and letter describing: 1) teaching and research philosophies; 2) your own program of research; and 3) skills, vision, and experience you would bring to this position. Please address applications, including the names and addresses of four references, to: **Biology Department Head Search Committee, University of North Carolina at Greensboro, Dean of Arts and Sciences Office, 105 Foust Building, Greensboro, NC 27412-5001. Equal Opportunity/Affirmative Action Employer. Women/Minorities/Veterans/Disabled.**

**ASSISTANT/ASSOCIATE PROFESSORS**—Environmental Microbiology and Bioremediation. The Center for Environmental Diagnostics and Bioremediation (CEDB) seeks applicants for two tenure-track faculty positions, with joint appointment in the Department of Biology, available August 1997. Preference would be given to candidates carrying out molecular applications in the study of environmental microbiology of soils, freshwater aquifers, marine or estuarine ecosystems. The successful candidates will be expected to establish externally funded research programs, to involve undergraduates and Master's students in research, and to teach at both the undergraduate and graduate levels. Qualifications include Ph.D. and postdoctoral research experience in a relevant area. Salary negotiable. Applicants should submit a statement of research and teaching interests, curriculum vitae, transcripts, reprints, and three letters of reference by December 31, 1996, to: **Dr. Malcolm Shields, CEDB Search Committee, Room 66, Building 58, The University of West Florida, Pensacola, FL 32514. An Equal Opportunity/Access/Affirmative Action Employer.**

Iowa State University, Department of Botany, invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level in plant physiology, cell biology, or molecular biology. Applications will be accepted from individuals using molecular techniques and conducting research with plants, photosynthetic microbes, or filamentous fungi. The Botany Department has active, collaborative research groups in plant molecular biology, physiology, genetics, systematics, and ecology. In addition, there are nearly 200 plant biologists, housed in 11 different departments at Iowa State, who are involved in a variety of interdisciplinary collaborations. The successful candidate will be expected to establish a competitive research program and to contribute to graduate and undergraduate education. For further information about Iowa State University, the Botany Department, and graduate programs, see: <http://www.public.iastate.edu>, or Email: [rodermel@iastate.edu](mailto:rodermel@iastate.edu). Candidates should send a curriculum vitae, statement of research and teaching interests, and selected reprints, and arrange for three letters of recommendation to be sent to: **Dr. Steven Rodermel, Search Committee Chair, Department of Botany, Iowa State University, Ames, IA 50011-1020, by December 15, 1996. Iowa State University is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are encouraged to apply.**

## POSITIONS OPEN

### ASSISTANT/ASSOCIATE PROFESSOR IN ANATOMY

#### Department of Physical Therapy School of Pharmacy and Allied Health Professions

Creighton University, a Catholic, Jesuit institution, invites applications for a full-time, 12-month position. Candidates must possess excellent communication skills, an earned doctorate, and experience teaching dissection-based gross anatomy and histology. Candidates with a background in physical therapy or other clinical experience are preferred. The position involves participation in teaching of gross anatomy, neuroanatomy, and histology, and development of an independent research program. Send letter of interest, curriculum vitae, and four letters of reference to: **A. Joseph Threlkeld, PT, Ph.D., Chair, Department of Physical Therapy, School of Pharmacy and Allied Health Professions, Creighton University, 2500 California Plaza, Omaha, NE 68178. Telephone: 402-280-5676.**

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

### ANIMAL PHYSIOLOGIST

The Department of Biological Sciences at Murray State University seeks a full-time, tenure-track **ASSISTANT PROFESSOR** in Animal Physiology. Starting date: fall 1997. Ph.D. and postdoctoral experience in an appropriate biological area required. Responsibilities: Teaching courses in Animal Physiology and Human Physiology, and upper-level courses in area of specialty; pre-med advising. Preference will be given to individuals who can also teach Human Anatomy. The successful applicant will be expected to develop an externally funded research program and to direct graduate students. Application deadline: December 1, 1996. To apply: Submit curriculum vitae, statements of teaching and research interests, undergraduate and graduate transcripts, and three letters of recommendation to: **Dr. Terry Derting, Department of Biological Sciences, P.O. Box 9, Murray State University, Murray, KY 42071-0009. Murray State University is an Equal Education and Employment Opportunity, Minorities/Females/Disabled, Affirmative Action Employer.**

The Departments of Medicine, Microbiology and Pharmacology at The University of Texas Health Science Center at San Antonio (UTHSCSA) are developing a joint Program in Immunopharmacology/Immunopathogenesis. Multiple positions (**TENURE-TRACK**) are available. A successful candidate for the position in the Department of Medicine should be qualified to be Chief of the Division of Clinical Immunology and Rheumatology. The Microbiology candidate should have an accomplished record of research in the host immune response to infectious organisms with special interest in the cytokine regulation of the immune/inflammatory process and associated immunopathology. The Pharmacology candidate should have an active program emphasizing molecular mechanisms underlying cytokine-mediated actions. Candidates are expected to develop and maintain strong research programs, to participate in departmental teaching activities, and, if appropriate, to engage in clinical activities. Salary, space, and start-up funds are competitive with national levels. Candidates should send their curriculum vitae, synopsis of research plans, and the names of three individuals to provide recommendations to: **Ms. Cathie Franks, Immunopharmacology/Immunopathogenesis Search Coordinator, Department of Pharmacology, UTHSCSA, 7703 Floyd Curl Drive, San Antonio, TX 78284-7764. UTHSCSA is an Equal Employment Opportunity/Affirmative Action Employer.**

### ANATOMIST/PHYSIOLOGIST ASSISTANT PROFESSOR

**TENURE-TRACK**, beginning August 1997. Required: Ph.D. in animal physiology plus ability to teach human and animal physiology, human anatomy, and general biology and to communicate in English, direct undergraduate research, and supervise an animal care facility. Ability to teach comparative anatomy helpful. Send application letter; curriculum vitae; statement of teaching philosophy, research interests, and goals; unofficial transcripts; and names, addresses, and telephone numbers of three references to: **Dr. Leonard Lundquist, Chair, Division of Biological and Physical Sciences, Lander University, Greenwood, SC 29649. Review of completed applications will begin December 1, 1996. Women and minorities are most strongly encouraged to apply. Affirmative Action/Equal Opportunity Employer.**

## POSITIONS OPEN

### COLUMBIA UNIVERSITY

Two positions are open at the **ASSISTANT PROFESSOR** level.

**Breast Pathologist:** Develop laboratory program on breast cancer in collaboration with the Division of Oncology. Certification in AP and cytopathology with fellowship in breast pathology required. Knowledge of molecular markers, tissue culture methods, and PCR, and evidence of scholarly productivity, necessary.

**Cancer Cytogeneticist:** M.D. or Ph.D., certified in cytogenetics to direct Cancer Cytogenetics Section and develop independent research program in cancer gene discovery. Must have proven ability to obtain research funding and a solid record of publication.

Respond to: **Ms. B. Lawson, Columbia University, Department of Pathology, P&S 15-402, 630 West 168th Street, New York, NY 10032.**

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

**DEPARTMENT HEAD, Chemistry:** Eastern Michigan University invites applications for the position of Chemistry Department Head, with a preferred commencement date of July 1997. Applicants must have a Ph.D. in chemistry or biochemistry and academic credentials appropriate to the rank of full professor. Previous administrative experience is desirable and the applicant should have experiences and accomplishments that promise creative and effective leadership of an ACS accredited department with strong Bachelor's and M.S. degree programs and 22 tenured or tenure-track faculty. Further details about the position and the department may be found at our web site, [http://www.emich.edu/public/chemistry/CHM\\_DEPT.HTM](http://www.emich.edu/public/chemistry/CHM_DEPT.HTM). Interested persons should submit a letter of application and curriculum vitae, and arrange for three letters of reference to be sent to: **Dr. A. S. Howard, Chair, Chemistry Department Head Search Committee, Position APAA9700, 318 King Hall, Eastern Michigan University, Ypsilanti, MI 48197. Review of applications will commence December 1, 1996. Eastern Michigan University commits itself to diversity as an Equal Opportunity/Affirmative Action Employer.**

**ASSISTANT PROFESSOR of Toxicology.** Candidates must have an earned doctorate and postdoctoral experience in toxicology or a related field, peer-reviewed publications reflecting high-quality research in toxicology employing modern methods, ability to garner extramural research support, capacity for excellence in classroom and individual teaching, and potential for collaborations with other faculty in toxicology or related biomedical and environmental sciences. Targeted fields are neurotoxicology, chemical carcinogenesis, and reproductive and developmental toxicology, but others will be considered. Send curriculum vitae with names of three references to: **Dr. R. J. Richardson, Chair, Toxicology Faculty Search Committee, The University of Michigan, 109 Observatory, Ann Arbor, MI 48109-2029. A Nondiscriminatory, Affirmative Action Employer.**

### RESEARCH ASSOCIATE

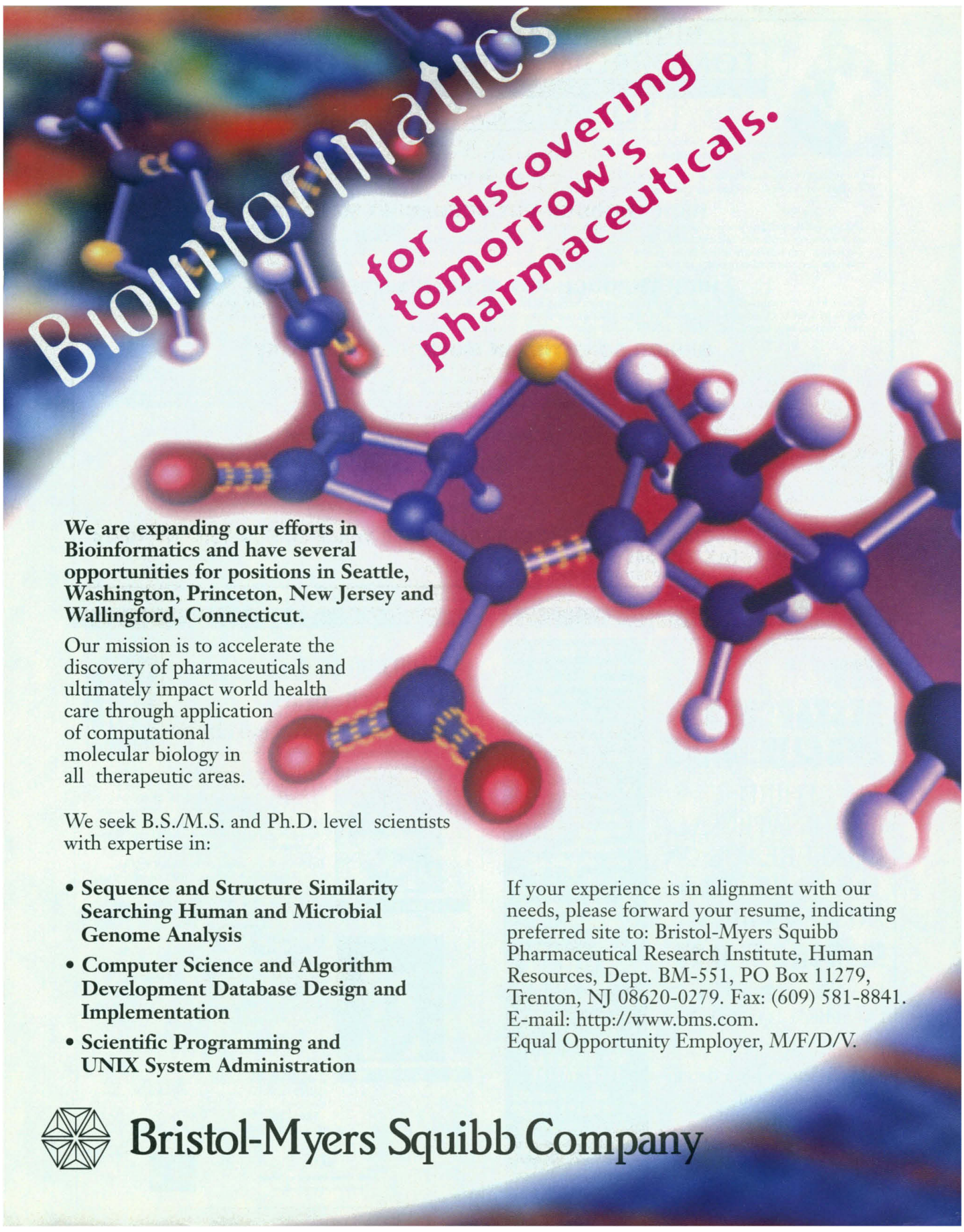
Conduct research in the area of molecular biology. Refine recombination hot spot between D4S10 and D4S126 on human chromosome 4, using single sperm typing. Map, isolate, and characterize polymorphic DNA sites. Design highly selective PCR based assays to test for polymorphic sites. Isolate single sperm cells with the use of Fluorescence Activated Cell Sorter. Compile data and prepare journal articles for publication. Requirements: Ph.D. in chemistry (biophysics), knowledge of repetitive sequences in human DNA and fluorescence. Ability to conduct highly selective PCR amplification of polymorphic sites and molecular biology techniques, including PCR, cloning, subcloning, southern transfer, radioactive probe assays, sequencing, and gel electrophoresis. Salary: \$536.53 per week; 40 hours per week. Job and interview site: Los Angeles, California. Send this ad and your résumé and letter of qualifications to: **Job Number 40818004GB, P.O. Box 269065, Sacramento, CA 95826-9065.**

### RESEARCH SCIENTIST

#### Avian Embryology and/or Molecular Genetics

Applications are invited for a permanent position. Applicants should have Ph.D. with at least one year of postdoctoral experience. Send curriculum vitae and names and addresses of three referees to: **Dr. A. Bar, The Institute of Animal Sciences, ARO, The Volcani Center, P.O. Box 6 Bet Dagan 50250, Israel. Applicants should be eligible for Israeli citizenship.**





# Bioinformatics

for discovering  
tomorrow's  
pharmaceuticals.

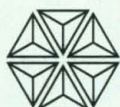
We are expanding our efforts in Bioinformatics and have several opportunities for positions in Seattle, Washington, Princeton, New Jersey and Wallingford, Connecticut.

Our mission is to accelerate the discovery of pharmaceuticals and ultimately impact world health care through application of computational molecular biology in all therapeutic areas.

We seek B.S./M.S. and Ph.D. level scientists with expertise in:

- **Sequence and Structure Similarity Searching Human and Microbial Genome Analysis**
- **Computer Science and Algorithm Development Database Design and Implementation**
- **Scientific Programming and UNIX System Administration**

If your experience is in alignment with our needs, please forward your resume, indicating preferred site to: Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources, Dept. BM-551, PO Box 11279, Trenton, NJ 08620-0279. Fax: (609) 581-8841. E-mail: <http://www.bms.com>. Equal Opportunity Employer, M/F/D/V.



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## BIOPHARMACEUTICAL CAREERS

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## TODAY'S CAREER OPPORTUNITIES

At ImClone Systems, you can build a rewarding career on innovative breakthroughs in the fight against cancer and cancer related disorders. We are a leading, publicly held biopharmaceutical firm with state-of-the-art systems and the most current technology.

Our research focuses on the discovery of novel inhibitors of capillary blood vessel formation that impact the therapy of cancer and other diseases. We emphasize innovation, multi-disciplinary problem solving, and teamwork.

### HIGH THROUGH-PUT SCREENING MANAGER

The successful candidate will have several years of experience in implementing and managing a high through-put screening operation in molecular and cell-based assay screens of small molecule candidates. You must demonstrate the ability to design screening assays and to implement them into robotic systems. You should also have a high familiarity with robotic systems. We prefer a Ph.D. in a related area, such as organic chemistry, biochemistry or pharmacology. Ideally, you will also have demonstrated experience in building and formatting of compound libraries, and in large volume data handling and analysis. Response code: HTSM.

