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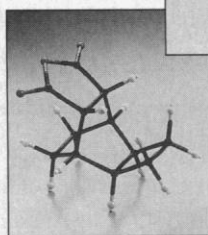
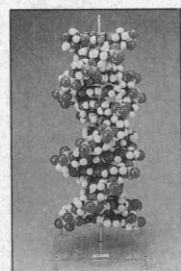
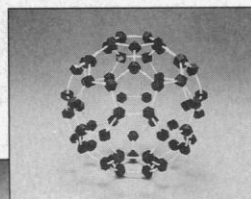
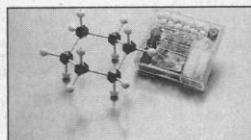
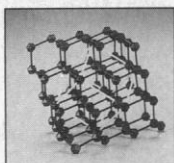
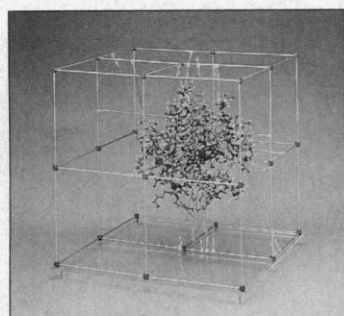
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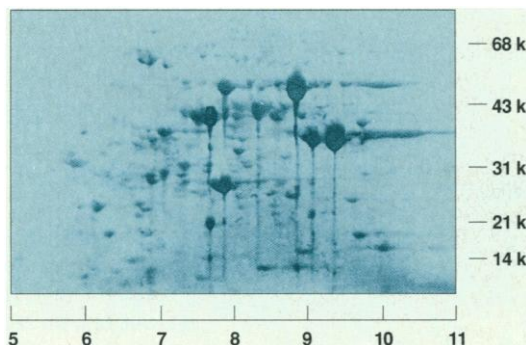
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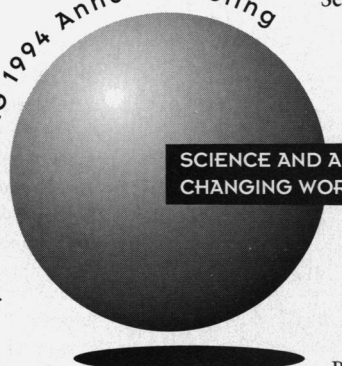
**The AAAS Annual Meeting**  
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## Program Topics

### Symposia Tracks

*The Changing Environment*  
*Regional and International Security and Defense Conversion*  
*Industry, Policy and the Changing Infrastructure of Science*  
*Health Care Reform and Advances in Medicine*  
*Science Education Reform*  
*Communicating Science*  
*Societal Change: Population Trends and Urban Challenges*  
*Science, Ethics, and the Law*  
*Evolution Revolution*  
*Frontiers in Engineering and Physical Science Technology*  
*Frontiers in Psychology and Linguistics*  
*Science for Everyone*  
*Frontiers in Astronomy*

AAAS 1994 Annual Meeting



## Seminars

*Mapping and Modeling the Brain*  
*Evolution and Extinction*  
*Eating and Health*  
*Half the Secret of Life Is Outside the Cell*  
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 English	 French	 German	 Japanese	 Spanish
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1 Cell Culture Media	Milieux pour la Culture Cellulaire	Medien für die Zellkultur	組織培養用培地	Medios para Cultivo Celular
2 Balanced Salt Solutions	Solutions Salines Equilibrées	Gepufferte Salzlösungen	平衡塩溶液	Soluciones Salinas Balanceadas
3 Animal Sera	Séras Animaux	Tierseren	動物血清	Suero Animal
4 Cell Culture Reagents	Réactifs pour la Culture Cellulaire	Reagenzien für die Zellkultur	組織培養用試薬	Reactivos de Cultivo Celular
5 Cellular Biomedical Fluids	Fluides Biomédicaux Cellulaires	Zelluläre biomedizinische Flüssigkeiten	生物医学用培地	Fluidos Biomédicos Celulares
<b>MOLECULAR BIOLOGY</b>	<b>BIOLOGIE MOLÉCULAIRE</b>	<b>MOLEKULAR-BIOLOGIE</b>	<b>分子生物学</b>	<b>BIOLOGIA MOLECULAR</b>
6 Enzymes	Enzymes	Enzyme	酵素	Enzimas
7 Nucleic Acids	Acides Nucléiques	Nukleinsäuren	核酸	Acidos Nucleicos
8 Molecular Size and Weight Standards	Standards de Poids Moléculaire	Molekulargewichtsstandards	分子量サイズマーカー	Estandares de Tamaño y Peso Molecular
9 Transformation and Transfection Technologies	Transformation et Transfection	Transformation und Transfektions-Technologie	遺伝子導入	Technologie de Transformación y Transfección
10 Media and Antibodies for Molecular Genetics	Milieux et Antibiotiques pour Génétique Moléculaire	Medien und Antibiotika für Molekulargenetik	分子遺伝学用培地と抗生物質	Medios y Anticuerpos para Genética Molecular
11 Reagent Systems for Molecular Biology	Kits pour Biologie Moléculaire	Reagenziensysteme	分子生物学用キット	Sistemas de Reactivos para Biología Molecular
12 Reagents	Réactifs	Reagenzien	試薬	Reactivos
<b>APPARATUS</b>	<b>APPAREILS</b>	<b>APPARATE UND GERÄTE</b>	<b>器械</b>	<b>APARATOS</b>
13 Electrophoresis Apparatus	Appareils d'Électrophorèse	Elektrophoresegeräte	電気泳動器械	Aparatos para Electroforesis
14 Cell Separation/Filtration Apparatus	Appareils de Séparation/Filtration	Trennungs/Filtrationsgeräte	細胞分離/濾過装置	Separación Celular/Aparatos de Filtración
15 Electroporation Apparatus	Appareils d'Electroporation	Elektroporationsgeräte	エレクトロポレーション器械	Aparatos de Electroporación
<b>CELL BIOLOGY</b>	<b>BIOLOGIE CELLULAIRE</b>	<b>ZELLBIOLOGIE</b>	<b>細胞生物学</b>	<b>BIOLOGIA CELULAR</b>
16 Signal Transduction	Transmission des signaux	Transmembrane Signalübertragung	シグナルトランスダクション	Señales de Transducción
17 Growth Factors, Lymphokines, and Cytokines	Facteurs de Croissance, Lymphokines, et Cytokines	Wachstumsfaktoren, Lymphokine und Zytokine	増殖因子、リンホカイン、サイトカイン	Factores de Crecimiento, Linfoquinas y Citoquinas
18 Extracellular Matrix Products	Produits de Matrice Extracellulaire	Produkte für die extrazelluläre Matrixforschung	細胞外基質製品	Productos de Matriz Extracelular
19 Stem Cell Research	Reserche des Cellules Germinales	Stammzellforschung	幹細胞研究用	Investigación de Células Germinales
<b>IMMUNOLOGY</b>	<b>IMMUNOLOGIE</b>	<b>IMMUNOLOGIE</b>	<b>免疫学</b>	<b>INMUNOLOGIA</b>
20 Analytical Cytology	Cytologie Analytique	Analytische Zytologie	細胞解析	Citología Analítica
21 Immunology Reagents	Réactifs pour l'Immunologie	Immunologische Reagenzien	免疫試薬	Reactivos para Inmunología



# SCIENCE

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## POSITIONS OPEN

### FACULTY POSITIONS IN STRUCTURAL BIOLOGY

The Department of Molecular Genetics, Biochemistry and Microbiology and the Cardiovascular Center of the University of Cincinnati College of Medicine announce the opening of two faculty positions; one at the **ASSOCIATE PROFESSOR** level and the other at the **ASSISTANT PROFESSOR** level. The department currently has 25 full-time members with strong research programs and is the lead department in the NHLBI-sponsored Program of Excellence in Molecular Biology of the Heart and Lung. We maintain a strong and active graduate program, plus core facilities in microbiology, cell culture, DNA synthesis and sequencing and production of transgenic and knockout mice. We are now developing a major structural biology program with generous support from the Marion-Merrell Dow Foundation. We seek to identify investigators who are using physical techniques such as NMR, X-ray or electron diffraction to understand basic questions related to the structure and function of biological macromolecules. Priority will be given to applicants whose research programs also include molecular genetic approaches and emphasize molecules of special significance in the cardiovascular system. *We are particularly interested in identifying women and minority candidates.* Applicants should submit curriculum vitae, brief description of anticipated research and the names of three qualified references to: **Jerry B. Lingrel, Ph.D., Chair Search Committee, Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, Cincinnati, OH 45267-0524.**

*Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITIONS IN THE DEPARTMENT OF MOLECULAR GENETICS, BIOCHEMISTRY AND MICROBIOLOGY