### HIGH THROUGH-PUT SCREENING TECHNICIAN

We are looking for an individual with experience in conducting ELISA and/or cell based assays including a strong familiarity with instrumentation. A BS degree in a related field and a minimum of three years of experience working with screening assays is required. Preference will be given to an individual with previous experience with robotic systems and computer data analysis systems. Response code: HTST.

### SENIOR SCIENTIST IN MOLECULAR BIOLOGY

An innovative expert in the field of applied molecular biology is sought to become a key member of our expanding group. The candidate must have a Ph.D. in molecular biology with a minimum of three years post-doc experience in a leading molecular biology focused laboratory. You should be skilled in all aspects of modern molecular biology practices with demonstrated expertise in one or more areas of current "cutting edge" technology such as cellular signaling or cell cycle biology. You should have a strong desire to apply your skills toward innovative development of effective cancer therapeutics and demonstrate strong leadership potential coupled with highly developed communication skills. Response code: SSMB.

### SCIENTIST IN SYNTHETIC CHEMISTRY

We are looking for a Ph.D. with a minimum of 3 years in medicinal chemistry with extensive experience in the preparation of protein-drug conjugates and small molecule combinatorial libraries. Post doctoral experience in synthetic and relevant analytical chemistry is essential. Response code: SSSC.

We offer excellent salaries with outstanding benefits. For immediate consideration, qualified candidates can mail or fax resume and salary requirements, noting response code of interest, to:



#### HUMAN RESOURCES

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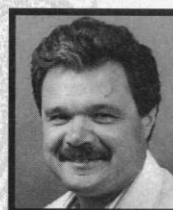
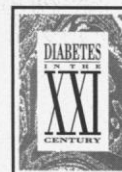
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## AWARDS

# \$100,000 Diabetes Care Research Award Goes to U.S. Researchers



Dr. Steven E. Shoelson



Dr. Morris F. White

Boehringer Mannheim and the Juvenile Diabetes Foundation International are proud to announce the winners of the second annual Diabetes Care Research Award. This award was created to stimulate innovation in the field of diabetes research leading to practical advances in prevention, detection, treatment or cure of diabetes.

Dr. Steven E. Shoelson and Dr. Morris F. White, both of the Joslin Diabetes Center in Boston, Mass., USA received the awards. Dr. Shoelson was recognized for his research into the workings of insulin, the insulin receptor and the proteins that carry the insulin signal into cells. Dr. White was selected for his research into the molecular mechanisms of insulin action. Their studies are central to understanding diabetes and provide a foundation for the discovery of new treatments for this disease.

This substantial research award will be presented again in 1997. Boehringer Mannheim and JDFI now invite you to submit your application for the 1997 award.

For more information and to obtain nomination forms, please contact:

Joachim Thiery at Boehringer Mannheim  
GmbH Sandhofer Strasse 116, D-68305, Mannheim,  
Germany  
+49 621-759-3142  
joachim\_thiery@bmg.boehringer-mannheim.com



Juvenile Diabetes Foundation International  
The Diabetes Research Foundation





# NIH Has A New Address.

The National Institutes of Health has introduced a new web site. Now, the latest news about clinical and research training opportunities at NIH can be accessed by visiting us at <http://helix.nih.gov:8001/oe/>

At the site, you can quickly obtain information regarding clinical and postdoctoral training. Review the NIH tenure-track openings. Take a look at the NIH Postdoctoral Research Fellowship Opportunities Catalog which chronicles research being conducted in all NIH laboratories. You can even apply electronically for positions.

All from the convenience of your keyboard.

Plus, the web site links to all NIH institute and laboratory home pages, provides a calendar of events, and offers links to many other areas.

We used to ask you to call us or send your *curriculum vitae*. Now, the best way to find out about world class opportunities at NIH is through the world wide web.



## National Institutes Of Health

Office Of Education

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The NIH is an Equal Opportunity Employer

### ANNOUNCEMENT

## THE 1997 LOUISA GROSS HORWITZ PRIZE

The Louisa Gross Horwitz Prize was established under the will of the late S. Gross Horwitz through a bequest to Columbia University, and is named to honor the donor's mother. Louisa Gross Horwitz was the daughter of Dr. Samuel David Gross (1805-1889), a prominent surgeon of Philadelphia, and author of the outstanding *Systems of Surgery*, who served as president of the American Medical Association.

Each year, since its inception in 1967, Columbia University has awarded the Louisa Gross Horwitz Prize for outstanding basic research in the fields of **Biology or Biochemistry**. The purpose of this award is to honor a scientific investigator, or group of investigators, whose contributions to knowledge in either of these fields is deemed worthy of special recognition.

The prize consists of an honorarium and a citation which are awarded at a special presentation event. Unless otherwise recommended by the Prize Committee, the prize is awarded annually. The 1996 awardees were Clay M. Armstrong, M.D., Professor of Physiology at the University of Pennsylvania, Philadelphia, PA, and Bertil Hille, Ph.D., Professor of Physiology and Biophysics at the University of Washington, Seattle, WA.



### QUALIFICATIONS FOR THE AWARD

The Prize Committee recognizes no geographical limitations. The prize may be awarded to an individual or a group. When the prize is awarded to a group, the honorarium will be divided among the recipients, but each member will receive a citation. Preference will be given to work done in the recent past.

Prospective recipients should be nominated to the Chairman of the Louisa Gross Horwitz Prize Committee, Dr. David I. Hirsh. Nomination letters should include:

1. A summary, preferably less than 500 words, of the research on which this nomination is based.
2. A summary, preferably less than 500 words, of the significance of this research in the fields of biology or biochemistry.
3. A brief biographical sketch of the nominee, including positions held and awards received by the nominee.
4. A listing of up to ten of the nominee's most significant publications relating to the research noted under item 1.
5. A copy of the nominee's curriculum vitae.

**An original and twelve (12) copies** of each nomination should be sent to: Dr. David I. Hirsh, Chairman of the Louisa Gross Horwitz Prize Committee, Office of the Vice President for Health Sciences and Dean of the Faculty of Medicine, Columbia University, 630 West 168th Street, New York, New York 10032.

**Deadline for the receipt of nominations is January 17, 1997.**

**REVOLUTIONARY SCIENCE.  
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Genentech is a pace-setting biotechnology company that discovers, manufactures and markets human pharmaceuticals for significant unmet medical needs. Our product pipeline is the richest in the industry and we are the only biotech company with five marketed products. To continue our record of success, we are seeking a Research Assistant/Associate to provide technical support and expertise in a new immunohistochemistry laboratory.

**Research Associate-Neuroscience**

Your project will use a variety of molecular biology approaches to understand the role of neuronal survival factors in development and maintenance of the nervous system. In addition, you will utilize molecular biology techniques to identify new extracellular proteins that have therapeutic value for treating neurological disease. Requirements include a BS/MS in biochemistry, molecular biology, or related area with 2+ years' experience in a molecular biology environment. Research experience in broad areas of molecular biological techniques, especially DNA manipulation, mRNA isolation, cDNA library construction and screening, PCR, and protein expression/cell culture is required. Job Code SLRK

**Research Associate-Insulin and Metabolism**

A bright and motivated RA/SRA is sought to create and execute ex vivo and in vitro assays focused in the areas of insulin sensitivity and metabolism. Experience in the development and implementation of assays related to signal transduction and substrate utilization highly desired. The successful candidate will desire a position which stresses intellectual as well as technical participation. Qualifications include a BA/BS in life sciences with emphasis in physiology, endocrinology, and/or metabolism, coupled with laboratory experience in one or more of these fields. Job Code SLNL

**Research Associate-Immunohistochemistry**

You will work as part of a team focused on the development and optimization of immunohistochemical methods for evaluating cell lines to support specific research projects using both commercially available and Genentech generated antibodies. You will utilize your thorough knowledge of physiology and tissue sectioning, basic histology, immunohistochemistry and lab management skills on a daily basis. Requires a BS/BA in the life sciences and advanced research training with an MS or equivalent. Expertise in microscopy, tissue sectioning (particularly cryotomy), basic histology and a thorough working knowledge of immunohistochemistry, including problem solving, is highly desirable. Experience with basic molecular biology techniques, image analysis and confocal microscopy would be a plus. Job Code MCBC2

**Scientist-Organic/Medicinal Chemistry**

We seek an outstanding synthetic chemist to join our innovative program in drug discovery and development. You must be a dedicated experimentalist with a proven track record of achievement in organic synthesis, and a desire to become part of a multi-disciplinary team focused on drug targets in immunology, oncology, and cardiovascular disease. Requirements include a PhD in Organic or Medicinal Chemistry and 2-4 years of postdoctoral experience. Expertise in multi-step laboratory scale synthesis, purification, and structure elucidation, as well as excellent verbal and written communication skills, are essential. Job Code ECUJ

**Scientist/Molecular Virologist**

You will be responsible for developing molecular detection methodologies for viruses and other infectious agents, as well as nucleotide sequencing and genetic analytical techniques in the characterization of genes of interest. To qualify, you must be a bench Scientist current in molecular virology literature and technology and possess a PhD and 2+ years' postdoctoral experience utilizing molecular virological techniques such as nucleotide sequencing, PCR and nucleic acid synthesis. Industry experience working under GLPs and familiarity with regulatory requirements for IND and licensing submissions will be a plus. Strong communication skills, as well as the proven ability to effectively supervise lab personnel, will be needed. Job Code MCMD

Join us and enjoy our exciting success and progressive benefit package that includes free health club membership, 3 weeks paid vacation, 6 weeks sabbatical after 6 years, fully paid medical/dental/vision coverage, and Company stock purchase opportunities for full time employees. For consideration, send your resume to **Genentech, Inc., Human Resources Dept., Job Code \_\_\_\_\_, 460 Pt. San Bruno Blvd., South San Francisco, CA 94080**. If possible, 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). Find out more about Genentech at [www.gene.com](http://www.gene.com). Genentech is an Equal Opportunity Employer. We value the contributions of our diverse workforce.

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**DEAN  
COLLEGE OF NATURAL AND  
AGRICULTURAL SCIENCES  
University of California,  
Riverside**

The University of California, Riverside invites applications and nominations for the position of Dean of the College of Natural and Agricultural Sciences. The College is unique in combining the biological and physical sciences together with the agricultural and biomedical sciences under one administrative umbrella. The Chancellor and faculty seek candidates with a fundamental commitment to academic excellence to lead the college.

Currently, the College has an enrollment of 2,753 undergraduates and 516 graduate students in 16 undergraduate and 20 graduate programs in the following academic units: Biochemistry, Biomedical Sciences, Biology, Botany and Plant Sciences, Chemistry, Earth Sciences, Entomology, Mathematics, Nematology, Neuroscience, Physics, Plant Pathology, Soil and Environmental Sciences, and Statistics. The College has 243 academic positions, 22 Cooperative Extension Specialists, and 354 budgeted non-academic staff. The total College budget is over \$34 million.

Major research units within the College include the Institute of Geophysics and Planetary Physics, the Statewide Air Pollution Research Center, and the Citrus Research Center-Agricultural Experiment Station. The Dean also serves as Director of the Agricultural Experiment Station And Cooperative Extension.

The Dean reports to the Executive Vice Chancellor, and through him to the Chancellor. As the most rapidly growing campus within the University of California system, UC Riverside is projected to significantly increase its current enrollment of 9,000 students within the next decade.

Applicants must have a distinguished record of research, teaching and public service appropriate to an academic appointment at the level of full professor in the College department of the candidates discipline as well as a record of successful and creative leadership. The target date for starting the position is July 1, 1997.

Review of nominations and applications will begin November 1, 1996 and continue until the position is filled. Nominations and letters of application, including a resume and the names and addresses of five references, should be sent to: **Chair, CNAS Dean Search Committee, c/o Office of The Chancellor, University of California, Riverside, CA 92521**. UCR is an Equal Opportunity/Affirmative Action Employer.



**UNIVERSITY OF CALIFORNIA  
RIVERSIDE**



## WE'VE GOT CAREERS DOWN TO A SCIENCE.



With a new state-of-the-art facility in **Research Triangle Park, North Carolina**, Corning Bio provides the biotechnology and pharmaceutical industry with world-class **process development and cGMP manufacturing** for recombinant products. These services are provided for preclinical through commercial production allowing our client companies to leverage their capital by tapping into our process development and cGMP manufacturing capabilities. Join us in North Carolina as we put our clients' products and your career onto the fast-track. We are currently recruiting for the following key positions:

### ■ Senior Scientist, Cell Culture and Fermentation Process Development

In this position, you will be responsible for the development of cell culture and fermentation processes for the manufacturing of biopharmaceuticals. You will also be involved with the transfer of these processes to Corning Bio's cGMP manufacturing facility. Experience in computer monitoring and control of bioreactors is a plus. You should have a Ph.D. (or equivalent experience) in cell biology or microbiology and five plus years of relevant experience. (Job Code: SC-301)

### ■ Senior Scientist, Purification Development

In this position, you will be responsible for the development of processes for the manufacturing of biopharmaceuticals and the transfer of these processes to Corning Bio's cGMP manufacturing facility. A Ph.D. (or equivalent experience) in biochemistry or protein chemistry is required. Five plus years of experience in protein purification and protein chemistry, along with knowledge in the areas of chromatographic methods, centrifugation, and ultrafiltration techniques is also required. Relevant cGMP experience will be considered a significant plus. (Job Code: SC-302)

Please send resume and job code to: **Corning Bio, Director-Human Resources**, P.O. Box 13865, Research Triangle Park, NC 27709-3865; or FAX: (919) 468-9070. PRINCIPALS ONLY. EOE.

### ■ Senior Scientist, Formulation Development

In this position, you will be responsible for the development of formulations for protein therapeutics. You should be knowledgeable in the field of biophysical chemistry and in techniques to achieve protein formulations with long-term stability. You should have experience in developing formulations for lyophilization and in lyophilization cycle development. Your analytical experience should include methods for quantification of protein aggregation and other biochemical and biophysical protein analytical tools. A Ph.D. (or equivalent experience) in biochemistry or protein chemistry and five plus years of relevant experience is required. Relevant cGMP experience will be considered a significant plus. (Job Code: SC-303)

### ■ Additional Positions:

- Research Associates in Process Development
- Manufacturing Associates
- Quality Control Scientists

# CORNING Bio

## POSTDOCTORAL POSITION

### Wound Healing

Johnson & Johnson, the world's largest health care corporation and a leader in wound healing research and development, seeks a first class candidate for a two-year postdoctoral program at its Wound Healing Technology Resource Center in Skillman, NJ, right outside of Princeton in Central New Jersey. The post is with a specialist team of 12 scientists with skills in biochemistry, cell biology, molecular biology, pharmacology, histopathology and wound healing biology.

Candidates should be strongly self-motivated, confident and experienced in areas related to connective tissue biology and preferably, wound healing. A Ph.D. in the biological sciences or equivalent is also required, and knowledge of techniques of molecular and cellular biology would be desirable. Applicants experienced with relevant animal models are especially encouraged to apply.

For consideration, send your CV to: Johnson & Johnson Recruiting, Dept. 985, P.O. Box 16597, New Brunswick, NJ 08906-6597. We are an equal opportunity employer and value diversity in the workplace.

**Johnson & Johnson**

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## Biomolecular NMR Spectroscopy

Parke-Davis Pharmaceutical Research Division of Warner-Lambert Company is seeking an outstanding senior level scientist to join our established Biomolecular NMR Spectroscopy Effort. The successful candidate will lead an experienced group of NMR Spectroscopists to develop and apply multidimensional NMR methods to the study of biological targets and ligands in the discovery of new drug substances.