We are presently searching for two tenure-track faculty members at the **ASSISTANT PROFESSOR** level. We are particularly interested in individuals who work in eukaryotic cellular or viral systems with an emphasis on signal transduction or transcription factors. More senior candidates whose program provides a unique fit with our program will also be considered. The department currently has 25 full-time members with strong research programs. We are the lead department in the NHLBI-sponsored Program of Excellence in Molecular Biology and are presently developing a structural biology unit in conjunction with the Cardiovascular Center. We maintain a strong and active graduate program, plus core facilities in microbiology, cell culture, DNA synthesis and sequencing, production of transgenic and knockout mice. All these factors contribute to an excellent research atmosphere. Generous start-up funds and space are available. *We are particularly interested in identifying women and minority candidates.* Applicants should submit curriculum vitae, brief description of anticipated research and the names of three qualified references to: **Jerry B. Lingrel, Ph.D., Professor and Chair, Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, Cincinnati, OH 45267-0524.**

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### ASSISTANT PROFESSOR Biochemistry, Cell and Molecular Biology Dartmouth Medical School

The Department of Biochemistry at Dartmouth Medical School, with **Dr. William T. Wickner** as Chair, is recruiting an Assistant Professor. Consideration will be given to outstanding individuals who work within the broad areas of biochemistry, cell and molecular biology, including molecular genetics, neurobiology and developmental biology. The successful candidate will be expected to establish an independent research program, to participate in medical and graduate education, and to be a member of a well-established multidisciplinary graduate program. Candidates should have a Ph.D. or M.D. degree with relevant postdoctoral training. Please send curriculum vitae and statement of research goals, and arrange for three letters of recommendation to be mailed to the address below. **BCMB Search Committee, Department of Biochemistry, Dartmouth Medical School, 7200 Vail Building, Room 413, Hanover, NH 03755-3844; FAX: 603-650-1128.** Review of applications will begin November 15, 1993. *Dartmouth is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### THE UNIVERSITY OF GEORGIA ASSISTANT PROFESSOR PLANT MOLECULAR GENETICS

The Departments of Botany and Genetics intend to joint-appoint a tenure-track assistant professor beginning fall 1994. We are particularly interested in candidates who are applying molecular genetic approaches to the study of fundamental problems in plant biology, such as physiology, development, or evolutionary mechanisms. The candidate will also be expected to teach at the graduate and undergraduate level.

Applicants must have postdoctoral experience. Curriculum vitae, up to five reprints, a statement of future research and teaching plans (1 to 3 pages each), and four letters of recommendation solicited by the applicant should be received no later than December 3, 1993, by: **Botany/Genetics Search Committee, Botany Department, University of Georgia, Athens, GA 30602, USA.** Inquiries may be addressed to the Chair of the Search Committee, **Dr. Gary Kochert, by Telephone: (706-542-1820) or Electronic Mail: (kochert@dogwood.botany.uga.edu).**

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**PLANT PHYSIOLOGIST**—The Department of Biology at the University of North Carolina at Greensboro (UNCG) has a 9-month tenure-track position with competitive start-up funds and salary for an **ASSISTANT PROFESSOR** beginning 1 August 1994. We seek an individual who will (1) develop a research program in plant physiology, (2) interact with faculty and students conducting research in related programs, (3) teach undergraduate and graduate courses in plant physiology, and (4) teach a portion of introductory biology. Postdoctoral experience is essential. Applicants should submit a statement of research and teaching interests, curriculum vitae, reprints, and three letters of reference by 15 December 1993 to: **Dr. Elizabeth P. Lacey, Chair of Plant Physiology Search Committee, Department of Biology, UNCG, Greensboro, NC 27412.** *Equal Employment Opportunity/Affirmative Action; W/M/V/D.*

### FACULTY POSITION IN MOLECULAR PHARMACOLOGY

The Division of Basic Medical Sciences at Mercer University School of Medicine invites applications for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level. The successful applicant should have a doctoral degree in Pharmacology with at least two years of postdoctoral training and will be expected to participate in problem-based medical education as well as develop an independent research program. Preference will be given to individuals with interest in endocrine- or immunopharmacology and with research experience using modern molecular biological/biochemical techniques. Candidates with strong backgrounds in other areas are also encouraged to apply. Applicants should send curriculum vitae with the names of three references to: **Robert J. Moon, Ph.D., Division of Basic Medical Sciences, School of Medicine, Mercer University, 1550 College Street, Macon, GA 31207.** *Equal Opportunity/Affirmative Action Employer.*

The Departments of Pathology at the Beth Israel Hospital and Harvard Medical School invite applications for **PROFESSOR** of Pathology, Laboratory Investigator criteria, to serve at the Beth Israel Hospital. We are seeking a leader in the investigation of the molecular mechanisms which regulate the initiation of allergic reactions. The successful applicant will be expected to lead a research effort that complements and interacts with existing programs in the Departments of Pathology and Medicine at the Beth Israel Hospital. These include investigations of the molecular biology, biochemistry and function of mast cells, basophils, eosinophils and other cells contributing to allergic reactions. Also included are investigations of the biochemistry and molecular biology of signal transduction as it affects these cells. Because a major focus of these research efforts is an understanding of the pathogenesis of clinically important aspects of allergic diseases, we particularly seek to identify suitable candidates with the M.D. or M.D./Ph.D. degrees.

Applicants should send curriculum vitae and the names of at least three references to: **Harold F. Dvorak, M.D., Chief, Department of Pathology, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215.**

*Harvard Medical School and Beth Israel Hospital are Affirmative Action/Equal Opportunity Employers. Women and minorities are encouraged to apply.*

NATIONAL INSTITUTE OF MENTAL HEALTH

## SERVICE FELLOWSHIP

The NIMH is seeking a Service Fellow with Ph.D. and at least 3 years research experience beyond the Ph.D. to conduct animal studies on the neuronal mechanisms relevant to schizophrenia. Demonstrated expertise in studies on cortical regulation of subcortical dopamine system, and experience with stereotaxic lesioning of adult and neonatal rats, performing microdissection and histological evaluation of brain tissue, microdialysis as well as receptor binding and/or in situ hybridization techniques required. Expertise in behavioral testing and use of computers in data acquisition is necessary. Training in neurochemistry and behavioral pharmacology desirable. Salary approximately \$38,000 - 46,000 per annum. U.S. citizenship required. Send curriculum vitae, brief statement of research achievements, and names of three references to:

**Dr. Daniel R. Weinberger**  
**Clinical Brain Disorders Branch**  
**Neuroscience Center at**  
**St. Elizabeths Hospital**  
**WAW Building**  
**Room 500**  
**Washington, DC 20032**



(This announcement corrects the salary for the same position posted in May 1993. Previous applicants will be reconsidered.)

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## University of Basel Switzerland

### Professor of Geography

The successful candidate will, in close cooperation with a new professorship in conservation biology, help develop a teaching and research program in "Natur-, Landschafts-und Umweltschutz (NLU)". Applicants with a strong record of innovative, cooperative research in quantitative landscape ecology using Geographic Information Systems and modelling, broad teaching ability, and active interest in applications considering the regional situation should submit, by 15 December 1993, their curriculum vitae and list of publications to: Dekanat der Philosophisch-Naturwissenschaftlichen Fakultät, Missionsstrasse 64, CH-4055 Basel, Switzerland. Applications by female candidates are particularly welcome.

## Cardiovascular Disease

**COR Therapeutics, Inc.** is a publicly-held biopharmaceutical company located in the San Francisco Bay Area. We specialize in the discovery and development of novel therapeutics for the treatment of various aspects of atherosclerosis-induced cardiovascular disease. COR is actively recruiting highly qualified scientists with proven track records to join our multidisciplinary research teams.

**VESSEL WALL BIOLOGY** • This Scientist position offers the opportunity to study the role of receptor tyrosine kinases in cardiovascular disease and to participate in an ongoing drug discovery program to identify and characterize growth factor receptor antagonists. Candidates with a strong background in the areas of molecular biology, immunohistochemistry and in situ hybridization techniques will be given preference. Anyone applying should have a Ph.D and at least 2-3 years of postdoctoral experience in the vascular biology and/or tyrosine kinase/signal transduction fields. (Job Code R15-93)

**ENZYMOMOLOGY** • We are looking for a Scientist with a background in protease enzymology to work on characterization and structure/function relationships of coagulation inhibitors. This position requires a Ph.D in biochemistry/pharmacology and 3-4 years postdoctoral research experience in enzymology. (Job Code R16-93)

**RECEPTOR BIOLOGY** • A Scientist position is available in receptor biology, to include the characterization of known agonists and antagonists, and the development of ligand binding assays. Applicants should have a strong background in protein biochemistry, a Ph.D and 2-3 years of postdoctoral experience. Candidates with expertise in G-protein coupled receptors, in particular, receptor-ligand interactions, are encouraged to apply. (Job Code R17-93)

COR Therapeutics, Inc. offers competitive salaries, benefits and attractive equity positions to its employees combined with the challenge and opportunity to make significant research contributions. **To apply, please send curriculum vitae to: COR Therapeutics, Inc., Human Resources, 256 East Grand Avenue, South San Francisco, CA 94080.** Please reference Job Code in correspondence. *COR is an Equal Opportunity Employer.*

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## POSITIONS OPEN

### BIOCHEMISTRY/MICROBIOLOGY VISITING ASSISTANT PROFESSOR

The Department of Biology, Hamilton College, invites applications for a visiting position at the assistant professor level, effective 1 January 1994. The appointment is expected to be for one and one half years. Applicants must have a Ph.D.; postdoctoral experience preferred. Teaching for the successful applicant will include an upper-level genetics course in the 1994 spring term and for the following academic year: biochemistry, microbiology and contribution to the introductory biology course sequence. Supervision of student research projects is also expected. Send curriculum vitae, statements of teaching and research interests, and three letters of reference to: **David A. Gapp, Chair, Biology Department, Hamilton College, 198 College Hill Road, Clinton, NY 13323-1292.** Review of applications will begin on 31 October 1993 and continue until the position is filled. *Women and members of minority groups are encouraged to apply. Hamilton College is an Equal Opportunity/Affirmative Action Employer.*

**GEORGETOWN UNIVERSITY** continues to accept applications for two tenure-track **FACULTY POSITIONS** in chemistry. One of the openings will be filled by a **structural chemist** with training and experience in **X-ray crystallography**, including solution of non-routine structures. (The Department has recently acquired a Siemens P4/RA X-ray Diffractometer.) Applicants for the other position should have research interests in an area of **inorganic chemistry** other than organometallic chemistry. Persons who are interested in teaching at both undergraduate and graduate levels, and in building an active, funded research program are invited to apply. *Minority and female applicants are especially encouraged.* It is anticipated that appointments will be made at the level of **ASSISTANT PROFESSOR**. Curriculum vitae, selected reprints, a research plan, and names of three references to whom we may write for recommendations, should be sent to: **Prof. Joseph E. Earley, Department of Chemistry, Georgetown University, Washington, DC 20057-2222.** *Georgetown University is an Affirmative Action/Equal Opportunity Employer.*

### MICROBIOLOGIST

Northern Illinois University anticipates a tenure-track **ASSISTANT PROFESSOR** position for fall 1994. A Ph.D. and postdoctoral research experience are required. Each candidate 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.

The candidate's expertise should complement programs in microbiology with preference given to one of the following areas: fermentation, microbial ecology, anaerobic archaea, or energy transduction. Teaching obligations will include an introductory course in microbiology and an advanced course in the candidate's area of expertise.

Send a letter of interest, curriculum vitae, brief statement of research goals and teaching goals, representative reprints, and three letters of reference by November 15, 1993, to: **Dr. Marvin Starzyk, Chair, Department of Biological Sciences, Northern Illinois University, DeKalb, IL 60115-2861.** Telephone: 815-753-1753. *Northern Illinois University is an Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITION IN CELL BIOLOGY

As part of our expanding program, the Department of Biological Sciences invites applications for a full-time tenure-track position at the rank of **ASSISTANT PROFESSOR**. Applicants must have a Ph.D.; postdoctoral research experience and a commitment to excellence in research and teaching. The successful applicant will be expected to seek extramural funding and to establish a vigorous research program involving graduate and undergraduate students. *We strongly encourage applications from women and minorities.* The Department of Biological Sciences consists of 12 interactive faculty members, most with extramurally funded research programs. Send a letter of application, curriculum vitae, three letters of reference and a statement of research and teaching goals to: **Dr. James R. Garey, Chair, Cell Biology Search Committee, Department of Biological Sciences, Duquesne University, Pittsburgh, PA 15282.** Telephone: (412) 396-6322. Application materials must be received by December 13, 1993. *Duquesne University is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### FACULTY POSITION Department of Medical Biochemistry and Genetics

The Department of Medical Biochemistry and Genetics invites applications for a tenure-track **ASSISTANT PROFESSOR** or tenured **ASSOCIATE PROFESSOR** faculty position. Candidates are expected to establish or maintain a vigorous research program and participate in medical and graduate instruction. Applications from individuals with research interests in any area of biochemistry, molecular biology, or molecular genetics are encouraged but teaching responsibilities will be in the Medical Genetics course. Submit curriculum vitae, description of research interests, and names of three references to: **Dr. Garret Ihler, Department of Medical Biochemistry and Genetics, Texas A&M College of Medicine, College Station, TX 77843-1114.** *Equal Opportunity through Affirmative Action.*

### BUCKNELL UNIVERSITY ASSISTANT PROFESSOR OF BIOLOGY

Entry-level, tenure-track position beginning fall 1994. Applicant should possess a strong interest in teaching of science, pedagogical research, and creative teaching of introductory courses, including both plant and animal sciences. Opportunity to teach upper-division courses in applicant's area of interest also exists. Ph.D. and teaching experience required. Successful applicant will be expected to establish an active research program. Applicants should forward curriculum vitae, statement of research interest, evidence of teaching effectiveness, and three letters of recommendation to: **Dr. Wayne McDifft, Acting Chair, Department of Biology, Bucknell University, Lewisburg, PA 17837.** Closing date for applications: November 19, 1993. *Women and members of minority groups encouraged to apply.*

### THE JOHNS HOPKINS UNIVERSITY DEPARTMENT OF BIOLOGY SCHOOL OF ARTS AND SCIENCES

Applications are invited for a tenure-track position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in the areas of Molecular, Cellular and Developmental Genetics. Successful applicants are expected to generate creative and productive research programs that will interface with the diverse scientific interests of the department. Applicants are expected to participate in the teaching of Genetics at the undergraduate and graduate levels. Send curriculum vitae, list of publications, a statement of research interests and plans, and arrange to have three letters of reference forwarded before December 1, 1993, to: **Chairman, Search Committee, Department of Biology, The Johns Hopkins University, Baltimore, MD 21218.** *Minority and female candidates are encouraged to apply. The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT/ASSOCIATE PROFESSOR

Assistant/Associate Professor position in retroviral molecular biology. Specific experience in cellular/molecular aspects of HIV and lentiviral gene expression is essential. The individual will conduct independent and creative research in a highly interactive multidisciplinary environment to complement an established retroviral research program with strong clinical foundations. Curriculum vitae with statement of research interests to: **Samuel M. Cohen, M.D., Ph.D., Chairman, Pathology/Microbiology, University of Nebraska Medical Center, 600 South 42nd Street, Omaha, NE 68198-3135.** *An Equal Opportunity/Affirmative Action Employer.*

**PENN STATE BIOLOGY DEPARTMENT—ASSISTANT PROFESSORS, FALL 1994.** The Department of Biology, the Pennsylvania State University Commonwealth System, invites applications for two tenure-track positions available August 1994 at the Worthington Scranton Campus. Positions require teaching microbiology, human anatomy and physiology, environmental science and general biology. Candidates must have a Ph.D. degree, excellent teaching and continuing scholarly activity, including research and publication. Salary and rank commensurate with qualifications. Application deadline: **November 30, 1993**, or until suitable candidates are identified. Send curriculum vitae, transcripts, and three letters of reference to: **SEARCH COMMITTEE, BOX W, 208 MUELLER LABORATORY, UNIVERSITY PARK, PA 16802.** *An Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR OF BIOLOGY

The Department of Biology at the University of New Mexico (UNM) is seeking applicants for a full-time, tenure-track position as Assistant Professor, to begin August 15, 1994, in one of the two following areas: (1) **PLANT MORPHOLOGY/DEVELOPMENT.** We seek candidates who are asking questions in plant evolution or ecology using techniques from structural botany and/or plant development. (2) **PHYLOGENETIC RECONSTRUCTION.** We seek candidates who are studying the theoretical basis of phylogenetic reconstruction using molecular and/or other kinds of data, and the application of phylogenetic reconstructions to basic questions in systematics, evolution, biogeography, or adaptation. We welcome applicants working on any kind of organism. Minimum requirement: Ph.D. in related field. Preferred characteristics: Postdoctoral experience; potential for developing a vigorous, independent research program as reflected in publications and other scholarly activities; and commitment to excellent teaching at the beginning undergraduate through graduate levels. Send a letter of application, curriculum vitae, at least three letters of reference, representative reprints, and statements of current and future research and teaching interests to: **Chair, Ecology/Evolution Search Committee, Department of Biology, The University of New Mexico, Albuquerque, NM 87131-1091.** Telephone: 505/277-3411; FAX: 505/277-0304. Applications must be received by December 15, 1993.