Structural biology studies are conducted by an interdisciplinary team of scientists at Parke-Davis. As a result, collaborations with scientists in computer modeling, biochemistry, molecular biology, pharmacology and protein purification are an important component of this position. Parke-Davis Scientists have enjoyed a productive relationship with Biophysics Research Division Faculty at the nearby University of Michigan. External collaborations and publication of scientific results are strongly encouraged.

Our laboratory facilities are equipped with 2 NMR spectrometers (Bruker DRX600 and Bruker AMX500) dedicated to protein structural studies and an extensive Silicon Graphics-based computer network. In addition, instrument time on a 600 MHz NMR is reserved at the University of Michigan.

A Ph.D. in Biochemistry, BioPhysics, Chemistry or a related field along with an extensive track record in the application of multidimensional NMR methods to study biomolecules are required. Ten plus years experience beyond Ph.D. is also required.

Members of the Parke-Davis team enjoy competitive salaries, benefits and career growth potential. Interested candidates should please send, fax or e-mail a CV and a list of three references to:

**Parke-Davis Pharmaceutical Research Division, Human Resources Department, BOX:RB-96173, 2800 Plymouth Road, Ann Arbor, MI 48105. Fax: (313) 998-3394. E-mail: resume@aa.wl.com.**

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## St. Jude Children's Research Hospital

ALSAC • Danny Thomas, Founder

### Postdoctoral Positions Department of Genetics St. Jude Children's Research Hospital

Postdoctoral positions are available in the laboratories of Drs. Gerard Grosveld and Alessandra d'Azzo.

Dr. Grosveld's lab studies the role of chromosome translocations in human myeloid leukemias. Fusion proteins encoded by these translocations are being analyzed biochemically and genetically, using in vitro systems, as well as transgenic and knockout mouse models. Currently, the primary focus of the work is the identification of transcriptional pathways that are disturbed by these fusion proteins and which contribute to myeloid leukemogenesis.

Dr. d'Azzo's lab studies a complex of three lysosomal enzymes which are individually deficient in clinically distinct neurodegenerative metabolic disorders. In addition to examining the biochemical and structural properties of the individual enzymes and the complex, transgenic and gene targeting, technology is being used to create mouse models for these diseases. These animal models are being used for experimental gene therapy approaches that may eventually lead to the cure of these and other lysosomal storage disorders in children.

These postdoctoral positions are ideally suited to someone with a biology background, who has recently obtained a Ph.D. and/or M.D. with laboratory experience, and who would like to pursue training in molecular genetics.

St. Jude provides an ideal research environment with strong and highly interactive research programs in biochemistry, developmental neurobiology, experimental oncology, genetics, immunology, molecular pharmacology, structural biology, and tumor cell biology. These positions provide an outstanding opportunity for training in molecular genetics.

Interested candidates should send a Curriculum Vitae and three letters of reference to either **Gerard Grosveld, Ph.D.** or **Alessandra d'Azzo, Ph.D.**, Department of Genetics, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101, USA.

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### RESEARCH SCIENTIST DNA Core Group

This position provides services essential to the functioning of the Molecular Biology department, and to other Rochester departments who depend on Molecular Biology for DNA sequencing, synthesis and PCR work. The suitable candidate will have a Ph.D or equivalent in the life sciences and up to 3 years' experience in the operation of automated DNA sequencing and synthesis equipment (ABI preferred). Computer proficiency is a must. Responsibilities will include DNA sequence alignments, blast searches, and the design and optimization of PCR and sequencing primers.

Lederle-Praxis Biologicals offers a dynamic, professional atmosphere and an excellent salary and benefits package. To apply, please send a resume to: Human Resources Department, Lederle-Praxis Biologicals, 211 Bailey Rd., West Henrietta, NY 14586-9728. An Equal Opportunity Employer.



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### UNIVERSITY OF CALIFORNIA AT BERKELEY

The Department of Plant and Microbial Biology and the Agricultural Experiment Station at the University of California, Berkeley, have three openings for tenure-track Assistant Professors (9 month appointments) starting July 1, 1997.

**Algal Biologist** — Applications are invited from outstanding individuals whose research includes the area(s) of biochemistry/biotechnology, cell biology, development, or molecular genetics of algae. The successful candidate is expected to develop and teach an undergraduate course in the biology of algae, to contribute to teaching at the graduate level, and to develop a strong and independent research program. Please direct correspondence to the **Chair, Algal Biologist Search Committee**, at the address below.

**Microbial Geneticist** — Applications are invited from outstanding individuals whose research is directed toward microbial genetics and/or the development of new microbial genetic systems, prokaryote or eukaryote (other than yeast). The successful candidate is expected to develop and teach an undergraduate lecture or laboratory course in microbial genetics, to contribute to teaching at the graduate level, and to develop a strong and independent research program. Please direct correspondence to the **Chair, Microbial Geneticist Search Committee**, at the address below.

**Microbial Physiologist** — Applications are invited from outstanding individuals whose research is directed toward microbial physiology: the growth, function, and development of microbial organisms, prokaryote or eukaryote (other than yeast). The successful candidate is expected to develop and teach an undergraduate lecture or laboratory course in microbial physiology, to contribute to teaching at the graduate level, and to develop a strong and independent research program. Please direct correspondence to the **Chair, Microbial Physiologist Search Committee**, at the address below.

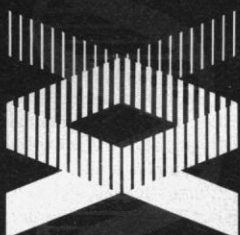
All applicants must have a Ph.D. degree and at least two years of postdoctoral experience. A curriculum vitae, a statement of current and future research interests, a statement of teaching experience and/or goals, and names of three references should be sent by December 1, 1996 to:

**Department of Plant and Microbial Biology, 111 Koshland Hall, University of California, Berkeley, CA 94720-3102**

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



National Center  
for  
Human Genome  
Research



NCHGR

at the  
National Institutes  
of Health

## Postdoctoral Positions in Cancer Genetics

National Center for Human Genome Research (NCHGR)  
National Institutes of Health (NIH)

The NCHGR located on the Bethesda MD campus of the NIH is applying genome information and technology to the study of human genetic disease including cancer. The Laboratory of Cancer Genetics (LCG), dedicated to the investigation of fundamental questions in contemporary cancer genetics and molecular and is now recruiting postdoctoral fellows with research interests and training in molecular biology and cellular biology.

### Physical Mapping of Disease Gene Loci and Molecular Genetic Analysis of Tumor Progression

Jeffrey M. Trent, PhD and Paul S. Meltzer, M.D., Ph.D.

Areas of training include the molecular identification by physical mapping of genes important in the biology and development of hereditary forms of common cancers including emphasis on prostate cancer. Also, genetic mechanisms of cancer progression are being studied using a variety of molecular genetic and molecular cytogenetic approaches, such as FISH, CGH, chromosome microdissection, and a focus on applications of cDNA microarray technology for genome-wide screening of gene expression. Positions are available which emphasize molecular, biochemical, and molecular cytogenetic approaches to these problems.

If you hold a graduate degree (e.g., PhD, MD/PhD) or a professional degree (MD, DO, DDS, DMD, DVM) and less than five years previous postdoctoral experience, and would like to be considered for one these positions, please send a cover letter, curriculum vitae, bibliography, and statement of research interests to: Sharon McFadden  
49 Convent Drive MSC 4470 / NIH - 49 4a38 / Bethesda, MD 20892-4470.  
In addition please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.

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You will develop novel strategies to improve gene expression from our plasmid-based systems. Your expert understanding of gene structure and expression in eukaryotic cells and exceptional molecular biology skills will have broad application throughout our product development programs.

The successful candidate will have demonstrated significant achievement in the field. You will have an excellent publication record, a Ph.D., and at least 3 years of relevant postdoctoral academic or industry experience. Experience in eukaryotic genetics is highly desirable. Experience working effectively within interdisciplinary teams is preferred. You will provide the Company with intellectual leadership and you will have excellent written and verbal communication skills.

GENEMEDICINE, INC. offers career growth and a highly competitive compensation and benefits package. For confidential consideration, please send resume to: GENEMEDICINE, INC., Human Resources, 8301 New Trails Drive, The Woodlands, TX 77381-4248. Fax: (713) 364-0858. EOE.

We have a challenging opportunity for a proactive professional to join us at our headquarters in Des Moines, Iowa as:

### PROJECT MANAGER/ USER SERVICES

We're seeking a strong project manager to coordinate the Life Cycle Information Management User Services staff supporting the Research and Product Development division. You'll provide leadership of end-user computer support and training activities while directing the adoption and implementation of information technologies. We require 6+ years' experience managing computer support in a research environment and an ability to work with individuals with competing priorities. Able to communicate complex information clearly, you understand traditional plant-breeding methodologies, molecular biology technologies and their application to product development. PC familiarity is also required, and an advanced degree in plant breeding, genetics or agronomy is preferred. Coursework in computer science, statistics or molecular biology is desirable.

We offer a competitive salary and excellent, comprehensive benefits such as 401(k), tuition and relocation reimbursement, and more. Des Moines is a prospering heartland city that ranks well above the national averages in affordability and education. Our location provides a mix of beautiful open spaces and city life advantages. For confidential consideration, please send 3 copies of your resume and cover letter indicating job number by Nov. 8, 1996 to: Jon Day, Job #96-0073, Pioneer Hi-Bred International, Inc., 4445 Corporate Drive, Box 65000, West Des Moines, IA 50265-5000.

Pioneer Hi-Bred International, Inc. is the world leader in agricultural genetics. Founded in 1926, we are a publicly held company that invests more than \$115 million in research and product development. Pioneer brand products are grown on almost every crop producing continent in the world.

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# ASSISTANT/ASSOCIATE PROFESSOR POSITIONS

BEGINNING ACADEMIC YEAR 1997-98

## Landscape Ecology/ Landscape Architecture

An assistant professor position is available beginning in academic year 1997-98 for a person qualified to offer graduate-level instruction in freshwater/landscape ecology as well as in landscape architecture/landscape planning. This full-time position may be filled for a fixed initial term, normally of three years, with responsibilities for teaching and scholarship. Candidates should have a record of scholarly research productivity on land-water interactions, an ability to relate research to the design professions, and some teaching experience. A Ph.D., a professional degree in landscape architecture/planning, and published research in ecology with a focus on streams, rivers, wetlands, or lakes are preferred but not required.

Applications are invited before **1 December 1996** on the application forms available from: **Office of Faculty Planning, Harvard University Graduate School of Design, 48 Quincy Street, Cambridge, MA 02138, Tel: (617) 495-5409; Fax: (617) 496-5310.** Applicants should also include non-returnable copies of their most relevant publications with their applications. Harvard University is an Equal Opportunity/Affirmative Action Employer.

**HARVARD**



**UNIVERSITY**

*Graduate School of Design*

## FACULTY POSITION Developmental Biology

The Department of Biological Sciences at the University of Pittsburgh anticipates making, subject to budgetary approval, one full-time tenure-track faculty appointment in the area of developmental biology, beginning September 1997, to continue expansion of the Department. Applicants studying molecular mechanisms of animal development using a model genetic system are especially encouraged to apply. This appointment is expected to be made at the Assistant Professor level, but under exceptional circumstances experienced candidates with outstanding records will be considered at higher rank. 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 December 2, 1996. Applicants should send a curriculum vitae along with a summary of research interests and goals, and should arrange to have at least three letters of reference sent to:

**Dr. Richard Carthew**

**Developmental Biology Search Committee  
Department of Biological Sciences**

**University of Pittsburgh**

**Pittsburgh, PA 15260**

**Telephone: 412-648-7687**

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

## THE GEORGE WASHINGTON UNIVERSITY DEVELOPMENTAL NEUROBIOLOGY

Applications are invited for a tenure-track Assistant/Associate Professor position in the Department of Anatomy and Cell Biology. The basic science departments of the GWU Medical Center have expanded interdisciplinary research and graduate programs through the GWU Institute for Biomedical Sciences (in conjunctions with the Holland Laboratories of the American Red Cross, Children's Research Institute of the Children's National Medical Center, and the Columbian School of Arts and Sciences). The successful candidate will find wide collaborative opportunities in the institute.

The successful candidate will be an outstanding investigator with potential to develop a vigorous, externally funded research program in the field of Developmental Neurobiology. Areas of research that are of particular interest include developmental gene expression, neural transplantation, neurotransmitters, and signal transduction. The candidate is expected to utilize modern cell and molecular biology techniques. The successful candidate will have teaching responsibilities in the medical curriculum (either Gross Anatomy, Microscopic Anatomy, or Neurobiology) and will participate in the interdepartmental graduate programs in Neuroscience, Genetics, or Molecular/Cellular Oncology. Faculty rank and salary commensurate with prior experience.

Applicants should send a letter of intent; a detailed statement of research goals and teaching expertise; curriculum vitae; and the names, addresses, and telephone numbers of four references to:

**Dr. Jeffrey M. Rosenstein**

**Chair, Search Committee**

**The George Washington University Medical Center**

**Department of Anatomy and Cell Biology**

**2300 I Street, NW, Washington, DC 20037**

Review of applicants will commence on November 18, 1996, and will continue until position is filled.

*The GWU is an Equal Opportunity/Affirmative Action Employer. Women and minority applicants are encouraged to apply.*

## RESEARCH SCIENTISTS MOLECULAR GENETICS OF AGING

Aeiveos Sciences Group (ASG) is a biotechnology company dedicated to elucidating the molecular mechanisms of aging and applying this knowledge to reducing the negative impacts of aging on human health. Immediate openings exist for talented, highly motivated Ph.D. scientists, preferably with 0-3 years of relevant postdoctoral experience, in the following positions:

**Molecular Geneticist** to carry out high-throughput genotype analysis for complex traits using current molecular biology techniques and robotics technology. (**Reference Code: CNT**)

**Molecular Biologist** to conduct research on molecular mechanisms of aging and caloric restriction. This position will involve cloning, analysis of differential gene expression, and characterization of aging-associated genes. (**Reference Code: PCS**)

**Molecular Biologist** to investigate pathways of oxidative stress in a mouse model. Candidates with experience in transgene technology, biochemistry, or a veterinary degree will be preferred. (**Reference Code: RML**)

**Molecular Biologist** to study mechanisms of oxidative stress using a primary cell culture model. Experience in oxidative stress, molecular biology, and tissue culture required. (**Reference Code: NAP**)

Qualified candidates should send a CV and names and contact information for three references to: **Human Resources, Code: (see above), Aeiveos Sciences Group, P.O. Box 31083, Seattle, WA 98103-1083.**



NATIONAL INSTITUTES OF HEALTH  
NATIONAL INSTITUTE ON AGING  
GERONTOLOGY RESEARCH CENTER  
BALTIMORE, MARYLAND

## POSTDOCTORAL FELLOW

The Office of the Scientific Director, National Institute on Aging, is seeking a postdoctoral fellow interested in studying mammalian cell cycle regulation. The candidate should have training in cellular and molecular biology. Experience in protein purification and biochemistry is very helpful. Starting salary will be commensurate with qualifications and experience. For more information, contact Dr. Douglas K. Ferris at (301) 846-1427. Interested candidates should submit a curriculum vitae, relevant reprints, and names of three references to:

NATIONAL INSTITUTE ON AGING  
ATTN: KAREN MABEN  
PERSONNEL OFFICE, ROOM 1D09  
GERONTOLOGY RESEARCH  
CENTER, 4940 EASTERN AVENUE  
BALTIMORE, MD 21224

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**NOTICE:** This is a REVISED  
posting of ad originally in Science  
issues 9/13/96 & 9/20/96.

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### MOLECULAR BIOLOGIST - Ph.D.

JOB CODE - MB

Vertex is seeking a highly motivated Scientist to join our Molecular Biology group and pursue studies relevant to our drug development programs. Our interests currently center on the exploration of drugs that affect inflammatory and antiviral processes, but the qualified individual should be able to design and execute experiments in a fast-paced atmosphere that relies on creative approaches to general biological problems. We seek an individual with expertise in basic molecular biology techniques and who has worked extensively with a mammalian system. Familiarity with animal models of inflammation, molecular virology, eukaryotic cell culture, transgenic animal, ribozymes or antisense technologies would be an asset. The successful candidate will have a Ph.D. in the biological sciences and at least three years of postdoctoral experience. A track record of independent productivity reflected in a body of critically reviewed publications is also necessary.

### PROTEIN BIOCHEMISTRY/BIOPHYSICAL CHEMISTRY - Ph.D.

JOB CODE - PB

We are seeking an individual with a Ph.D. in Physical Chemistry, Biophysical Chemistry or Protein Biochemistry who will assist in the expansion of our protein purification effort and or biophysical analysis of proteins in support of our ongoing scientific projects. You will be responsible for evaluating protein structural integrity and optimizing in vitro protein folding pathways for large scale preparation of protein targets. In addition, you will characterize the thermodynamic parameters associated with protein-ligand binding. Successful candidate will have at least 2 years of full-time post-doctoral experience in protein purification and physical characterization and extensive experience using modern optical spectroscopic (CD fluorescence, FTIR) and calorimetric methods for investigating protein structure-function relationships. Experience characterizing the thermodynamic consequences of protein-protein and protein-ligand interactions is essential. Candidate must be fluent in the theory of enzyme kinetic characterization and thermodynamic interpretations.

Test the boundaries at Vertex, and find the rewards only a leader can deliver, such as a stimulating work environment, highly competitive salaries and excellent benefits. Please send your resume, indicating job code, to: **Vertex Pharmaceuticals Incorporated, Recruiting Manager, 130 Waverly Street, Cambridge, MA 02139-4211; Fax: (617) 577-6645; email: recruiting@vpharm.com.** Visit our home page at <http://www.vpharm.com>. Equal Opportunity Employer.



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## RESEARCH SCIENTIST

Molecular  
Biology  
Group

Energy BioSystems Corporation is searching for an experienced RESEARCH SCIENTIST to join our biotechnology company specializing in the application of enzyme systems for the fossil fuel industry.

#### DUTIES OF SUCCESSFUL CANDIDATE:

- Plan and execute research to express genetic elements of a multi-step biodesulfurization pathway.
- Develop an independent program to construct and characterize recombinant microorganisms capable of sulfur removal from heterocyclic compounds.

#### REQUIREMENTS OF POSITION:

- Ph.D. in Molecular Genetics, Molecular Biology or related field.
- 3+ years of postdoctoral and/or industrial experience.
- Significant publication record.
- Extensive experience in gene expression involving heterologous microbial hosts.
- Broad but thorough understanding of microbial biosynthetic/degradative pathways.

Please send resume and cover letter stating the name of the position, job number 96-062 and relevant references to Human Resource Manager.



**ENERGY BIOSYSTEMS**

4200 Research Forest Drive  
The Woodlands, Texas 77381

No Phone Calls

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### Postdoctoral Opportunity

## Immunology

Hoffmann-La Roche's dedication to the future is evident in our commitment to the research, development and manufacture of pharmaceuticals worldwide. We currently have a postdoctoral position available for a dedicated immunologist to join the Immunology Department at our U.S. headquarters in Nutley, New Jersey.

In this position, you will study the peripheral T cell tolerance and autoantigens involved in the development of rheumatoid arthritis and multiple sclerosis using humanized MHC class II and TCR Tg mice. The successful candidate will possess enthusiasm about the field of science and have a Ph.D and experience with animal works, molecular biology and cellular immunology.

We offer an attractive salary and benefits package in a state-of-the-art work environment. For consideration, please send your c.v. and names of references to: Ms. Stella M. Strazdas, Hoffmann-La Roche, Dept. 6SS16K1, 340 Kingsland Street, Nutley, NJ 07110-1199. No phone calls please. **PRINCIPALS ONLY.** We are an equal opportunity employer.



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## POSITIONS OPEN

### FISHERIES ECOLOGY/FIELD STATION DIRECTOR ILLINOIS NATURAL HISTORY SURVEY

The Center for Aquatic Ecology (CAE) invites applications for a career-track position at the **ASSISTANT PROFESSIONAL SCIENTIST** level. The successful applicant will conduct research relating to the fisheries and ecology of Lake Michigan, and will direct the personnel (current staff of 12) and facilities of the Lake Michigan Biological Station, Zion, Illinois. Candidates must hold a Ph.D. in an appropriate discipline by date of appointment, must have an outstanding record of independent research, and will be expected to develop a strong, externally funded research program that complements existing strengths in CAE. Experience working on large systems (freshwater or marine) is highly desirable. The Illinois Natural History Survey (INHS) is located on the Urbana-Champaign campus of the University of Illinois. The ten CAE scientists conduct self-directed research on a broad range of questions and taxa in systems ranging from large rivers and the Great Lakes, to boreal streams and temporary ponds. CAE scientists have full access to campus facilities and resources, and may hold affiliate appointments in university departments, teach, and supervise graduate students. Please send a letter of application, curriculum vitae, a statement of research interests, reprints of no more than three representative publications, and three letters of reference to: **Jacqueline Sanders, CAE Search, Illinois Natural History Survey, 607 East Peabody, Champaign, IL 61820. Telephone: 217-244-7790; FAX: 217-333-4949.** Applications should be received by 29 November 1996 for full consideration. Technical questions regarding this position should be directed to: **Dr. Steven Kohler, Telephone: 217-244-2103; Email: s-kohler@uiuc.edu.** The Illinois Natural History Survey is an Equal Employment Opportunity/ADA Employer.

### ENVIRONMENTAL SPECIALIST III Position Number 43010694

Palatka, Florida—Minimum \$27,760. This is a professional position working with a large wetland and lake restoration project. Duties include coordinating technical and administrative activities for the Lake Apopka project; developing and managing technical research contracts; analyzing and interpreting data; and preparing technical reports. Qualifications include a Bachelor's degree in chemistry, biology, limnology, botany, or environmental science and four years of professional experience in the environmental field. An advanced degree can substitute for a portion of the required experience. Preference will be given to applicants possessing advanced training and experience in water quality chemistry, water quality monitoring, wetlands ecology, and technical project management. Send résumé identifying source of ad and position number by November 22, 1996 to: **St. Johns River Water Management District, Office of Human Resources, P.O. Box 1429, Palatka, FL 32178-1429.** Equal Employment Opportunity/Veterans Preference/Drug-Free Workplace.

### POSTDOCTORAL FELLOWSHIPS MOLECULAR GENETICS

**POSTDOCTORAL POSITIONS** are available to work on i) the germline mutation process and its relationship to evolution and genetic disease (sample reference: *Trends in Genet.*, 11:141) and (ii) the development of improved methods for finding and analyzing mutations in humans (*Science*, 244:331; *Hum. Mol. Genet.* 5:107).

Clinical Molecular Geneticist: City of Hope is making a major investment in molecular diagnosis for cancer and other diseases. ABMG-certified molecular geneticist is sought to supervise the day-to-day activities of a molecular diagnostic lab.

If interested, mail curriculum vitae, short- and long-term professional goals, and names of three references to: **Steve Sommer, M.D., Ph.D., City of Hope, 1500 East Duarte Road, Duarte, CA 91010. FAX: 818-301-8448; Email: ssommer@smtplink.coh.org**

**POSTDOCTORAL FELLOWSHIPS** available (U.S. citizens/permanent residents) to address issues of signaling specificity for G-protein coupled receptors. Research efforts involve a multifaceted approach utilizing tools for molecular biology, protein chemistry and cell biology to identify determinants of signaling specificity and to define the receptor's microenvironment. Send curriculum vitae and three letters of reference to: **Stephen M. Lanier, Ph.D., Department of Pharmacology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.** An Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### CLINICIAN SCIENTISTS HUMAN GENETICS PROGRAM

Geisinger Clinic, the Henry Hood Research Program, is seeking recently trained **PHYSICIANS** in Internal Medicine, Obstetrics/Gynecology, or Pediatrics to practice human genetics in the Pediatrics and Obstetrics/Gynecology division and to do laboratory research in molecular genetics. The primary appointment will be in the Research Program with up to 25% of time devoted to clinical activities. These positions are funded by institutional monies. Research funds include budgeted monies for supplies and technical support. Additional support can be obtained through grants. The Internal Medicine appointment will be in the Oncology Department. The Pediatrics/Obstetrics/Gynecology appointment will be in the field of the candidate's clinical training. Successful candidates should be Board-certified/Board-eligible in Medical Oncology, Pediatrics, or Obstetrics/Gynecology. The Basic Research Program has well-established research in signal transductions, cell cycle regulation, gene transcription, extracellular matrix proteins, and function of oncogenes. Research must be conducted independently but collaboration with members of the Basic Research program is encouraged. Geisinger Medical Center, located in Danville, is a 548-bed tertiary care and academic institution, providing care for 2.3 million in eastern and central Pennsylvania. You can enjoy the advantages of living in a small town with low crime, good schools, and reasonable housing costs and still do research and practice medicine in a large urban style medical center. Please send your curriculum vitae along with all inquiries to: **Kurt Scott, c/o Howard E. Morgan, M.D., Geisinger Physician Recruitment (GEN-CS), 100 North Academy Avenue, Danville, PA 17222-1528. Telephone: 800-845-7112. FAX: 800-622-2515.** Equal Opportunity Employer. Minorities/Females/Disabled/Veterans.

### SCIENTIFIC PROGRAMMERS

Will work on the implementation of database and work-flow management software to be utilized by the Genome Center, other genome centers, and community databases. Will be involved in design and coding of application software (user-oriented programs), and responsible for testing and porting of systems software (Core DBMS and workflow management software). Requires a B.A./B.S. in computer science, or related field, and five years' professional software development experience, including at least three in C or C++. Experience in designing database schemas, writing database applications, and developing graphical user interfaces; knowledge of object-oriented modeling; and a biology background preferred.

Other DNA sequence-related software positions with required B.A./B.S. and knowledge of Perl, C, and Web development, in a UNIX environment, also available.

We offer excellent salaries, generous benefits, and interaction with the MIT community. Please send résumés to: **Whitehead Institute for Biomedical Research, Human Resources Department Reference S1025, Nine Cambridge Center, Cambridge, MA 02142.** Equal Opportunity Employer.

### WASHINGTON UNIVERSITY SCHOOL OF MEDICINE POSTDOCTORAL POSITION

Available immediately to study the molecular and genetic mechanisms of iron and copper metabolism in human neurodegenerative diseases (*PNAS*, 92:2539, 1995; *Hum. Mol. Gen.*, 5:81, 1996; *J. Clin. Invest.*, 98:207, 1996). Experience in cell and molecular biology required. Send curriculum vitae and names of references to: **Dr. Jonathan D. Gitlin, Department of Pediatrics, Washington University School of Medicine, St. Louis Children's Hospital, 1 Children's Place, St. Louis, MO 63110. Email: Gitlin@kids1.wustl.edu.** Washington University is an Affirmative Action/Equal Opportunity Employer.

### POSTDOCTORAL RESEARCH ASSOCIATES

Two **POSTDOCTORAL POSITIONS** are now available for recent Ph.D. graduates with experience in microbial ecology and physiology. Research will focus on adhesion and transport characteristics of bacteria in porous media as part of a multidisciplinary project on bioremediation. Experience with anaerobes required for one position. Applications received by November 15, 1996, will receive first consideration. Send curriculum vitae and addresses of three references to: **Dr. Madilyn Fletcher, Baruch Institute, University of South Carolina, Columbia, SC 29208.** The University of South Carolina is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE

The United States Department of Agriculture (USDA), Agricultural Research Service (ARS), Pollinating Insect-Biology, Management, Systematics Research, Logan, Utah, is accepting applications for a permanent, full-time **RESEARCH LEADER** and **SUPERVISORY RESEARCH ENTOMOLOGIST**. This position will develop a program to identify chemophysiological traits responsible for gregarious nesting behavior of bees that nest in the soil. Candidates should have a strong working knowledge of insect biology, foraging behavior, ecology, and physiology. Responsibilities as Laboratory Leader require managerial and leadership experience in areas of crop pollination, biology of pollinator species, and bee conservation. A Ph.D. in entomology or related discipline with emphasis in physiology is desired. Experience with statistical methods and computer programs is essential. *Applicant must be a U.S. citizen.* Salary range is \$51,915 to \$79,754. For a copy of announcement number ARS-D7W-007 and application forms, please call: **John Watterson, USDA, ARS, Location Administrative Officer, Telephone: 801-797-3071.** Specific questions regarding the position may be directed to: **Philip F. Torchio, Telephone: 801-797-2520.** The closing date for this announcement is November 4, 1996. *USDA, ARS is an Equal Opportunity/Affirmative Action Employer.*

The Copenhagen Muscle Research Centre (CMRC) invites applications for a two-year **RESEARCH ASSOCIATE** position, beginning February 1 or March 1, 1997, to contribute to the molecular identification and characterization of genes involved in skeletal muscle differentiation and regulation. The CMRC is a multidisciplinary group with a strong focus on the cell biology of skeletal muscle and its interaction and communication with the organism as a whole in both health and disease.

The selected candidate will be responsible for designing and conducting specific scientific experiments that contribute to attaining goals set by the research staff as well as lending support to other scientists' individual projects. Requirements include a Ph.D. in molecular biology and three to four years of experience in a laboratory setting. Skills that in particular are required include proficiency in PCR, cloning and sequencing and a knowledge of gene regulation and identification of transcription factors.

Salary and fringe benefits commensurate with experience and skills. Applicants should submit their curriculum vitae, a list of publications, and names and addresses of three references to: **Professor Bengt Saltin, CMRC, Rigshospitalet, Section 7652, 20 Tagensvej, DK-2200, Copenhagen N, Denmark.**

### SCIENTIFIC SOFTWARE ENGINEER

Affymetrix, located in the heart of Silicon Valley, seeks a **SCIENTIFIC SOFTWARE ENGINEER** to develop algorithms and visualization tools for the interpretation of DNA sequencing. The specific application is mutation screening in the BRCA gene, including the detection of heterozygous mutations. For this one-year appointment, we seek an independent, inquisitive thinker who can provide innovative solutions to data analysis programs. Requirements include a B.S./M.S. in computer science or equivalent and strong background in mathematics and statistical analysis with three years' related experience. Experience with C++ application programming and user interface development essential; Windows/MFC experience desirable. Travel will be required between Affymetrix and the collaborator's site. For consideration, please send or FAX your résumé to: **Affymetrix, Human Resources, 3380 Central Expressway, Santa Clara, CA 95051; FAX: 408-481-0422.** Equal Opportunity Employer.

### POSTDOCTORAL FELLOWSHIP TIME-RESOLVED FOOTPRINTING

Applicants are sought to participate in a collaborative project in biochemistry/biophysics at the Albert Einstein College of Medicine to study protein DNA-interactions, RNA folding, and protein structure applying a novel new footprinting technology developed by the Center for Synchrotron Biosciences. Competitive salary commensurate with experience. Send a curriculum vitae and three letters of reference to the attention of: **Dr. Mark Chance or Dr. Michael Brenowitz, c/o Jeanne McGee, Department of Physiology/Biophysics, Ullmann Building, Room 315, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461.** An Equal Opportunity Employer.