*UNM is an Equal Opportunity/Affirmative Action Employer and Educator.*

### FACULTY POSITION HYDROLOGY/WATER QUALITY/ BIOGEOCHEMISTRY

The Department of Forestry seeks applicants for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level in the general area of forest hydrology, water quality, or biogeochemistry. Specific research interests are open; however, the department is especially interested in candidates with demonstrated expertise in the interface between biotic and hydrologic processes. The Department of Forestry covers a broad range of topics related to forestry and natural resource management, and maintains an active long-term hydrologic monitoring system (20 years of continuous data) which offers the opportunity to analyze the impacts of land use on hydrologic and water quality parameters. Collaboration with other forestry and natural resource specialists is strongly encouraged, and initiation of a successful research program in the area of expertise is expected. Teaching responsibilities (40%) include forest hydrology, collaboration in a course on integrated resource management, a graduate course in the area of expertise, and direction of graduate students. To apply, send curriculum vitae, transcripts, a statement of research interests, and three letters of recommendation to: **Dr. Robert N. Muller, Chairman, Department of Forestry, 205 T. P. Cooper Building, University of Kentucky, Lexington, KY 40546-0073.** Applications accepted until January 7, 1994, or until a suitable candidate is found. *The University of Kentucky is an Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT/ASSOCIATE PROFESSOR IN BEHAVIORAL NEUROSCIENCE.** Non-tenure-track opening in the Department of Medical Psychology, School of Medicine, Oregon Health Sciences University (OHSU). The appointee would join the faculty at OHSU and their affiliated faculty colleagues at the Portland VA Medical Center in offering Ph.D. and postdoctoral training in biopsychology and neuroscience supported by NIAAA and NIDA training grants and individual research grants. Candidates should have a Ph.D. degree, postdoctoral experience, and demonstrated ability to conduct independent research in an area complementary to ongoing research efforts in the department focused on drug and alcohol abuse. The specific area of expertise is open. The position would require the appointee to provide a portion of his/her own salary support. Position availability depends on final authorization of funds. Candidates should send curriculum vitae, statement of research interests, and the names of three references to: **Chris Cunningham, Vice-Chair, Department of Medical Psychology L470, Oregon Health Sciences University, 3181 SW Sam Jackson Park Road, Portland, OR 97201-3098.** Telephone: 503-494-8464. *OHSU is an Equal Opportunity Employer.*



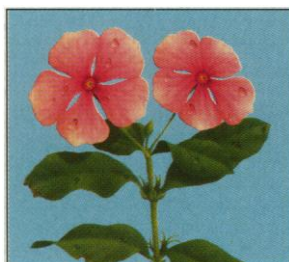


## NATURAL PRODUCT RESEARCH IN SINGAPORE

### INSTITUTE OF MOLECULAR AND CELL BIOLOGY, NATIONAL UNIVERSITY OF SINGAPORE AND GLAXO GROUP RESEARCH ~ Centre for Natural Product Research ~

#### RESEARCH LEADER FOR THE BIOASSAY GROUP

The Centre for Natural Product Research, located in the premises of the Institute of Molecular and Cell Biology (IMCB) of the National University of Singapore, represents a major new development in the biotechnology industry. Supported by Glaxo, the IMCB and the Singapore Economic Development Board, the Centre will be fully operational by the end of 1993 and will be developed as an integrated unit dedicated to the discovery of novel drug candidates from natural sources.



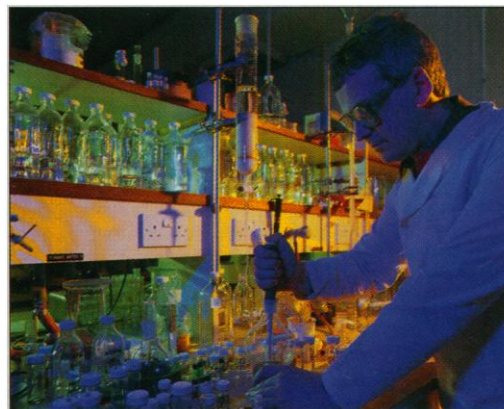
We now wish to appoint a Senior Biochemist to the position of Research Leader of the Bioassay Group. Reporting directly to the Head of the Centre, you will be responsible for the development and supervision of the biological screening programme which will incorporate enzyme, receptor and functional cellular assays designed to detect novel bioactive compounds of potential therapeutic use in a wide range of disease targets. You

will have a proven track record of scientific achievement with several years' relevant postdoctoral experience, preferably in the drug discovery field. You will also have a demonstrable capacity for scientific innovation, a broad knowledge base spanning the major areas of modern biological sciences and a dedicated commitment to the goal of drug discovery.

This is a key position in which the successful applicant will play a major role in the development of the Centre's screening programme. Excellent communication, interpersonal and management skills, along with strong leadership qualities and a powerful drive to succeed in a challenging environment will therefore be essential attributes. For the candidate able to provide the necessary expertise, enthusiasm and commitment, the appointment provides a unique opportunity

for career and personal development in an environment which combines the widely acknowledged cultures of scientific excellence within the IMCB and Glaxo. Competitive terms and conditions of employment, along with generous relocation assistance to this exciting part of the world will also be offered.

Please send a full CV with covering letter to Dr. Miranda G.S. Yap, Institute of Molecular and Cell Biology, National University of Singapore, 10 Kent Ridge Crescent, Singapore 0511, Fax: 010-65-779-1117.



# Glaxo Group Research





## Health Scientist Administrator (HSA) GS-601-12/13/14

The National Institute of General Medical Sciences, National Institutes of Health, Bethesda, MD is seeking a HSA, responsible for managing the programming and evaluation of a portfolio of research and research training grants that support work in the fields of biological chemistry, particularly where the emphasis of research is on enzymology, lipid biochemistry, intermediary metabolism and bioenergetics. In addition, the incumbent provides scientific expertise in the above mentioned specialized areas and advises grantees and professional staff members regarding research aspects of grants within these areas of expertise and serves as a source of technical knowledge.

Applicants interested in applying must have a knowledge of biochemistry with specific expertise in at least one of these areas: lipid biochemistry, membrane biochemistry, biophysics, enzymology, intermediary metabolism or bioenergetics; ability to make critical judgements about the management and evaluation of scientific research; and ability to write about complex scientific topics for a varied audience.

**For information regarding the qualifications and application requirements, please call the NIGMS Personnel Office (301) 594-7767. Announcement closes 11/08/93. U.S. Citizenship is required.**

*NIH is an Equal Opportunity Employer*

## DEPARTMENT of PHARMACOLOGY

### INITIATIVE IN NEUROSCIENCE

Initial Salary Range:  
£13,601 – £25,107 per annum.

The Department has been awarded an additional lectureship for 5 years following a review of its performance in the recent research selectivity exercise by the Faculty Group and would like to use this appointment to strengthen its contribution to the newly formed Centre for Neuroscience (Director: Professor Richard G M Morris). Applicants will be expected to have an active and substantial research profile in Neuropharmacology, Signal Transduction or Neuroplasticity. Candidates in other areas of pharmacology will also be considered.

Please quote REF: SM 930410.

Informal enquiries to Professor J S Kelly on 031-650 3519 or Professor R G M Morris on 031-650 3518.

Further particulars may be obtained from:

**THE PERSONNEL OFFICE,  
THE UNIVERSITY OF EDINBURGH,  
1 ROXBURGH STREET,  
EDINBURGH EH8 9TB,**

where applications (five copies) including the names and addresses of two referees should be lodged.

Closing date: 18th November, 1993.



## *Henry Ford* Medical Group

### NUCLEAR MAGNETIC RESONANCE SCIENTIST

Upon the appointment of Professor Roger Ordidge to the Joel Chair of Medical Physics at University College, London, the NMR Center in the Department of Neurology at Henry Ford Health Sciences Center is seeking to appoint his replacement. The NMR Center is research dedicated and houses a 3 Tesla 80 cm bore and a 7 Tesla 20 cm bore magnet for clinical and experimental studies. Techniques in use or under development include diffusion imaging, localized spectroscopy, spectroscopic imaging and blood flow and functional imaging. Henry Ford Hospital also houses two GE 1.5 Tesla clinical systems. The NMR Research Center is part of an NIH funded Stroke Center with projects that include the study of human and experimental brain ischemia. In addition we are funded to study vascular dementia, Parkinson's Disease and demyelinating disease. We are searching for a senior NMR scientist at Associate of Full Professor Level, experienced in NMR techniques and their biological applications. The successful applicant will be expected to develop independent research programs, participate in existing studies and supervise graduate students. A joint appointment in the Department of Radiology is available. Henry Ford Health Sciences Center is a major teaching affiliate of Case Western Reserve University. Applications should include a letter, complete curriculum vitae and the names and telephone numbers of referees. This should be sent to: K.M.A. Welch, M.D., William T. Gossett Chair of Neurology, Henry Ford Health Sciences Center, 2799 W. Grand Blvd., Detroit, Michigan 48202.

### ASSISTANT PROFESSOR MICROBIOLOGY

The Department of Microbiology at the University of Illinois at Urbana-Champaign seeks candidates for a full-time tenure track position at the Assistant Professor level. Applicants should have a Ph.D. degree, postdoctoral experience, and show exceptional promise in developing an active research program in Microbiology. Preference will be given to applicants with research interests in the physiology, biochemistry, or molecular genetics of microorganisms that further expand the Department's breadth of microbial diversity. Responsibilities include teaching undergraduate and graduate students. Starting date August 1994. Salary will be commensurate with experience. The Department of Microbiology offers a supportive and collegial atmosphere and a strong graduate program. There are extensive interdepartmental interactions in microbial and eukaryotic cell and molecular biology, immunology, developmental biology, evolution, biochemistry, and biophysics. The University of Illinois at Urbana-Champaign offers an outstanding and exciting academic research environment including a Biotechnology Center and state-of-the-art facilities for hybridoma production, flow cytometry, electron microscopy, X-ray crystallography, and computer analyses. Applicants should submit a curriculum vitae, a description of research interests and future plans, and have at least three letters of reference sent to:

Stanley Maloy, Chair  
Faculty Search Committee  
Department of Microbiology  
University of Illinois  
131 Burrill Hall  
407 S. Goodwin Avenue  
Urbana, IL 61801  
Telephone: (217) 333-1736  
FAX: (217) 244-6697

To ensure full consideration, applications should be received by December 15, 1993. Interviews may be conducted before the closing date, but no final decision will be made before that time.