## Faculty Position

### Department of Biology

The NYU Department of Biology is continuing a long-term program of expansion and development. A senior position is currently available (subject to final budgetary approval), in the area of cellular and molecular physiology. Outstanding candidates in other areas or in junior faculty positions will also be considered. Candidates are expected to have active, externally-funded research programs and to participate in the department's teaching activities at both the undergraduate and graduate levels. The department offers an excellent research environment with a strong molecular focus, substantial start-up packages and modern laboratory facilities. Application letter with curriculum vitae and three letters of reference should be sent to: **Chairman of the Search Committee, Department of Biology, New York University, 1009 Main Building, Washington Square, New York, NY 10003.**

NYU encourages applications from women and members of minority groups.

## CYTEL GLYCOTECHNOLOGY

**Cytel Corporation**, a leading biotechnology company located in San Diego, CA, is developing products under several core technology platforms. Cytel's clinical development programs are focused on immunotherapeutics for serious human disease. Our Glycotechnology Business Unit is dedicated to the development, manufacture and commercialization of bioactive carbohydrate products.

We are currently seeking entrepreneurial, technically skilled individuals who can work effectively in the highly interactive and collaborative team environment of our Glycotechnology Business Unit.

### GROUP LEADER (Molecular Biology/Protein Expression)

We are seeking a Group Leader of Molecular Biology/Protein Expression to lead an interdisciplinary group dedicated to the design and optimization of recombinant protein expression systems for production of enzymes used in Cytel's manufacturing of bioactive carbohydrates. Knowledge of current molecular cloning technologies and construction of expression vectors is required. Industry experience in the expression and production of recombinant proteins in bacterial, yeast, filamentous fungus, insect cell and mammalian cell expression systems is highly desirable. Knowledge of GMP procedure and documentation is also valued. Candidates must have a PhD and at least 3 years experience in recombinant protein production. **(Job Code: GL-S)**

### STAFF SCIENTIST (Biochemist)

The ideal candidate will be a versatile Biochemist to develop purification methods for recombinant enzymes used in manufacturing carbohydrate products. Other responsibilities will include development of new enzyme assays and optimizing reactions involving enzymatic synthesis of carbohydrates. Industrial experience in developing and scaling up purification protocols for recombinant proteins is highly desirable. Molecular biology skills are considered a strong positive. The successful applicant is expected to have a PhD and 2 years postgraduate experience. **(Job Code: SS-S)**

Cytel offers a challenging environment, a competitive salary and benefits program, as well as stock options. Qualified candidates please send your resume to: **Cytel Corporation, Attn: Human Resources, (Insert appropriate job code), 3525 John Hopkins Court, San Diego, CA 92121-1121. EOE.**



UNIVERSITY OF

## CONNECTICUT

### PROFESSOR/DEPARTMENT HEAD

#### DEPARTMENT OF MOLECULAR AND CELL BIOLOGY, UNIVERSITY OF CONNECTICUT

The University invites nominations and applications for the position of Head, Department of Molecular and Cell Biology. The Department has 32 faculty members, over 130 graduate students, and a substantial level of external research funding. The University is located in a scenic rural community convenient to several major urban centers.

The Department seeks a distinguished scientist, committed to excellence in research and teaching, to provide dynamic and innovative leadership. Enthusiasm, dedication, wisdom, and prudent managerial skills will be required to foster the continued development of molecular and cell biology at the University.

Research areas of the faculty include biochemistry, biophysics, biotechnology, cell biology, genetics, microbiology, and plant molecular and cell biology. University resources include a Biotechnology Center (providing a range of core facilities in molecular and cellular areas); an electron microscopy facility; computer center; and mass-spectrometer, NMR, and x-ray diffraction capabilities.

Construction of a new building for the Department is projected to begin in a year.

Nominations and applications, including a resume and names and addresses of at least three individuals willing to provide evaluatory comments, should be sent to: **Professor Timothy J. Killeen, College of Liberal Arts and Sciences, Dean's Offices, U-98, University of Connecticut, Storrs, CT 06269-2098.** Review of applications is expected to begin on November 1, 1996 for an appointment beginning July, 1997. Department Homepage address: [http://www.lib.uconn.edu/MCB/MCB\\_dept/MCB\\_homepage.html](http://www.lib.uconn.edu/MCB/MCB_dept/MCB_homepage.html) We encourage applications from under-represented groups including minorities, women, and people with disabilities. (Search #97A111)



## DIRECTOR BOARD ON RADIATION EFFECTS RESEARCH

The **NATIONAL RESEARCH COUNCIL (NRC)**, operating arm of the National Academy of Sciences, National Academy of Engineering, and the Institute of Medicine, is seeking a Director to manage the Board on Radiation Effects Research (BRER). BRER performs studies (requested and sponsored by a variety of federal agencies) on the biological effects of exposure to ionizing and nonionizing radiation and manages the NRC participation in the Japanese/American Radiation Effects Research Foundation (RERF) located in Japan. Responsibilities include securing and budgeting funds that support the BRER studies, recruiting scientists to serve as committee members and staff at the NRC; and scientific and administrative monitoring and control of studies performed by BRER at the NRC. Requires a Ph.D. or equivalent in epidemiology, biostatistics, radiation biology, biophysics, or other radiation-related field; at least 6 years experience in scientific research/administration; and expertise concerning cancer causation. Applicants must be familiar with a wide-range of scientists involved in radiation effects research. Salary is competitive and the NRC maintains an excellent benefits program.

Applications and salary requirements should be forwarded by November 30, 1996 to: **NRC/CLS-PG, NAS 343, 2101 Constitution Avenue, NW, Washington, D.C. 20418. EOE.**



## POSITIONS OPEN

**POSTDOCTORAL POSITIONS** in Vaccine Development or Structure-Based Drug Design. 1) Vaccine development: human rhinoviruses are engineered to display immunogens from other pathogens, with a large focus on HIV-1. Combinatorial libraries of chimeric viruses are immunoselected to isolate viruses with the most effectively reconstructed foreign immunogens. Single chain Fv's are also being engineered as alternative vehicles for vaccine development. 2) Crystallographic structure determination and refinement; structure-based drug design: HIV-1 reverse transcriptase (RT) and drug-resistant mutants are being studied (in collaboration with the laboratory of **Stephen Hughes** at NCI-Frederick) with and without bound nucleic acids (including different dsDNA duplexes and RNA-DNA template-primers) and diverse inhibitors. Structure determination of other proteins and viruses is also ongoing. Our laboratory at the Center for Advanced Biotechnology and Medicine (CABM) has state-of-the-art facilities for crystallography, protein chemistry, molecular biology, virology, and molecular modeling. Send curriculum vitae and names and addresses of three references to: **Eddy Arnold** and/or **Gail Ferstendig Arnold**, CABM and Rutgers University, 679 Hoes Lane, Piscataway, NJ 08854-5638. Telephone: 908-235-5323 and/or 908-235-4343; FAX: 908-235-5788; Email: [arnold@cabm.rutgers.edu](mailto:arnold@cabm.rutgers.edu) and/or [gferstend@mbcl.rutgers.edu](mailto:gferstend@mbcl.rutgers.edu); CABM web page: <http://www.cabm.rutgers.edu/~arnold>. Affirmative Action/Equal Opportunity Employer, Minorities/Females/Disabled/Veterans.

### POSTDOCTORAL RESEARCH FELLOWS MOLECULAR CARDIOLOGY University of Miami School of Medicine Department of Molecular and Cellular Pharmacology

Applications are invited for several positions to investigate molecular stress response pathways in the cardiovascular system. The specific areas of research are flexible but we are particularly interested in analyzing the activity of second messengers and target genes in cardiac myocytes and endothelial cells subjected to oxidative stresses and aging. Excellent laboratory space and facilities are in the University of Miami's Medical Campus, close to Miami Beach and Coconut Grove. Salary and benefits will be commensurate with experience. Positions are for one to three years. Applicants should have Ph.D. or M.D. degrees and experience in biochemical, cell biological whole animal, and/or molecular techniques.

Please send curriculum vitae; description of research interests; and the names, addresses, fax, Email, and telephone numbers of two or three references to: **Keith A. Webster, Ph.D.**, Department of Molecular and Cellular Pharmacology, University of Miami School of Medicine, RMSB Building, 1600 NW 10th Avenue, Miami, FL 33136, U.S.A. Telephone: 305-243-6779; FAX: 305-243-4555; Email: [Kwebstr@chroma.med.miami.edu](mailto:Kwebstr@chroma.med.miami.edu). The University of Miami is an Equal Opportunity/Affirmative Action Employer.

**THREE POSTDOCTORAL** positions—available immediately in the areas of Virology, Cell Biology, and Biochemistry for studies in baculovirus systems and engineered insect cell culture systems. Specific studies involve structure-function of the major baculovirus envelope protein (gp64); functional studies of the baculovirus enhancer protein and molecular structure of insect peritrophic membranes; engineering and development of new technologies for stably transformed insect and vertebrate cell lines. Experience in virology, molecular-cellular biology, protein biochemistry, or cell culture. Send curriculum vitae, reprints, and names and addresses of three references to: **Dr. G. Blissard** or **Dr. R. Granados**, Boyce Thompson Institute at Cornell University, Tower Road, Ithaca, NY 14853-1801. Telephone: 607-254-1234. Please specify area(s) of interest. Affirmative Action/Equal Opportunity Employer.

A **POSTDOCTORAL POSITION** in reproductive biology is available in the Department of Obstetrics/Gynecology at the University of Illinois at Chicago. The focus of the research program is to study conceptus-regulated gene expression in the primate endometrium. These studies will include both *in vivo* regulation and cellular and molecular regulation *in vitro*. A strong background in biochemistry and molecular biology is highly desirable. Please forward a curriculum vitae and names and addresses of three referees to: **Dr. Asgi Fazleabas**, Department of Ob/Gyn, University of Illinois at Chicago, 820 South Wood Street (M/C 808), Chicago, IL 60612-7313. Telephone: 312-996-0994; FAX: 312-996-4238; Email: [asgi@uic.edu](mailto:asgi@uic.edu). Application deadline is November 22, 1996.

## POSITIONS OPEN

Princeton University: **POSTDOCTORAL POSITION** to study stress effects on learning. Ph.D. in neuroscience, molecular biology, or biochemistry. One-year appointment; possibility of renewal. Send curriculum vitae to: **T. J. Shors**, Department of Psychology, Green Hall, Princeton University, Princeton, NJ 08544-1010. Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL FELLOW

The Henry M. Jackson Foundation is in immediate need of filling a position for a Research Scientist for recombinant DNA laboratory projects that support a program of military biomedical research. The selected **POSTDOCTORAL FELLOW** will critique and adapt current, state-of-the-art procedures for recombinant antibody production and will use these procedures to produce and analyze recombinant antibodies. The incumbent is required minimally to have completed a Ph.D. (or equivalent) degree in molecular biology, immunology, or pathogenic microbiology or a Ph.D. (or equivalent) in a related field. The incumbent is expected to have experience in gene cloning and laboratory expression of recombinant proteins as well as a working knowledge of immunology and molecular techniques including: RNA/mRNA isolation, cDNA production, PCR, electrophoresis of DNA/protein, ELISA/dot blots and bacterial/viral culture and growth methods as related to molecular biology procedures. Knowledge of pathogenic viruses, pathogenic bacteria, microbial toxins, and plant toxins will be beneficial to candidate selection. Interested candidates should send a cover letter and résumé to:

**Human Resources Department**  
Attention: PL2960432  
The Henry M. Jackson Foundation  
for the Advancement of Military Medicine  
1401 Rockville Pike, Suite 600  
Rockville, MD 20852  
Email: [hr@mail.hjtf.org](mailto:hr@mail.hjtf.org)

Affirmative Action/Equal Opportunity Employer

### TRUDEAU INSTITUTE, INC.

A **POSTDOCTORAL POSITION** in Immunology is available for a person with training in cellular and/or molecular immunology to study the immune response to bacterial infections. The laboratory is currently emphasizing immunity to experimental tuberculosis.

The Trudeau Institute is a well-endowed, not-for-profit, basic research institute with modern facilities, up-to-date equipment, in-house animal production, efficient management, and an international reputation for excellence. The Trudeau Institute is located on the shore of Saranac Lake, eight miles from Lake Placid. Competitive salary and fringe benefits are offered and institute housing will be made available.

Applications consisting of a curriculum vitae and the names and addresses of three references should be addressed to:

**Robert J. North, Ph.D., D.Sc.**  
Trudeau Institute, Inc.  
P.O. Box 59  
Saranac Lake, NY 12983

### POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL HEMATOPOIETIC CELL GROWTH

A **POSTDOCTORAL** or **RESEARCH ASSOCIATE** position is available immediately for a Ph.D. to investigate signal transduction by cytokine receptors. Extensive experience in molecular biology and/or biochemistry is required.

Please send curriculum vitae and three letters of reference to: **Dr. Alan D. D'Andrea**, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. FAX: 617-632-2080; Email: [a\\_dandrea@farber.harvard.edu](mailto:a_dandrea@farber.harvard.edu). An Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITIONS** are available to investigate structure-function relationships in dopamine receptors, the beta-adrenergic receptor, and the dopamine transporter. Experience in molecular biology and membrane protein biochemistry would be desirable. Please send curriculum vitae and three letters of reference to: **Jonathan A. Javitch, M.D., Ph.D.**, Center for Molecular Recognition, P&S 11-401, Columbia University, 630 West 168th Street, New York, NY 10032. Email: [javitch@cumc.ccc.columbia.edu](mailto:javitch@cumc.ccc.columbia.edu). Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### POSTDOCTORAL RESEARCH BIOLOGICAL OCEANOGRAPHY

A **POSTDOCTORAL RESEARCH ASSOCIATE** is sought to work in a research team investigating coupling of mesoscale physics and biological response in the Arabian Sea. A database generated by acoustic sensors and net tows exists, ready for analysis of diel, seasonal and spatial variability and for investigation of ecological, meteorological and physical forcing of zooplankton communities. The position requires use of MATLAB and the CODAS data base technology and experience with PC, Macintosh, or Unix systems and graphics programs (DISPLA, CANVAS, Spyglass, MATLAB graphing). Familiarity with database programs (Fox, SIR) and Fortran or C programming is desirable. The position is for one year, renewable for a second year contingent upon funds and progress.

A current curriculum vitae and three letters of recommendation should be sent to: **Professor Sharon Smith**, RSMAS-MBF, University of Miami, 4600 Rickenbacker Causeway, Miami, FL 33149. The University of Miami is an Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL POSITION Protein Synthesis/Signal Transduction

A full-time position is available for a **POSTDOCTORAL FELLOW** to participate in a research program studying initiation of protein synthesis in eukaryotic cells. Specific projects include the mechanism of mRNA recruitment by eIF4 factors, the role of phosphorylation of eIF4 factors, the physiological regulation of eIF4G levels, including the effect of picornavirus infection, the function of the eIF4G internal ribosome entry sequence, and the signal transduction pathways regulating protein synthesis rate. A Ph.D. in biology, biochemistry, chemistry, or a related discipline is required. Individuals with laboratory research experience in molecular biology are preferred. Salary is competitive and dependent upon qualifications. Interested applicants should send curriculum vitae, a brief summary of research experience, and the names of three referees to: **Dr. Robert E. Rhoads**, Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center, Shreveport, LA 71130-3932. LSU Medical Center is an Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL POSITION AND PhD STUDENTSHIP Natural Killer Cell Receptor Genes and Proteins Department of Vascular Biology University of Vienna

We are searching for candidates interested in the function of human natural killer cell receptors and the structure of the gene locus encoding these receptors on chromosome 12 (see *Immunol. Today*, 13:429 and *Eur. J. Immunol.*, 25:2923). The project is financed by the Austrian Science Foundation and the European Commission. Candidates with corresponding experience in gene mapping and analysis, in the cell biology of NK cells, or in receptor-target interactions are invited to send applications including a curriculum vitae and names of two referees to: **Dr. E. Hofer**, Department of Vascular Biology, VIRCC, Brunnerstrasse 59, A-1230 Vienna, Austria. FAX: +43-1-86634-623; Email: [erhard.hofer@univie.ac.at](mailto:erhard.hofer@univie.ac.at).

A **POSTDOCTORAL POSITION** is available for the study of inflammatory cell involvement in liver injury, including inflammatory mediators, serine proteases, and signal transduction. A Ph.D. degree is required; research training in biochemical and/or molecular mechanisms of cell injury is desirable. Preference will be given to those eligible for support by an NIH-funded training grant. Please submit curriculum vitae and names of three references to: **Dr. Robert A. Roth**, Department of Pharmacology and Toxicology, Michigan State University, East Lansing, MI 48824. Equal Opportunity/Affirmative Action Employer.

A **POSTDOCTORAL POSITION** is available immediately to study the regulation of oncogene expression in mammalian development and tumorigenesis. Candidates should have a Ph.D. or M.D. and a strong background in molecular biology. Experience with *in situ* hybridization techniques is desirable. Send curriculum vitae and the names of three references to: **Janet Sawicki**, Ph.D., Lankenau Medical Research Center, 100 Lancaster Avenue, West of City Line, Wynnewood, PA 19096. FAX: 610-645-2205; Email: [Sawicki@tigger.jvnc.net](mailto:Sawicki@tigger.jvnc.net). Equal Opportunity/Affirmative Action Employer.



## FACULTY POSITION Community/Ecosystem Ecology

The Department of Biological Sciences at the University of Pittsburgh anticipates making, subject to budget approval, one full-time tenure-track faculty appointment in the area of community or ecosystem ecology, beginning September 1997, to continue expansion of the Department. Applications from candidates with research interest at the community/ecosystem interface are especially valued. This appointment is expected to be made at the 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 post-doctoral 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 December 2, 1996. 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.*

## PRODUCT APPLICATIONS SPECIALIST

At PE Applied Biosystems, we're making some of the biggest breakthroughs in science happen. From advances on the Human Genome Project, to accelerated opportunities in bioresearch, we offer professionals the chance to break into an exciting career as a member of our breakthrough team.

In this key role, you will be responsible for world wide applications and marketing support of Proclive protein sequencing instruments. We will rely on you to interact with the marketing and sales groups to provide input regarding technical issues which impact product sales, quality, cost, reliability and performance. Additionally, you will perform sales demonstrations, develop sales tools, participate in the design and implementation of customer training courses, seminars, and workshops, and provide back-up for the technical support group.

The ideal candidate will possess a BS in the life sciences along with relevant experience in chemical protein sequencing. An advanced degree and broader scientific background are highly desirable. Strong written and verbal communication skills and a valid passport for international travel are a must.

In exchange for your talents, we offer a competitive salary and benefits package with advancement potential for your career. For consideration, please send your resume to PE Applied Biosystems, Human Resources Department, Ref. 4461, 850 Lincoln Centre Drive, Foster City, CA 94404. You may also fax to 415/638-5874, email us at [biocareer@perkin-elmer.com](mailto:biocareer@perkin-elmer.com) or see our home page on the WWW at <http://www.perkin-elmer.com> for more details. PE Applied Biosystems is an equal opportunity employer.

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## HEALTH SCIENTIST ADMINISTRATOR National Institute on Aging National Institutes of Health

The Neuroscience and Neuropsychology of Aging Program, National Institute on Aging, is seeking a Health Scientist Administrator, GS-601-13/14 (\$52,867 to \$81,217) as the Program Director for the Neuropsychology of Aging Program to develop and administer an extramural research program on clinical neuropsychology and experimental and physiological psychology. The program focuses on the elucidation of age-related changes in memory and higher cognitive processes and their neurological and pathophysiological bases and includes development of behavioral measurements and tests of neural dysfunction. The incumbent develops the program, defining its long-range goals, preparing Program Announcements and Requests for Applications to achieve the goals, and contacting and encouraging scientists with appropriate expertise and interest to develop and submit research proposals. **RESEARCH EXPERIENCE IN AT LEAST ONE OF THESE RELEVANT AREAS OF NEUROPSYCHOLOGY IS REQUIRED: COGNITION, MEMORY, OR COGNITIVE NEUROSCIENCE.** In addition, applicants must demonstrate that they have worked independently in planning, organizing, and conducting biomedical, behavioral health, or health-related research and served effectively in research program administration in these fields. U.S. citizenship is required. A familiarity with the particular problems of the aging nervous system and cognitive problems is desirable.

For a faxed copy of the complete vacancy announcement, call 1-300-728-5627, ID# 1213. Send C.V., resume, or the Optional Application for Federal Employment (OF-612) to:

Ms. Christine Hartz, NIA Personnel Office, Building 31, Room 2C02, 31 Center Drive, MSC 2292, Bethesda, MD 20892-2292, phone (301) 496-5347. Applications will be accepted until a postmarked deadline of March 1, 1997.

NIH is an Equal Opportunity Employer

## Research Positions

### CENTRE HOSPITALIER UNIVERSITAIRE DE QUÉBEC (CHUQ)

CENTRE DE RECHERCHE du PAVILLON L'HÔTEL-DIEU DE QUÉBEC

Several staff positions in basic and clinical research are available in the fields of Cancer and of Kidney Diseases, with emphasis in the areas of:

- signal transduction
- gene therapy
- development and differentiation
- transcription
- nephro-pharmacology

Salary support and start-up funds are available immediately for two positions, one of which is in retrovirology applied to cancer gene therapy. Further positions will require competitive application for salary and operating funds from external sources in 1997.

L'Hôtel-Dieu de Québec is a Reference Centre for Oncology and Nephrology and currently has 20 research groups headed by Faculty members of Laval University Medical School. It provides a modern, dynamic, and multidisciplinary environment for collaborative clinical, fundamental and industrial research. The Research Centre of L'Hôtel-Dieu is supported by a Core Grant from the Fonds de la Recherche en Santé du Québec, and will expand in 1997 into a new 75 000 ft<sup>2</sup> facility adjacent to L'Hôtel-Dieu in the historic centre of the city of Québec.

Applications including a *curriculum vitae*, names of references, and a summary of research interests should be sent to:



CENTRE DE RECHERCHE  
L'HÔTEL-DIEU DE QUÉBEC

Dr. Luc Bélanger, Director  
Centre de Recherche de L'Hôtel-Dieu de Québec  
Centre Hospitalier Universitaire de Québec  
(CHUQ)  
11, Côte du Palais  
Québec (Québec), G1R 2J6  
Canada  
<http://www.crhdq.ulaval.ca/>

UNIVERSITÉ  
LAVAL

## POSITIONS OPEN

### POSTDOCTORAL POSITION Indiana University Medical Center

Immediate opening available for three years for an electrophysiologist with experience in patch clamp techniques to study the role of ion channels in the cellular response of bone to mechanical strain and calcitropic hormones. Experience with cell culture techniques desired. Send curriculum vitae, three references, and statement of research experience to:

**Dr. Randall L. Duncan**  
Department of Orthopaedic Surgery  
Indiana University Medical Center  
541 Clinical Drive, Suite 600  
Indianapolis, IN 46202  
Email: rduncan@indyunix.iupui.edu

Indiana University and Indiana University Medical Center are  
Equal Opportunity/Affirmative Action Employers.

### POSTDOCTORAL POSITION MOLECULAR NEUROBIOLOGY

**POSTDOCTORAL FELLOWSHIP** available immediately to study the effects of glutamate receptor gene knock-out at the National Institute of Child Health and Human Development, NIH. Strong background in molecular biology is required. The successful applicant will also interact with two well-established groups of neurophysiologists. Salary commensurate with experience; candidates must have less than five years of postdoctoral training. Please send curriculum vitae, description of research experience, and names of three references to: **Dr. Vittorio Gallo and Dr. Mark Mayer, Laboratory of Cellular and Molecular Neurophysiology, Building 49, Room 5A78, 49 Convent Drive, Bethesda, MD 20892.**

### IMMUNOLOGY POSTDOCTORAL POSITION Washington University School of Medicine

A **POSTDOCTORAL POSITION** is available to study the molecular and genetic mechanisms of early TH1 and TH2 cell differentiation (*Science*, 260:547; 270:1215; 271:984; *Immunity*, 2:665). Projects include identification of the downstream targets of IL-12 induced Stat4 activation with emphasis on cloning novel transcription factors. Experience in molecular and cellular techniques required. Send curriculum vitae and three letters of reference to: **Dr. Kenneth M. Murphy, Department of Pathology, Washington University School of Medicine, Box 8118, St. Louis, MO 63110.** Email: murphy@immunology.wustl.edu; FAX: 314-362-8888.

### UNIVERSITY OF PENNSYLVANIA Postdoctoral Research on B-Cell Disorders

Two **POSTDOCTORAL** (M.D. or Ph.D.) positions are available in a research laboratory focused on dysregulated B-cell disorders. The first will address mechanisms of AIDS-related lymphomagenesis. The second will define the target epitopes of pathogenic red blood cell autoantibodies in immune hemolytic syndromes. Experience in molecular biology, biochemistry, and/or genetics required. Send curriculum vitae and statement of interest to: **Leslie E. Silberstein, M.D., University of Pennsylvania School of Medicine, 284 John Morgan Building, Philadelphia, PA 19104-6082.** FAX: 215-573-9288. *Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITIONS** available to study CNS serotonergic function through the generation and analysis of serotonin receptor knockout/transgenic mice. Experience required in one or more of the following areas: neurobiology, knockout/transgenic technology, molecular biology, and behavioral pharmacology. Send curriculum vitae and names of three references to: **Laurence Tecott, M.D., Ph.D., Department of Psychiatry, UCSF, 401 Parnassus Avenue, San Francisco, CA 94143-0984.** Email: tecott@itsa.ucsf.edu. *Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL RESEARCH FELLOWSHIP Johns Hopkins University School of Medicine

A GI training fellowship is immediately available to investigate the role of cyclic nucleotide gated cation channels in epithelial tissue using both electrophysiology and molecular biology techniques. Prior experience of electrophysiological techniques and/or molecular biology is desirable. Send curriculum vitae, covering letter, and names of referees to: **Sandra E. Guggino, Ph.D., Division of Gastroenterology, 929 Ross Research Building, 720 Rutland Avenue, Baltimore, MD 21205-2196.** Email: sguggino@welchlink.welch.jhu.edu.

## POSITIONS OPEN

**REGULATORY REFORM:** The Department of Engineering and Public Policy at Carnegie Mellon seeks Ph.D. students, postdoctorals, and more senior professionals interested in the problems of improving the regulation and management of safety and environmental risks. Résumé to: **G. Morgan, EPP, 129 Baker, Carnegie Mellon, Pittsburgh, PA 15213.**

**POSTDOCTORAL POSITION** in cellular and molecular neurobiology—The Department of Neurobiology has **POSTDOCTORAL POSITIONS** available to study various aspects of molecular, cellular, and developmental neurobiology. Some major areas of interest are cell-cell and cell-substratum adhesion molecules, neurite outgrowth, and nerve regeneration. Specific studies include: analysis of overexpression, mutation or deletion of adhesion molecules in animals, analysis of genes such as Hox and Pax, that control the expression of adhesion molecules and their subsequent roles in the formation of morphogenetic pathways during neural development; identification of signal transduction pathways and the gene programs activated by adhesion molecule binding. Applicants should have a strong background in cellular and/or molecular biology. Send curriculum vitae and three letters of reference to: **Dr. Gerald M. Edelman, Chairman, Department of Neurobiology, The Scripps Research Institute, 10550 North Torrey Pines Road, SBR14, La Jolla, CA 92037.** *Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL IRTA FELLOW

The Molecular Signaling Section of the Laboratory of Pathology, National Cancer Institute, National Institutes of Health, has a **POSTDOCTORAL RESEARCH** position available to study the molecular and biochemical basis of cancer metastasis. A three- to five-year appointment funded by an Intramural Research Training Award is available to applicants who are U.S. citizens or permanent residents; hold a doctoral degree in biomedical, behavioral or related sciences or have been certified as meeting all of the requirements leading to such a doctorate; and have five years or less of relevant postdoctoral research experience. Salary commensurate with experience (\$25,000 to \$38,000). Please send curriculum vitae and recent reprints to: **Dr. Elise Kohn, Building 10, Room 2A33, National Institutes of Health, 10 Center Drive, Bethesda, MD 20892.** *NIH is an Equal Opportunity Employer.*

### POSTDOCTORAL RESEARCH FELLOW

The Department of Neurosurgery at LSU Medical Center is seeking an individual with experience in focal or global ischemia research (animal surgery, histochemistry, and molecular or cell biology). The Brain Tumor and Stroke Research Laboratory studies the role of growth factors and stress-induced factors in cerebral ischemia. This appointment is for one year with renewal dependent upon productivity. Please send curriculum vitae, summary of research interests, three letters of reference, and publications to: **LSU Medical Center, Department of Neurosurgery, c/o Dr. Anil Nanda, P.O. Box 33932, Shreveport, LA 71130-3932.** *LSU Medical Center is an Affirmative Action Employer.*

**POSTDOCTORAL POSITIONS** are available to study control mechanisms of cytokine signal transduction and gene expression. Candidates with background in molecular biology or biochemistry should send curriculum vitae and addresses of three references to: **Dr. Yu-Chung Yang, Departments of Medicine (Hem/Onc) and Biochemistry/Molecular Biology, Walther Oncology Center, Indiana University School of Medicine, IB540, 975 West Walnut Street, Indianapolis, IN 46202.** Telephone: 317-274-7512; FAX: 317-274-7592; Email: yuchung.yang@iucc.iupui.edu.

**POSTDOCTORAL POSITION** available for a recent Ph.D. to study immunological factors in atherosclerosis in an NIH and VA supported project at Dartmouth Medical School and nearby VA Hospital in White River Junction, Vermont. Experience in immunology or molecular biology helpful. Interested candidates should send their curriculum vitae and three references to: **Peter Morganelli, Ph.D., VA Hospital, Research 151, White River Junction, VT 05009.** Telephone: 802-295-9363 (ext. 5895); FAX: 802-296-6308; Email: Peter.Morganelli@Dartmouth.edu.

## POSITIONS OPEN

### PRE- AND POSTDOCTORAL POSITIONS NIH Training Grant Program Molecular and Cellular Physiology

Positions are available on an NIH Training Grant Program in various areas of molecular and cellular physiology, including cardiovascular, vascular smooth muscle, endothelial/epithelial cells, pulmonary, neurophysiology, renal, membrane transport, thrombosis, molecular endocrinology, signal transduction, and gene expression. A strong emphasis is placed on modern molecular biological approaches to investigations of physiological mechanisms in cell lines and in transgenic and "gene knockout" mice. Applicants must be U.S. citizens or permanent residents.