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

**CHAIR, DEPARTMENT OF  
PHARMACOLOGY AND  
TOXICOLOGY  
WRIGHT STATE UNIVERSITY  
SCHOOL OF MEDICINE,  
DAYTON, OHIO**

We seek a Ph.D. or M.D. with an established record of external funding, and a commitment to scholarly achievement in research and teaching. We participate in the University's Biomedical Sciences Ph.D. Program and have teaching responsibilities for medical and nursing students.

The School of Medicine has 240 full-time faculty and over \$7 million in extramural research support. It is a model for community-based medical education and is a leader in recruiting and retaining minority students.

The combined chair/faculty position has a 12 month salary commensurate with experience, start-up funds, and an opportunity to build and shape the direction of the department. Opportunities exist for collaboration with basic and clinical scientists at the Tri-Service Toxicology Center at WPAFB and the Dayton VA Medical Center.

Submit curriculum vitae, and the names and telephone numbers of three references to Jane N. Scott, Ph.D., Chair, Search Committee, Wright State University, School of Medicine, P.O. Box 927, Dayton, Ohio 45401-0927; (FAX: 513-873-3672).

Review of applications will begin January 15 and will continue until the position is filled.

*Wright State University is an  
EO/AA Employer.*

**TENURE-TRACK  
FACULTY POSITIONS**  
Department of Bioengineering  
University of Utah

Applications are invited for two tenure-track positions in the area of "Biobased Engineering." Candidates must have an earned doctorate and a strong physical science or engineering background, with a specific biological direction to their research. We are specifically seeking candidates with demonstrated expertise in one of the following three areas.

1. **Micro/Nano Fabrication of Inorganic, Organic, and Biomolecular Materials:** use of inorganic materials, compliant biomaterials, or composite inorganic/polymeric materials to fabricate microsensors and microactuators, and the application of these microsystems to problems in the life sciences.
2. **Cellular Bioengineering:** cytoskeletal biomechanics, mechanisms of cell attachment, locomotion, and bioenergetics.
3. **Neural Plasticity and Control:** information processing and plasticity in higher neural centers, neural network architectures, and adaptive and hierarchical control systems.

Appointees will be expected to develop significant research programs, to assist in the development of new teaching laboratories, and to teach graduate classes in their areas of specialization. A complete CV, names of three references, and a brief career goals/objectives statement should be sent to R. A. Normann, Ph.D., Professor and Chair, Department of Bioengineering, 2480 MEB, University of Utah, Salt Lake City, UT 84112 (phone 801-581-8528, FAX 801-585-5361) by January 15, 1994, or until qualified applicants are identified.

*The University of Utah is an AA/EO employer, encourages applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.*

The Bristol-Myers Squibb Pharmaceutical Research Institute in Seattle performs research dedicated to pursuing novel approaches to the development of therapeutic products in the areas of immunology, infectious diseases and cancer.



**Bristol-Myers Squibb**

## POSTDOCTORAL RESEARCH

### Autoimmunity/ Transplantation

Evaluate role of T cell co-stimulation via CD28 in immunological disease models. Experience with animal (rodent) experimentation and in-vitro immunological assays is desirable. Ph.D. in immunology or cellular biology. **Reference #PL**

### Immunodeficiency/ Immunosuppression

Participate in the establishment of embryonic stem cell and gene "knock-out" technology in order to study the function of immunoregulatory proteins. Requires working knowledge of molecular biology and tissue culture techniques. Ph.D. with transgenic mice experience and immunology background preferred. **Reference #CC**

### Oncology Drug Discovery

Investigate T cell responses to oncogene products in vivo and in vitro with the goal of developing candidate immunogens for cancer immunotherapy. Also, analyze the deficiency of tumor cells to elicit an efficient immune response. Ph.D. in cellular immunology with molecular biology experience preferred. **Reference #LC**

### Molecular Immunology

- Investigate changes associated with cellular transformation and metastasis. Ph.D. with experience in molecular biology and animal (rodent) experimentation desirable. **Reference #PF**
- Utilize phage display of antibody binding sites to identify novel tumor cell reactivities. Ph.D. with molecular biology experience desired. **Reference #PF**
- Candidate will conduct research in the area of molecular approaches to targeted therapy. Specific emphasis will be placed on the identification of novel targets and novel cytotoxic or cytostatic proteins. Ph.D. in biological sciences required with background in molecular biology and protein biochemistry. **Reference #CS**

We offer a creative research environment, competitive salaries, an excellent benefit package and relocation assistance. Our facility offers open and well-equipped laboratories overlooking beautiful Puget Sound and the Olympic Mountains from our downtown site.

Please forward your resume to **Bristol-Myers Squibb, Human Resources Department, 3005 First Avenue, Seattle, WA 98121**. Please note the position reference code. Equal Opportunity Employer, M/F/D/V.



## POSITIONS OPEN

### ASSISTANT PROFESSOR OF BIOLOGY

Tenure-track position, to teach introductory courses in Biology and develop a viable research program in cellular or molecular neurobiology. Ph.D. and postdoctoral experience required. Research specialty must be compatible with existing Ph.D. program in Molecular Biology. Appointment effective September 1994. Send application, curriculum vitae, names, addresses and telephone numbers of at least three references to: **Dr. Fritz Schwalm, Department of Biology, P.O. Box 23971, Denton, TX 76204.** Have three letters of recommendation sent directly to the same address. Screening of applications will begin November 15, 1993, and continue until position is filled. *Texas Woman's University is a State-supported University and is an Equal Opportunity Employer.*

### ASSISTANT PROFESSOR OF PLANT MOLECULAR BIOLOGY/GENETICS

The Department of Biology at Colorado State University (CSU) invites applications for a tenure-track position in plant molecular biology/genetics, especially from individuals using molecular and genetic techniques to study developmental processes. Candidates must have a Ph.D. in botany or a related area, and postdoctoral experience is strongly preferred. The successful candidate is expected to develop an independent, externally funded research program and to participate in teaching introductory botany and a course in her/his specialty.

To apply, send a letter stating your teaching and research interests, curriculum vitae, transcripts, and no more than three publications to: **Secretary, Plant Molecular Biology/Genetics Search Committee, Department of Biology, Colorado State University, Fort Collins, CO 80523 [Telephone: (303) 491-7013, FAX: (303) 491-0649].** In addition, have three letters of reference sent directly to the above address. All materials are due by December 3, 1993. The search may be extended if a suitable candidate is found.

*Ethnic minorities and women are encouraged to apply. CSU is an Affirmative Action/Equal Opportunity Employer. Equal Opportunity Office: 314 Student Services Building.*

**FACULTY POSITION IN GENETICS. DUKE UNIVERSITY MEDICAL CENTER.** Applications are invited for a tenure-track position in the Section of Genetics at Duke University Medical Center. Although we anticipate filling this position at the **ASSISTANT PROFESSOR** level, we will consider individuals for any level appointment. We are particularly interested in those individuals who are engaged in work utilizing mammalian systems or focusing on the genetics of human disease. The facilities and environment of the Section, which will become the Department of Genetics within this year, are excellent. Applications should include curriculum vitae, a brief description of research accomplishments, a brief description of plans for future research, and the names of three individuals who can serve as referees. Address applications to: **Genetics Search Committee, Section of Genetics, Duke University Medical Center, Box 3054, Durham, NC 27710.** *Duke University Is An Equal Opportunity/Affirmative Action Employer.*

**Polymer/Analytical-Physical Chemistry:** The College of Staten Island (CSI), a senior college of the City University of New York (CUNY), invites applications for a tenure-track faculty position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. The Chemistry Department participates in CUNY Ph.D. programs in polymer chemistry and biochemistry. The College recently moved to a new 204-acre campus equipped with first-rank teaching and research facilities. A Ph.D. is required for this position, with postdoctoral experience preferred. Candidates should have research expertise in areas that complement our strengths in polymers and biopolymers. The successful candidate will be expected to put equal emphasis on establishing a vigorous research program and demonstrating a sustained commitment to undergraduate and graduate teaching. Primary undergraduate teaching responsibility will be analytical chemistry. Appointment is effective September 1994. Applicants should submit curriculum vitae, list of publications, descriptions of research and teaching interests, a brief description of research equipment needs, and three letters of recommendation by December 1, 1993, to: **Professor Fred Naider, Chair, Department of Chemistry, The College of Staten Island/CUNY, 2800 Victory Boulevard, Staten Island, NY 10314.**

*Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**ASSISTANT PROFESSORS—Department of Biochemistry, Vanderbilt University School of Medicine.** Several tenure-track faculty positions are available. If appropriate, a **Senior Faculty** position is also available. Applications are invited from a broad range of candidates with varying scientific concentrations (for example, enzyme reaction mechanisms, and developmental biology). Successful applicants will have demonstrated originality, creativity, and accomplishment in their research careers and the potential to establish a productive laboratory in a university environment.

Beginning in 1993, appointments will be made over several years. Interested applicants should forward curriculum vitae with a statement of future research objectives and should arrange for three letters of reference to be sent to: **Graham Carpenter, Ph.D., Faculty Search Committee, Department of Biochemistry, Vanderbilt University School of Medicine, Nashville, TN 37232-0146.** *Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.*

**MOLECULAR BIOLOGY GENETICIST/ SYSTEMATIST—The Center for Theoretical and Applied Genetics at Rutgers University announces a position at the ASSISTANT PROFESSOR level.** We seek an individual with experience in molecular or quantitative genetic studies of insect, plant, or fungal biodiversity. A tenure-track appointment will be made within an appropriate academic department of the College of Agriculture and Environmental Sciences (Entomology, Plant Science, Plant Pathology). Faculty are expected to develop extramurally funded research and to participate in teaching programs. Send curriculum vitae, a brief statement of research interests, and the names, addresses, and telephone numbers of at least three references to: **Dr. R. C. Vrijenhoek, CTAG, Rutgers University, New Brunswick, NJ 08903-0231.** *Rutgers University is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR OF INSECT PATHOLOGY, CORNELL UNIVERSITY

The Department of Entomology, College of Agriculture and Life Sciences is recruiting a full-time, tenure-track insect pathologist at the Assistant Professor level. Responsibilities include the development of a vigorous research and teaching program in insect pathology. Ph.D. in entomology, microbiology, parasitology or a related discipline required. Preference given to candidates with academic training and research experience in insect pathology. Applicants should forward a letter of application describing qualifications and interest, curriculum vitae, list of publications including reprints, transcripts and names and addresses of 3 to 5 references. Application deadline is January 15, 1994. Start date is July 1, 1994. Send application to: **Dr. George C. Eickwort, Chair, Department of Entomology, Comstock Hall, Cornell University, Ithaca, NY 14853-0901.**

### FACULTY POSITION MOLECULAR NUTRITION SCIENTIST

The Department of Nutrition and Food Sciences at Utah State University (USU) seeks applicants for a tenure-track position at the **ASSISTANT PROFESSOR** level or above with 30% teaching and 70% research responsibilities. The position requires a research emphasis in cellular and molecular mechanisms of nutrition, teaching experience in upper-division nutrition or molecular biology courses, a strong research track record in biochemistry, immunology, endocrinology and/or molecular genetics, and a Ph.D. in Nutrition Sciences or related field. Proficiency in the application of fundamental techniques and concepts of biotechnology, immunology, protein chemistry, and demonstration of collaborative endeavors are desired. This position offers an opportunity for collaboration with other Utah State faculty including nutritionists, food scientists, microbiologists, biologists, biochemists, and geneticists. A letter of application, professional curriculum vitae, and names and addresses of five persons who may be contacted for references should be sent to: **Bart Weimer, Ph.D., Chairperson Search/Screening Committee, Department of Nutrition and Food Sciences, Utah State University, Logan, UT 84322-8700; Telephone: (801) 750-3356; FAX: (801) 750-2379.** Review of applications will begin November 8, 1993, and continue until a suitable candidate is found. *USU is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR: DEPARTMENT OF MOLECULAR BIOPHYSICS AND BIOCHEMISTRY YALE UNIVERSITY

The Department of Molecular Biophysics and Biochemistry seeks applicants for a position at the level of Assistant Professor in the general area of macromolecular crystallography. Individuals whose interests bridge biophysics, biochemistry and molecular biology are especially encouraged to apply. The person appointed would be expected to develop an independent research program and to participate in departmental teaching. Candidates should submit curriculum vitae with a summary of present and future research interests, and request that three letters of recommendation be sent no later than November 30, 1993, to: **Thomas A. Steitz, Search Chair, Department of Molecular Biophysics and Biochemistry 0734, Yale University, P.O. Box 208114, 260 Whitney Avenue, New Haven, CT 06520-8114, USA.** *Yale University is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.*

### ASSISTANT PROFESSOR: DEPARTMENT OF MOLECULAR BIOPHYSICS AND BIOCHEMISTRY YALE UNIVERSITY

The Department of Molecular Biophysics and Biochemistry seeks applicants for a position at the level of Assistant Professor in the general areas of biochemistry or molecular biology. The person appointed would be expected to develop an independent research program and to participate in departmental teaching. Candidates should submit curriculum vitae with a summary of present and future research interests, and request that three letters of recommendation be sent no later than November 30, 1993, to: **Thomas A. Steitz, Search Chair, Department of Molecular Biophysics and Biochemistry 0734, Yale University, P.O. Box 208114, 260 Whitney Avenue, New Haven, CT 06520-8114, USA.** *Yale University is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.*

### FACULTY POSITION INVERTEBRATE GENETICS Case Western Reserve School of Medicine Department of Genetics

The Department of Genetics is continuing to expand and is now seeking a tenure-track **ASSISTANT** or **ASSOCIATE PROFESSOR** in the area of either *Drosophila* or *C. elegans* genetics. The Genetics Department now has 17 faculty members whose research programs focus on the genetics of humans, mice, *Drosophila* and *C. elegans*. This year, we are searching for an interactive scientist with a strong interest in developmental genetics, gene expression, chromosome structure, RNA processing and/or cell cycle regulation. The successful candidate should have at least two years of postdoctoral experience and will be expected to initiate an active, externally funded research program. Interested candidates should submit curriculum vitae, representative reprints, a statement of research interests and arrange to have three letters of recommendation sent to: **Dr. Helen Salz, Invertebrate Genetics Search Committee, Department of Genetics, Case Western Reserve University, Cleveland, OH 44106-4955** by November 15, 1993. *Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.*

### PHARMACOLOGIST

The Southern Illinois University School of Dental Medicine is seeking applicants for a full-time, continuing, tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level in the Section of Pharmacology, Department of Applied Dental Medicine. A Ph.D. in pharmacology (or combined Ph.D./D.M.D. or D.D.S.) is required. The candidate will have teaching responsibilities in the pharmacology and therapeutics courses and is expected to pursue an active, fundable research program. Position available July 1, 1994. Applicants should submit curriculum vitae with names and addresses of three references by January 14, 1994, to: **Dean Patrick J. Ferrillo, Jr., Southern Illinois University, School of Dental Medicine, 2800 College Avenue, Alton, IL 62002.**

*Affirmative Action/Equal Opportunity Employer.*

## Program Analyst (PART-TIME)

The Howard Hughes Medical Institute conducts scientific research in laboratories affiliated with leading academic medical centers in the United States. We are seeking a part-time Program Analyst for our headquarters in **Chevy Chase, MD**.

The successful candidate will assist with the activities of our Office of Grants and Special Programs which supports biological and scientific education at the graduate, undergraduate and precollege levels. This is an ideal position for someone who wants to work 32 hours a week.

Responsibilities include: assisting with the administration of a grants program including undergraduate competitions and proposal reviews; tracking students at grantee institutions; handling administrative inquiries; developing reports and publications; reviewing financial and program reports; and assisting with the preparation of directors' annual meeting.

Qualifications include at least 2 years related experience, preferably in science education, laboratory research administration, or grants management. A master's degree in biological sciences, such as cellular or molecular biology, strong communication skills, knowledge of word processing and databases are also required.

HHMI offers an excellent salary and a generous benefits package. Please send resume to:

**Howard Hughes Medical Institute,  
Human Resources Department,  
4000 Jones Bridge Rd., Chevy  
Chase, MD 20815-6789.**

FAX: (301) 215-8937.

Principals only.

No phone calls, please.

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## Scientist/Inflammation Pharmacologist

Pfizer is a lot more than a pharmaceuticals and healthcare industry leader. It's a group of people dedicated to discovering, developing and marketing innovative pharmaceuticals, animal health and food industry products that improve the quality of life worldwide. As a Fortune 100 company, Pfizer is committed to continuing its remarkable growth by investing close to a billion dollars annually in research and development. Currently, we have an opportunity available for a Scientist/Inflammation Pharmacologist at our Central Research Division in Groton, Connecticut.

The successful candidate will have a BS or MS in Biology or Pharmacology, along with a minimum of 1-3 years of relevant experience in *in vitro* analyses of ligand/receptor binding assays using whole cells and membrane fractions, as well as a familiarity with ligand-mediated functional responses of cells. Ability to work independently and summarize/communicate results effectively is also desirable.

In addition to a stimulating research environment, we offer a competitive compensation and benefits package, including generous relocation assistance to this southeastern Connecticut shoreline community. Qualified applicants may send a resume, and names of three references, to: **Ms. Ellen Buller, Supervisor, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340**. We are an equal opportunity employer.