Send résumé to:

**Dr. David Millhorn, Chairman**  
Department of Molecular and Cellular Physiology  
College of Medicine  
University of Cincinnati  
Cincinnati, OH 45267-0576

### POSTDOCTORAL POSITION Cellular and Molecular Nutrition

A funded position is available immediately for a Ph.D. with up to three years of experience to study the molecular and cell biology of the hypolipidemia accompanying soy protein intake. Background in rDNA and immunoblotting techniques is desired. This project is part of a collaborative effort led by **Dr. N. E. Shay and S. M. Potter** of the University of Illinois at Urbana-Champaign. Competitive salary. Send curriculum vitae, graduate transcripts, and names of three references to: **Neil F. Shay, Ph.D., Department of Food Science and Human Nutrition, University of Illinois, 260 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801.** FAX: 217-244-7877; Email: n-shay@uiuc.edu. *Equal Opportunity Employer.*

### POSTDOCTORAL POSITION MOLECULAR BIOLOGY

A **POSTDOCTORAL POSITION** is available to study herpesvirus transforming and anti-transforming genes. The applicant should be a recent Ph.D. with a strong background in molecular biology of nucleic acid/protein interactions with some experience in tissue culture. Please send curriculum vitae to: **Dr. L. J. Rosenthal, Department of Microbiology/Immunology, Georgetown University, 3900 Reservoir Road, NW, Washington, DC 20007.** FAX: 202-687-1264; Email: rosenthl@gunet.georgetown.edu. *An Equal Opportunity/Affirmative Action Employer.*

### UNIVERSITY OF CALIFORNIA, IRVINE

A **POSTDOCTORAL RESEARCH** position is available immediately to study the regulation of transcription factors in the immune system by phosphorylation. Experience with molecular biology, immunology, protein chemistry, or tissue culture preferred. Send curriculum vitae and list of three references to: **Dr. Steven Sloan, Department of Pathology, UC Irvine, College of Medicine, D440 Med. Sci., Irvine, CA 92697-4800.**

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**POSTDOCTORAL POSITION** available: For studies on regulation of cytokine production by respiratory epithelial cells. Experience with epithelial cell culture and/or in situ hybridization required. American citizen or permanent resident status required by terms of grant funding. Send curriculum vitae to: **Melvin Berger, M.D., Ph.D., Professor of Pediatrics, Case Western Reserve University, Rainbow Babies and Childrens Hospital, 11100 Euclid Avenue, Cleveland, OH 44106.** *Case Western Reserve University is an Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL** position to study opioid signal transduction in immune cells (*P.N.A.S.*, 93:8294-8299, 1996). Experience required in protein biochemistry and molecular approaches to G-protein signaling. Send curriculum vitae and three reference letters to: **Burt Sharp, M.D., Minneapolis Medical Research Foundation, 914 South 8th Street, D3, Minneapolis, MN 55404.** FAX: 612-347-3915; Email: Sharp002@maroon.tc.umn.edu. *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available immediately to study electrophysiology and behavior of motoneurons in mammalian spinal cord. Experience with intracellular recording preferred. Applications to: **Dr. T. C. Cope, Physiology Department, Emory University, Atlanta, GA 30322.** Telephone: 404-727-8901; FAX: 404-727-2648; Email: cope@physio.emory.edu. *Affirmative Action/Equal Opportunity Employer.*



## SEQUENCING SPECIALIST

5 Prime → 3 Prime, Inc. a manufacturer of innovative nucleic acid purification products, is seeking a Boulder, Colorado based Applications Specialist. This challenging position, reporting to the Director of Marketing and Sales, requires a special individual with "hands-on" high through-put sequencing experience for conducting high profile product demonstrations to customers and seminar groups.

This candidate must possess the ability to interact effectively with Ph.D. level Scientists and Biotechnology Executives and to provide strategic feed back to support corporate and business development.

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## St. Jude Children's Research Hospital

ALSAC • Danny Thomas, Founder

### Postdoctoral Positions

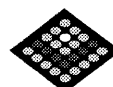
**St. Jude Children's Research Hospital**, a renowned center for biomedical research and treatment of pediatric cancers, has immediate openings for Postdoctoral Research Fellows to study a family of protein kinases involved in spliceosome structure, apoptotic signaling, and checkpoint control. At least 16 different protein kinase isoforms in this family are generated by alternative splicing from three distinct, but tandemly linked, genes. Several isoforms are targets of a CPP32-like protease during TNF and Fas induced programmed cell death (Lahti et al, Mol Cell Biol 15:1-11, 1995; Beyaert et al., EMBO J). This proteolytic processing is blocked by bel-2, crmA, and peptide inhibitors (e.g., AVAD). The mechanism(s) involved in activating/regulating these protein kinase(s) by ICE-like proteases, association with regulatory subunits, and phosphorylation are currently being investigated. Additional isoforms of this protein kinase family are expressed in a cell cycle-dependent manner and respond to DNA damage. The relationship between these protein kinases and checkpoint control is of particular interest. Projects require individuals with prior experience in molecular biology, cell biology, and/or biochemistry purifications. Recent Ph.D., M.D., or M.D./Ph.D. is required.

Please send a C.V. and three letters of recommendation to: **Dr. Vincent Kidd, Tumor Cell Biology Department, St. Jude Children's Research Hospital, 332 No. Lauderdale, Memphis, TN 38101.** An Equal Opportunity/Affirmative Action Employer.

### INTERDISCIPLINARY PROGRAM IN BIOMEDICAL SCIENCES AT THE UNIVERSITY OF NORTH CAROLINA

The University of North Carolina at Chapel Hill has instituted a program for admission of graduate students interested in research in Biomedical Sciences. Students in this program will receive a fellowship of at least \$13,500 plus tuition and health insurance. During the first year the students choose from a broad range of courses and do three research rotations. They select their research advisors from over 180 faculty. At the end of the first year they select a Ph.D. program based on their research interests and the affiliations of their advisor. The Ph.D. programs include Biochemistry and Biophysics, Biomedical Engineering, Biology, Cell Biology and Anatomy, Genetics and Molecular Biology, Microbiology and Immunology, Neurobiology, Pathology, Pharmacology, Physiology, and Toxicology. For information about the program contact:

**Frank Church**  
CB# 7100, 101 MBBRL  
University of North Carolina at Chapel Hill  
Chapel Hill, NC 27599-7100  
(919) 962-8920  
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We have an opening for a highly motivated, experienced microbiologist. We seek a scientist with BS/MS degree and 3-5 years of experience or a Ph.D. degree and 2-4 years of experience in antimicrobial susceptibility testing. The successful candidate will be responsible for evaluating novel antimicrobial agents and maintaining strain collections.

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# SCIENCE



**Postdoctoral Position****Optical Spectroscopy/Nonlinear Optics/  
Ultrafast Systems/Biophysics**

Applications are invited for a postdoctoral position in the research group **Nonlinear Optical Microscopy in Biology**, which is being established at the Max-Planck-Institut of Biophysical Chemistry in Göttingen. The group is specializing in the development of laser scanning microscopes of high resolution, and their application to biological imaging. We are seeking highly motivated individuals with outstanding qualifications in at least two of the following fields: fluorescence spectroscopy, multiphoton excitation, nonlinear optics, and ultrafast laser systems. Experience in fluorescence microscopy and related biophysics is advantageous but not required. One of our main objectives is the development of three-dimensional far-field microscopes with resolution in the sub100-nm range. We address the problem of diffraction by implementing (photo-)physical phenomena in the focus formation (Point-Spread-Functions Engineering). The implementation of suitable phenomena in the imaging process as well as their evaluation for biological imaging will be one of the main tasks of the successful applicant. Further information is available on the following WWW page: [http://www.mpibpc.gwdg.de/index\\_ENG.html](http://www.mpibpc.gwdg.de/index_ENG.html). This offer should particularly reach women, as the Max-Planck-Society is interested in a conspicuous increase of the part of women in the scientific sector. Disabled applicants will be given preference in the event of equal qualification. Interested applicants are invited to submit their curriculum vitae and also three reference names to **Priv.-Dox. Stefan W. Hell, Max-Planck-Institut für Biophysikalische Chemie, Postfach 2841, D-37018 Göttingen; Email: stefan.hell@utu.fi.**

**INTERNATIONAL CENTRE FOR DIARRHOEAL DISEASE RESEARCH,  
BANGLADESH****Vacancy for Senior Scientist and Director of the Laboratory Sciences Division**

ICDDR,B also known as the Centre for Health and Population Research, is an autonomous, international, philanthropic, and non-profit-making centre for research, education, and training as well as clinical service. It is located in Dhaka, Bangladesh. The fundamental mission of the Centre is to develop and disseminate solutions to major health and population problems, with an emphasis on simple and cost-effective methods of prevention and case management.

The Centre has four scientific divisions of which the Laboratory Sciences Division (LSD) is one. The LSD is made up of the following research laboratories: enteric bacteriology, reproductive tract infections, environmental microbiology, parasitology, virology, immunology, molecular biology, and nutritional biochemistry. It also runs a large clinical laboratory service.

The Centre is looking for an internationally recognized scientist to head this division. The prospective candidate must have an established record of research in infectious diseases and/or applied health sciences; experience in international activities associated with research and training programs; proven record of grants and contract funding; and administrative experience, especially in initiating research directions, strategic planning, and team management.

**Qualifications:** Doctoral degree in microbiology (M.D. or Ph.D.).

**Experience:** Minimum of 15 years of experience in related fields of which at least 5 years should have been as head of a laboratory. Demonstrated ability to develop an independent and productive research program as evidenced by a record of original work published in international peer-reviewed scientific journals. Good connections with international scientific institutions and funding organizations.

**Language:** Excellent knowledge of spoken and written English.

**Salary and benefits:** the post is comparable to the UN/WHO pay level D1 or D2, depending on qualifications and experience. The appointment is normally for three years and renewable for a further three years.

**Inquiries and Applications:**

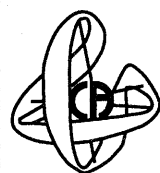
These should be accompanied by a full curriculum vitae and sent to the:

**Director  
Administration and Personnel  
ICDDR,B**

**GPO Box-128, Dhaka-1000  
Bangladesh**

**FAX: 880-2-883116 and 880-2-871686**

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**The Tenth International Symposium on  
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Attendance will be limited to 200 participants.

Further Information may be obtained from:

**Symposium Secretariat**

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**Lund University**

**POB 124**

**S-221 00 Lund Sweden**

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**Postdoctoral Researcher****NERC CENTRE FOR POPULATION BIOLOGY**

We seek a Population Ecologist with a proven track record in modelling ecological problems and an ability to collaborate with experimentalists; others with strong theoretical interests may also apply. Research in population ecology at CPB includes single and multi-species dynamics, and problems at the interface of population ecology and genetics.

Applicants should have a PhD and relevant research experience. A 2-year contract is offered, with the possibility of renewal. Salary range £14,317-£21,519.

Further details from Miss C Challis,  
e-mail [c.challis@ic.ac.uk](mailto:c.challis@ic.ac.uk); Tel 01344 294475; Centre  
for Population Biology, Imperial College at Silwood Park,  
Ascot, Berkshire SL5 7PY, UK; WWW  
<http://forest.bio.ic.ac.uk/cpb/cpb/cpbintro.html>

**Applications to be received by 31st December 1996.**

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## UNIVERSITY OF UTAH SCHOOL OF MEDICINE

### Ph.D. Molecular Biologist: Research Laboratory Director

The Division of Reproductive Sciences/Department of Obstetrics and Gynecology is seeking applications for the above non-tenure track position. Academic rank: Research Associate. Start date: as early as 11/15/96. The successful candidate is expected to become an integral member of a research group concerned with the molecular and cellular endocrinology of the mammalian ovary. Participation in the delineation of the research agenda, in day-to-day operations, and in supervision of postdoctoral trainees is anticipated. Prior experience in reproductive biology is **not** a prerequisite. Salary support will be guaranteed for a minimum of five years.

### Tenure Track Faculty Position

The Division of Reproductive Sciences/Department of Obstetrics and Gynecology is seeking applications for a tenure track research scientist position. Academic Rank: Open. Candidates should hold a Ph.D. or equivalent degree. The successful candidate is expected to join (by July 1, 1997) a growing division of reproductive sciences and to establish an independent, high quality extramurally funded research program suitable for the training of Ph.D. candidates and postdoctoral fellows. Secondary appointments will be encouraged. Candidates with research interests in the general areas of reproductive biology, developmental biology, immunology, signal transduction, or molecular genetics/medicine are welcome to apply. Start-up funds as well as operational, technical, and secretarial support will be guaranteed for up to three years.

Curriculum vitae should be forwarded to:

Eli Y. Adashi, M.D.

Professor and Chair

Department of Obstetrics and Gynecology

University of Utah School of Medicine

50 N. Medical Drive, 2B200

Salt Lake City, Utah 84132

*The University of Utah is an Equal Opportunity Affirmative Action Employer, and encourages applications from women and minorities.*



## GLOBAL CAREER OPPORTUNITIES



THE UNIVERSITY  
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### Reader/Senior Lecturer/Lecturer (Level D/C/B) in Embryology/ Developmental Biology

(Fixed-term: 5 years)

DEPARTMENT OF ANATOMICAL SCIENCES

Applications are invited for the position of embryologist/developmental biologist, at the level of Reader/Senior Lecturer/Lecturer depending on qualifications and experience.

Applicants must possess a proven research ability in any area of embryology/developmental biology relevant to the human, and a strong commitment to teaching (science, medical and graduate students). Applicants are expected to have a strong background in molecular biology and 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 \$A64,311 – \$A70,851 per annum;  
Senior Lecturer \$A53,411 – \$A61,586 per annum; Lecturer  
\$A43,601 – \$A51,776 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. 39496**, including the names, addresses and facsimile numbers of five referees, should be forwarded to the Director, Personnel Services, The University of Queensland, Brisbane Qld 4072 Australia. Closing date for applications: 29 November 1996.

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# SCIENCE

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## Two Tenure-Track Biology Faculty Positions

Truman State University invites applications for two tenure-track positions at the Assistant Professor level, starting August 1997. Teaching and research are mutually supportive activities at Truman; candidates should be strongly committed both to teaching and to developing an active research program involving undergraduates and M.S. students. Laboratory space and start-up funds will be provided. In addition to the responsibilities listed below, all positions include rotation through a majors or nonmajors general biology course.

(1) **Animal Physiologist** to teach a junior-level physiology course as well as an upper-level physiology course in the candidate's area of expertise. We are especially interested in candidates with research interests in neurobiology and endocrinology. Search Chair: Dr. George J. Schulte.

(2) **Plant Cell Biologist/Physiologist** to teach a sophomore-level cell biology course as well as a junior-level plant physiology course. Research background and interests should address questions in cell biology or physiology using plant systems. Search Chair: Dr. David R. Howard.

Ranked fourth in the nation by *Money Guide*, Truman is Missouri's only statewide, highly selective, public undergraduate liberal arts and sciences university. We are nationally recognized for our innovative assessment program and commitment to a broad-based liberal arts and sciences education. Students benefit from a university-wide 16:1 student/faculty ratio and the opportunity to work closely with faculty conducting research. [www.truman.edu](http://www.truman.edu).

Candidates must possess a Ph.D., or have a targeted completion date by August 1997. Complete applications include a curriculum vitae, statements of teaching philosophy and research goals, all undergraduate and graduate transcripts, and three recent letters of reference. All application materials should be sent directly to the respective Search Chair at: **Division of Science, Truman State University, Kirksville, MO 63501 (816-785-4597)**. Completed applications will be reviewed starting December 6, 1996. *Truman is an AA/EEO institution committed to cultural diversity and compliance with the Americans with Disabilities Act.*



## FACULTY POSITION

Department of Biology

Texas A&M University

Applications are invited for a tenure-track position at the Assistant Professor level in the Department of Biology with a joint appointment in the Center for Advanced Invertebrate Molecular Sciences. We seek outstanding individuals who use cellular, molecular, and genetic approaches to address fundamental questions in an invertebrate system. We are particularly interested in candidates working in the areas of invertebrate immunity or receptor biology. Successful candidates will be expected to establish a vigorous research program and to participate in undergraduate and graduate teaching.

Interested individuals should send curriculum vitae and a statement of research and teaching interests, and should arrange to have three letters of reference sent to:

**Invertebrate Molecular Biology Search Committee**

Department of Biology

Texas A&M University

College Station, TX 77843-3258

FAX: 409-845-2891

Email: [DLJarvis@TAMU.edu](mailto:DLJarvis@TAMU.edu)

Biology Department Web site:

<http://bio-www.tamu.edu/>

The deadline for full consideration of applicants is **December 15, 1996**

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## ASSISTANT PROFESSOR IN RESIDENCE

Department of Biopharmaceutical Sciences

University of California, San Francisco

The School of Biopharmaceutical Sciences invites applications for an Assistant Professor-In-Residence position from Ph.D. scientists with specialization in bioinformatics, protein structure, function, and evolution. Preference will be given to candidates who use an interdisciplinary approach to understanding protein structure-function relationship. Applicants must be able to integrate experimental techniques in enzymology and molecular biology with computational tools in structural biology. The successful individual will have a broad background in primary sequence analysis and will demonstrate a proven ability to develop new tools in bioinformatics that integrate sequence and structural information. Applicants must be able to attract all portions of the salary required for this non-tenure-track position through extramural grant support. Our interest is in exploiting the information coming out of the genome projects in ways that interface with the work of computational chemists working with three dimensional structural information. Teaching requirements include development of introductory and advanced courses in bioinformatics.

Send curriculum vitae, a summary of current research, a concise outline of future research plans, and three letters of reference by November 30, 1996 to:

**Wolfgang Sadée, Ph.D., Chairperson**

**Search Committee**

**Department of Biopharmaceutical Sciences, Box 0446**

**School of Pharmacy**

**University of California**

**San Francisco, CA 94143-0446**

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## UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER

DENVER, COLORADO

The University of Colorado School of Medicine is seeking a Chairperson for the Department of Immunology. This individual must have a Ph.D., M.D., or comparable degree, and must have an outstanding record as a basic scientist and as an international scientific leader. Other qualifications include a commitment to medical and graduate education, demonstrated abilities as an educator, and both experience and proficiency as an administrator.

The immunology community in Denver is widely recognized for the quality of basic and clinical research, medical school teaching, and graduate training. This community consists of individuals based at the University of Colorado Health Sciences Center, including the Barbara Davis Center for Childhood Diabetes and the Denver Veterans Administration Medical Center, and at the nearby National Jewish Center for Immunology and Respiratory Medicine. The Department of Immunology is based in the School of Medicine and presently includes 22 individuals with primary faculty appointments and 24 individuals with secondary appointments. The Department has evolved from an Interdepartmental Graduate Program that directs an educational program for 32 graduate students and is supported by an NIH training grant.

School of Medicine resources will be provided for continued growth and development of the Department of Immunology. This is an excellent opportunity to lead a group of outstanding scientists who have developed a strong record of interinstitutional and interdepartmental collaboration in research and cooperation in graduate education.

Interested applicants should send by December 1 a copy of their curriculum vitae, a statement of their research interests, and a list of four references to:

**William J. Betz, Ph.D.**

**Chair, Department of Immunology Search Committee**

**c/o Department of Physiology**

**University of Colorado Health Sciences Center C240**

**4200 East Ninth Avenue**

**Denver, Colorado 80262**

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



### Evolutionary/Ecological Statistician

#### Plant Molecular Biologist

The Department of Biology, San Francisco State University, invites applications for 2 tenure-track positions at the Assistant/Associate Professor level for Fall 1997. Ph.D. is required and postdoctoral experience is preferable. Successful candidates must have an established research record, the potential for extramural funding of a research program that includes supervision of M.A. students, and a commitment to excellence in teaching that includes general courses as well as area of specialty. We seek: 1. A Plant Molecular Biologist with research interests in molecular genetic mechanisms underlying plant processes and extensive training in plant biology. Responsibilities will include teaching upper division and graduate courses in molecular and plant molecular biology, and participation in lower division introductory biology. 2. A Statistician with a broad understanding of statistical theory and methods, and a research record in statistics applied to any area of ecology or evolutionary biology. Responsibilities will include teaching undergraduate and graduate courses in biometry, and consulting with graduate students and faculty on statistical issues. Send letter of application, curriculum vitae, a statement of teaching interests, a statement of research goals, and three letters of reference by January 2, 1997 to either the **Plant Biology or Statistician Search Committee, Department of Biology, San Francisco State University, San Francisco, CA 94132.** *Women, ethnic minorities, and persons with disabilities are especially urged to apply. SFSU is an Equal Opportunity/Affirmative Action Employer.*

### TENURE-TRACK FACULTY POSITION IN PHARMACOKINETICS DEPARTMENT OF PHARMACOLOGY COLLEGE OF PHARMACY THE UNIVERSITY OF TOLEDO

The Department of Pharmacology at The University of Toledo College of Pharmacy invites applications for a twelve-month tenure-track position in pharmacokinetics at the rank of Assistant or Associate Professor of Pharmacology. The successful candidate will have an earned doctorate (Pharm.D. or Ph.D.) in pharmacokinetics. Post-doctoral experience in pharmacokinetics will be helpful.

Primary responsibilities will include: instruction in biopharmaceutics, pharmacokinetics, and clinical pharmacokinetics for the professional degree programs in Pharmacy; instruction at the graduate level (M.S. in Pharmaceutical Science) in pharmacokinetic theory; establishment of an independent research program in pharmacokinetics; and collaborative clinical pharmacokinetic research with pharmacologists and clinicians.

The University of Toledo is a state-supported institution enrolling 21,000 students. The College of Pharmacy was established in 1904, and graduates 110-115 undergraduate and graduate students yearly. The City of Toledo offers an excellent quality of life.

The position is available immediately. Applications will be accepted until November 15, 1996. Rank and compensation will be commensurate with experience. Interested individuals should send a letter of interest, a current curriculum vitae, and the names of at least three references to:

**Dr. Kenneth Bachmann, Professor and Chair**  
Department of Pharmacology, The University of Toledo  
2801 W. Bancroft St.  
Toledo, OH 43606  
Telephone (419) 530-2010 - FAX (419) 530-8407  
email: kbachma@utnet.utoledo.edu

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Interested candidates should send a resume and salary history, together with the names of three professional references, to: **Human Resources, Molecular Tool, Inc., Alpha Center, 5210 Eastern Avenue, Baltimore, MD 21224.** **NO PHONE CALLS PLEASE.**

### STATISTICAL GENETICIST

The Osteoporosis Research Center at Creighton University is recruiting a statistical geneticist to join an established research team of 11 osteoporosis investigators and 30 staff in the investigation of the genetic determination of bone mass in humans. The Center has a history of nearly 40 years of research in osteoporosis, and has available both a large population of potential human research subjects and a genotyping laboratory. This is a tenure-track position, with light teaching duties and \$35-\$50 K available for computer equipment. Education should include a doctorate in human/medical genetics, epidemiology, biostatistics, or a related field, and 2-3 years of postdoctoral experience. Experience should ideally also include genetic analysis of quantitative traits including: model-dependent and model independent linkage analysis, segregation analysis, estimation of familial correlations and fitting mixtures of distributions. Required job skills include a strong background in statistics, biostatistics, computer science, or biomathematics. Applicants should have experience with the SAGE, LINKAGE, LIPED, and SAS analysis packages or the equivalent. The postdoctoral experience and/or job skills may be obtained during the first year of the appointment through an arrangement with the Center for Inherited Disease Research (NIH-sponsored), which is affiliated with the Human Genome Project located in Baltimore. Interested applicants should contact **Robert R. Recker, M.D., Director, Osteoporosis Research Center, Creighton University, 601 N. 30th St., Omaha, NE 68131.** Phone: 402-280-4471, Fax: 402-280-5034.



### UCLA FACULTY POSITION

#### UCLA-DOE Laboratory of Structural Biology and Molecular Medicine

The Division of Structural Biology and Genetics of the UCLA-DOE Laboratory of Structural Biology and Molecular Medicine will appoint one faculty member at the level of Assistant Professor or Assistant Professor in Residence, jointly with departments in the College of Letters and Science or the School of Medicine. We seek a **computational biochemist** with an **interest in genome analysis**; however, truly exceptional candidates in **related areas of structural biology** will also be considered. Set up and research funds will come from the UCLA-DOE Lab. Candidates must have significant research accomplishments, the ability to establish a vigorous research program, and a commitment to excellence in education. *UCLA is an equal opportunity/affirmative action employer.* Applicants should provide a curriculum vitae, a summary of proposed research, copies of key publications or preprints, and three letters of recommendation by November 30, 1996. Applications should be sent to:

**Dr. David Eisenberg, Chair of Search Committee, UCLA-DOE Lab, UCLA, Box 951570, 611 Circle Drive East, Los Angeles, CA 90095-1570, Fax: (310) 206-3914**



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Letters of inquiry should include: curriculum vitae, statement of research interests, list of publications, and names of three references. (Predoctoral programs limited to U.S. citizens/permanent residents and are in conjunction with the University of Maine and Yale University.)

To apply or request further information, contact: **Suzanne Serreze, The Jackson Laboratory, 600 Main St., Bar Harbor, ME 04609-1500. Phone: 207/288-6420; FAX: 207/288-6079; email: sbs@jax.org.EE/AA Employer.**

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**FACULTY POSITIONS  
DEPARTMENT OF VETERINARY SCIENCE  
COLLEGE OF AGRICULTURAL SCIENCES**

Applications are invited for two tenure-track or tenured positions at the levels of assistant or associate professor. Candidates with interests in **molecular biology, toxicology, microbiology, pharmacology, nutrition, neuroendocrinology, and molecular pathology**, as related to the disciplines of immunology, will be considered. Applicants at the associate professor level should have an established externally-funded research program. Applicants at the assistant professor level should be recent graduates, preferably with some postdoctoral experience, with the potential for building a solid research program based on externally funded support. The responsibilities for these positions include development of an active, independent research program and participation in undergraduate and graduate education in the department.

Start-up funds and ample laboratory space supported by excellent clinical facilities in our Animal Diagnostic laboratory are available. Applications will be accepted until the positions are filled; however, initial review will begin on December 1, 1996. Applicants should send a curriculum vita, a brief summary of research objectives; and names, addresses, and telephone numbers of at least three references to: **DR. GARY H. PERDEW, CHAIR, FACULTY SEARCH COMMITTEE, THE PENNSYLVANIA STATE UNIVERSITY, 115A HENNING BUILDING, BOX SCI, DEPARTMENT OF VETERINARY SCIENCE, UNIVERSITY PARK, PA 16802-3500.**

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The Department of Neurosciences and the Research Institute are undergoing rapid growth. The Department of Neurosciences has strong programs in developmental neurobiology, excitable membranes, cell signaling, and human genetics. It is housed in the Health Science Building along with the Departments of Cell Biology and Molecular Biology. Opportunities for interactions with Clinical Neurosciences Departments are plentiful.

Candidates should submit a curriculum vitae, a list of publications, a brief statement of research interests, and three letters of reference to:

**Search Committee  
Department of Neurosciences NC30  
The Cleveland Clinic Foundation  
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**Columbia University**  
**College of Physicians and Surgeons**  
 Faculty Positions in the Departments of Biochemistry  
 and Molecular Biophysics, Genetics and Development,  
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Several tenure-track faculty positions at the **assistant professor** level are available as part of the expansion and enhancement of the three departments named above. Strong preference will be given to candidates who are addressing fundamental questions in biology using novel approaches or combining standard techniques in innovative ways, particularly within the following areas:

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- ◆ **Theory, computation, and informatics** applied to genetical or structural questions

The College of Physicians and Surgeons of Columbia University provides a highly interactive research environment. The expansion of the faculty of these Basic Science departments is made possible in part by generous funding obtained from the Howard Hughes Medical Institute and aims to help young scholars initiate successful, innovative laboratory programs.

Applications should include a curriculum vitae and a brief statement of research goals and interests. Three persons should be requested to send a letter of reference directly. Applications and letters of reference should arrive no later than **December 6, 1996**, and be sent to:

**Ms. Nina Steinberg,**  
**Basic Sciences Recruitment Program**  
**Columbia University**  
**701 West 168th Street, Room 1602**  
**New York, NY 10032**  
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**FACULTY POSITION**  
**DEPARTMENT OF ANATOMY**  
**Medical College of Virginia**  
**Virginia Commonwealth University**

The Department of Anatomy at the Medical College of Virginia, Virginia Commonwealth University, seeks a highly qualified individual to join its tumor biology group as a collateral assistant professor. The successful candidate should have experience in cancer genetics and genetic toxicology related to familial and sporadic lung and breast cancers, with expertise in a full range of state-of-the-art molecular techniques, including but not limited to differential display PCR. The successful candidate should also have an established funding record in undertaking imaginative studies isolating novel genes and characterizing their role in common adult neoplasms. In addition to these research responsibilities, the successful candidate is expected to participate in both graduate and professional teaching, with particular emphasis on microscopic anatomy. An M.D., D.D.S., or Ph.D. degree with two or more years of productive postdoctoral experience are required. This position is offered initially as a three-year appointment.

Applicants should send a curriculum vitae and statement of research interests, along with the names, addresses, and telephone and fax numbers of three references, by December 16, 1996, to:

**George R. Leichnetz, Ph.D.**  
**Chair, Search Committee**  
**Department of Anatomy**  
**P.O. Box 980709**  
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Cover letter, CV, a brief description of research interests and names with addresses of 3 references should be sent by December 17, 1996 to: **Dr. Cheryl Adams, Chair, Search Committee, Dept of Natural Science (Biology) at the address below:**

 **York College**  
**The City University of New York**  
**94-20 Guy R. Brewer Blvd.**  
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## POSITIONS OPEN

### POSTDOCTORAL POSITION YALE UNIVERSITY

A POSTDOCTORAL POSITION is available immediately to study the molecular mechanism of secretory vesicle fusion at the plasma membrane. Send curriculum vitae and three references to: **Dr. Bhanu P. Jena**, Section of Gastroenterology, Department of Surgery, Yale University School of Medicine, New Haven, CT 06510. FAX: 203-737-1571; Email: Bhanu.Jena@yale.edu.

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Deadline for completed application: February 1, 1997.

For information, write to: **Dr. Margaret A. Pericak-Vance**, Box 2900, Duke University Medical Center, Durham, NC 27710 or contact: **Ms. Valorie Roberts**, Course Administrator, Telephone: 919-684-6274; FAX: 919-684-6514; Email: genclass@genemap.mc.duke.edu.

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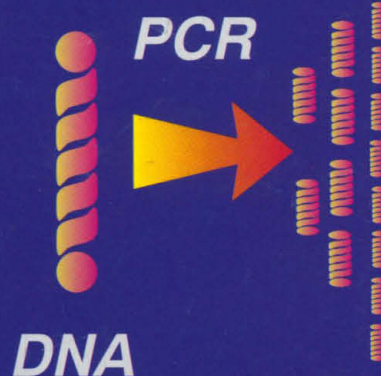
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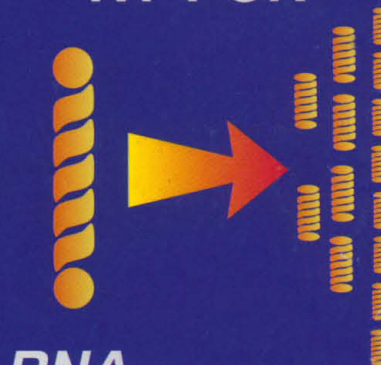


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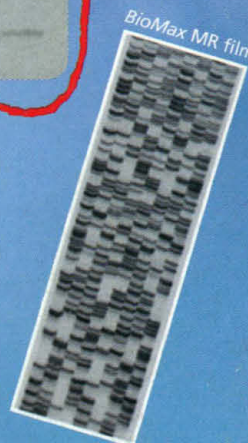
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