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



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**Deadline January 15, 1994**

National Institutes of Health  
Laboratory of Viral Diseases

## POSTDOCTORAL POSITION

Regulation of RNAPII Directed Transcription

Herpes simplex virus is used as a model system for the analysis of cellular and viral factors involved in the transcription of RNAPII genes. These studies focus upon the DNA-protein and protein-protein interactions which mediate the assembly of multiprotein enhancer-promoter complexes and upon the biochemical mechanisms of gene transcription.

Applicants should have experience in molecular biology, molecular virology and/or protein biochemistry. Two positions are available immediately. To apply, forward curriculum vitae and names of three references to:

**Thomas M. Kristie, Ph.D.**  
**Laboratory of Viral Diseases,**  
**NIAID**  
**National Institutes of Health**  
**Building 4, Room 229**  
**9000 Rockville Pike**  
**Bethesda, Maryland 20892**  
**FAX: 301-480-1147**



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**Faculty Positions**  
Florida State University  
Program in Structural Biology  
and  
Institute of Molecular Biophysics  
**Macromolecular Crystallography  
and  
Solution NMR of Macromolecules**

The Program in Structural Biology at Florida State University invites applications for two full-time tenure track faculty positions; one in Macromolecular Crystallography and one in Solution NMR of Macromolecules. Rank and salary are open and will be commensurate with experience. Academic appointment will be in either the Department of Biological Science or Department of Chemistry. Candidates should have demonstrated expertise in the study of macromolecular structure and a well-developed plan for independent research. Resources are available to create state-of-the-art laboratories for the successful candidates.

Florida State University has made a strong commitment to Structural Biology. Funding is provided by grants from the Lucille P. Markey Charitable Trust and the State of Florida. The 50,000 square foot Institute of Molecular Biophysics is being renovated with new laboratories designed and equipped for the study of the structure, activity and engineering of macromolecular systems. Over the next four years the program will be expanded through the addition of seven new faculty members. Extensive new instrumentation has been acquired and will be expanded to provide these faculty with all the necessary facilities to carry on highly productive research programs. In addition, substantial expansion is occurring in computational structural biology at the Supercomputer Computations Research Institute and in solution NMR at the National High Magnetic Field Laboratory at Florida State University. Unique research facilities will be available at these centers.

Applications should be submitted by December 1, 1993 to receive full consideration. A curriculum vitae, brief research plan and a list of at least three people who may be contacted to provide references should be sent to:

W. Ross Ellington  
Chairman  
Structural Biology Search Committee  
Department of Biological Science  
Florida State University  
Tallahassee, Florida 32306-3050

*Florida State is an Equal Opportunity/Affirmative Action Employer*

**BIOLOGICAL SCIENCES:** Texas Tech University invites applications for tenure-track positions at the **Assistant Professor** level. All applicants must hold a Ph.D.; postdoctoral experience is highly preferred. Appointees will be expected to develop extramurally-funded research programs, interact with existing faculty, and have a strong commitment to undergraduate and graduate teaching. The Biological Sciences Department has 30 faculty, over 100 masters and doctoral students, and 500 undergraduate majors.

**Mammalian Biologist** with interests in specimen-based research in mammalian biodiversity, biogeography, phylogenetics, population or quantitative genetics, or systematics. Appointee will participate in the growth and curatorial activities of the Vertebrate and Frozen Tissue Collections in the Natural Science Research Laboratory at the Museum of Texas Tech University. The successful candidate will be expected to teach vertebrate structure and development. Willingness to teach introductory biology or genetics is desired. **Invertebrate Ecologist** with research interests that focus at the level of communities or that emphasize plant-animal interactions. Willingness to participate in joint research projects is highly desirable. Possible undergraduate teaching assignments include ecology and introductory biology and botany. **Plant Molecular Biologist** with a strong background in plant gene expression using molecular approaches to answer questions in areas which may include, but are not limited to: plant/microbe interactions; plant cell surface/cell walls; plant development; plant stress physiology; and plant pathology. Possible teaching contributions include introductory biology and botany, microbiology, cell biology, genetics, plant pathology and plant gene expression.

Send letter of application including a description of research plans, career goals and teaching interests, curriculum vitae, copies of representative publications, and three letters of recommendation to: Chairperson, Department of Biological Sciences, Texas Tech University, Box 43131, Lubbock, TX 79409-3131. Deadline for applications is December 1, 1993. TTU is an Equal Opportunity/Affirmative Action Employer.

**S**ynergen, located in Boulder, Colorado, is a research-based biopharmaceutical company engaged in the discovery, development and production of protein-based human pharmaceuticals. Synergen's recombinant technology focuses on naturally occurring human proteins that regulate body processes associated with disease.

Synergen is working to further scientific understanding of how the human body responds to inflammation, injury and disease, in order to produce pharmaceuticals that reduce mortality and help people who have illnesses that currently have no satisfactory treatment. This is difficult, challenging and exciting work. Highly qualified people are drawn to Synergen, attracted by the science, energy, values and informal collegial work environment.

Openings exist in the following areas:

#### **Research Associate - Discovery Research**

This position is responsible for the set up and maintenance of cell culture (oligodendrocyte). Requirements include a B.S./M.S. in Cell Biology and a minimum of 2 years tissue culture experience. Extensive experience in identifying various glial precursor cells via immunocytochemistry and proliferation assay is also desirable.

#### **Lab Manager/Scientist - Protein Chemistry**

Experienced manager is needed for our core protein facility. Analytical methods performed by the lab include amino acid composition, N-terminal sequencing, mass spectrometry, and peptide synthesis/purification. This manager will also administer training and documentation to ensure adherence to GMP guidelines and perform analysis of protein samples. Individual will also develop sub-picogram level protein sequencing and analytical methods.

Requirements include a Ph.D. in Biochemistry and a minimum of 3 years previous experience in performing and analyzing all of the above analytical methods and a strong background in structural characterization of proteins and peptides.

Synergen offers competitive salaries, generous benefits including relocation and 401(k). Synergen is nestled at the base of the Rocky Mountains in Boulder, Colorado, a university community just 30 minutes north of Denver. The area's mild, sunny climate fosters an active, casual lifestyle in a community that respects education and technology.

For consideration please send your resume/C.V. to: **Employment Manager, Box SC1015, Synergen, Inc., 1885 33rd Street, Boulder, CO 80301.** No phone calls, please. We are an Equal Opportunity Employer.

 **Synergen, Inc.**

#### **POSTDOCTORAL FELLOWSHIPS IN VECTOR BIOLOGY**

The Center for Insect Science, through a grant from the John D. and Catherine T. MacArthur Foundation, is offering postdoctoral fellowships to study various aspects of vector biology. Ongoing research projects, mostly on mosquitoes, include biochemistry and pharmacology of salivation, biochemistry and molecular biology of gut enzymes, the molecular basis of lipid and iron transport, hormonal control of development and oogenesis, and the search for effective molecular transformation tools in mosquitoes.

The Center includes over 80 scientists in the Departments of Biochemistry, Ecology and Evolutionary Biology, Entomology, Molecular and Cellular Biology, Neurobiology, Pharmaceutical Science and Veterinary Science at the University of Arizona in Tucson, the Department of Zoology at Arizona State University in Tempe, the Department of Biology at Northern Arizona University in Flagstaff, and several USDA facilities. Appointments are for two years, depending on availability of funds and satisfactory performance. In addition to a stipend, fellows receive funds to support their research and are expected to develop independent and collaborative projects.

To apply, please send an introductory cover letter with statement of research interests, curriculum vitae, evidence of academic background and degrees earned, and three letters of recommendation to: Dr. José Ribicci, Chair, Vector Biology Search Committee, 410 Forbes Building, University of Arizona, Tucson, AZ 85721 USA. Review of applications will begin on November 12, 1993 and continue until positions are filled. Foreign applications as well as applications from women and members of minority groups are particularly encouraged. The University of Arizona is an Affirmative Action/Equal Opportunity Employer.

# DIRECTOR OF STRANGEWAYS RESEARCH LABORATORY, CAMBRIDGE

The Medical Research Council and the Trustees of the Strangeways Research Laboratory wish to appoint a scientist with a distinguished record in biomedical research to the Directorship of the Strangeways Research Laboratory, following the retirement of the present Director, Dr John Dingle. The Director will be responsible for providing leadership and strategic direction for research at the Laboratory as well as directing his or her own research team. This offers a rare opportunity for a senior scientist wishing to take on a new challenge.

The Strangeways Research Laboratory is an independent charity with a long and distinguished history in biomedical research. The Laboratory is located in Cambridge, close to the new Addenbrooke's Hospital and the Laboratory of Molecular Biology (LMB); it currently has a total of around 100 staff and a research focus on arthritis and connective tissue diseases. The research teams are funded by long-term grants from the Medical Research Council, the Arthritis and Rheumatism Council and other sponsors.

This post represents an exciting opportunity to build on existing strengths at the Laboratory and to develop new initiatives. The successful candidate is likely to have research interests in the area of cell biology, immunobiology or inflammation, that will complement the more molecular approaches of the LMB. He or she will be expected to develop effective collaborations with the LMB, with

Cambridge University and the Clinical School; in addition, links should ideally be forged with other related national centres and with industry. Space is available to accommodate the new Director and his or her research team.

The Director will be responsible to the MRC and the Trustees for the overall direction of research at the Laboratory, as well as for the management of core facilities and premises, including the central budget and staff. The MRC Centre located at the new Addenbrooke's Hospital site will provide additional administrative and supporting services.

The salary is negotiable in the range for Council's Special Appointments (equivalent to UK University professorial salaries). In addition, assistance with the costs of relocation will be available.

A job description and other additional information may be obtained from Dr Diane McLaren, MRC Headquarters, 20 Park Crescent, London W1N 4AL (telephone 071 636 5422 ext 6233).

Applicants should include a brief outline of their plans for the strategic direction of research at the Strangeways Research Laboratory and brief proposals for his or her own research team, together with a curriculum vitae, an up-to-date list of publications and the names of three referees. These should be sent, no later than 10 December 1993 to Sir Dai Rees, Secretary to the Council, at the above address.

**MRC**  
Medical Research Council

*An Equal Opportunities Employer.*

## Procurement Analyst

The Howard Hughes Medical Institute conducts scientific research in laboratories affiliated with leading academic medical centers in the United States and supports science education. We are seeking a Procurement Analyst for our headquarters in Chevy Chase, MD.

The successful candidate will be responsible for ensuring efficient use of the purchasing budget by developing product and pricing comparisons for biomedical supplies and equipment. Additional responsibilities include determining equivalency of various brands and models and interacting with vendors and researching alternative sources. The ability to evaluate vendors and utilize statistical and comparison methods is a must.

The position requires a Bachelor's degree and 1-2 years of experience in biomedical research with 1-3 years buying experience preferred. Proficient PC skills and effective communication skills are a must.

HHMI offers an excellent salary and a generous benefits package. Please send resume to: **Howard Hughes Medical Institute, Human Resources Department, 4000 Jones Bridge Rd., Chevy Chase, MD 20815-6789. FAX: (301) 215-8937.** Principals only. No phone calls, please. Equal Opportunity Employer.



## Dr Op Everything!

One Cell Systems, using technology licensed from MIT, is developing a novel method for encapsulating single cells in gel microdrops for use in clinical diagnostics and drug discovery projects sponsored by NIH and biopharmaceutical companies.

If you are a creative, trailblazing Ph.D. who thrives in a flexible, intense environment, *drop everything* and apply.

### Immunologist/Virologist

Develop nucleic acid, viral protein, and cytokine secretion assays.

### Microbiologist

Develop TB drug screening, diagnostic, and antibiotic susceptibility products.

### Cell Biologist/Bioprocessing

Develop cell cloning method for measuring hybridoma secretion.

Send resume to:

President

**One Cell Systems, Inc.**

100 Inman Street, Cambridge, MA

02139, FAX: 617-492-7921

AA/EOE

## UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The Department of Biochemistry at the University of Illinois at Urbana-Champaign is seeking a distinguished scientist for the position of Professor and Head of the Department. Senior candidates with outstanding accomplishments in research and an interest in administration and teaching are urged to apply. Candidates should send a letter of application, curriculum vitae, and the names of three references. In order to ensure full consideration, completed applications and nominations should be submitted by December 1, 1993 to:

Thomas G. Ebrey, Chair  
Biochemistry Search Committee  
University of Illinois  
School of Chemical Sciences  
505 S. Mathews St.  
106 Noyes Laboratory D-1  
Urbana, IL 61801

Phone: 217-333-2015

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



## POSITIONS OPEN

### ASSISTANT/ASSOCIATE PROFESSORS NEUROSCIENCE

The Department of Anatomy and the Neuroscience Center at Louisiana State University Medical Center seek to identify two neuroscience faculty. A Ph.D. and three years of postdoctoral experience are required. Scientists who study receptor, neurotransmitter, or channel mechanisms and/or molecular approaches to development and plasticity using patch clamp or calcium imaging are especially encouraged to apply. However, all well-qualified applicants with an outstanding funding record/potential will be considered. Salary levels are competitive with ample space and start-up funds. Participation in the Interdisciplinary Ph.D. Program in Neuroscience is encouraged. Send curriculum vitae, research interests, and names of three references to: **Dr. R. Ranney Mize, Department of Anatomy, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112.** An Equal Opportunity/Affirmative Action Employer.

**ASSISTANT PROFESSOR.** The Department of Physiology invites applications for one assistant professor position (tenure-track). Ph.D. degree or equivalent with three years of postdoctoral training. Candidates who plan to develop an independent research program in cellular, molecular or biophysical aspects of cell signaling systems or membrane biology are especially encouraged to apply. However, excellent candidates in all areas of cell physiology will be given serious consideration. Applicants should submit curriculum vitae and a brief statement of research plans and have three letters of reference sent to: **James T. Stull, Ph.D., Department of Physiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040.** An Affirmative Action/Equal Opportunity Employer.

### FIELD BIOLOGIST

**ASSISTANT PROFESSOR** (tenure-track), starting fall 1994, to teach a field course, general ecology, introductory biology, and at least one advanced course in either organismal or population biology. We seek candidates with strong interest in undergraduate teaching; research involving undergraduates is encouraged. Ph.D. required; teaching experience preferred. Submit résumé, statement of teaching philosophy, and three letters of reference by December 10, 1993, to: **Dr. Margaret Simpson, Chairman, Department of Biology, Sweet Briar College, Sweet Briar, VA 24595.** Sweet Briar College is an Equal Opportunity/Affirmative Action Employer and encourages applications from women, minorities, and persons with disabilities.

### CELL BIOLOGIST— CARNEGIE MELLON UNIVERSITY

The Department of Biological Sciences, Carnegie Mellon University, is seeking a Cell Biologist for a tenure-track appointment at the **ASSISTANT PROFESSOR** level. Exceptional candidates for appointment at a higher level will also be considered. Candidates using innovative molecular and/or technological approaches to fundamental problems in Cell Biology are especially encouraged to apply. To apply, submit curriculum vitae along with a description of past accomplishments, present activities and future research plans; also arrange to have three letters of reference sent directly to: **Cell Biology Search Committee, Department of Biological Sciences, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213.** Application deadline: December 15, 1993. Carnegie Mellon University is an Equal Employment Opportunity/Affirmative Action Employer.

**BEHAVIORAL NEUROSCIENTIST.** The University of Rochester anticipates an **ASSISTANT PROFESSOR** position in neuroscience. We are interested in persons studying relationships between brain and behavioral plasticity at the level of neural systems, especially those investigating either learning and memory or development/reorganization in perceptual or motor systems. Development of an active research program and teaching in both graduate and undergraduate programs in neuroscience are expected. Applicants should submit curriculum vitae, a brief statement of research interests, and three letters of reference by 1 February 1994 to: **Biopsychology Search, Department of Psychology, University of Rochester, Rochester, NY 14627.** An Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### DEVELOPMENTAL ENTOMOLOGIST

The Department of Biological Sciences at East Tennessee State University (ETSU) invites applications for a nine-month, tenure-track position at the **ASSISTANT PROFESSOR** level available 15 August 1994. Candidates must have a Ph.D., be broadly trained in *entomology*, and have interests in **comparative development or evolutionary biology**. The successful applicant will be expected to teach General Biology and General Entomology, and develop advanced courses; establish a research program and be a mentor to research students at undergraduate and Master's levels; and provide occasional public service identifying "bugs" (*sensu lato*). Submit a letter of application, statement of teaching and research goals, curriculum vitae, graduate transcripts, recent reprints, and three letters of reference by 1 November 1993 to: **Dan M. Johnson, Search Committee Chair, Department of Biological Sciences, Box 70,703, East Tennessee State University, Johnson City, TN 37614-0703.**

E.T.S.U. is an Affirmative Action/Equal Opportunity Employer. Applicants should be U.S. citizens or permanent residents.

### ASSISTANT PROFESSOR OF BIOLOGY

The Biology Department at the University of New Mexico is seeking applicants for a full-time, tenure-track position as Assistant Professor, to begin August 15, 1994, in the area of **MOLECULAR IMMUNOLOGY or DEVELOPMENTAL NEUROBIOLOGY**. Applicants must have a Ph.D. in biology or related discipline, and postdoctoral experience is preferred. We seek a colleague committed to excellent teaching at beginning undergraduate through graduate levels, with potential for developing a vigorous, independent research program in area of specialty as reflected in publications and other scholarly activities, and enthusiasm for joining a broadly based biology department as shown in application materials. Send a letter of application, curriculum vitae, at least three letters of reference, representative reprints, and statements of current and future research and teaching interests to: **Cell/Molecular Search Committee, Department of Biology, University of New Mexico, Albuquerque, NM 87131-1091, USA.** Telephone: 505-277-3411; FAX: 505-277-0304. Deadline for receipt of applications is December 15, 1993.

The University of New Mexico is an Equal Opportunity/Affirmative Action Employer and Educator.

**DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY, UNIVERSITY OF MARYLAND AT COLLEGE PARK (UMCP)** invites applications for one tenure-track position in **biochemistry and biophysical chemistry** (with special consideration given to protein crystallography) and one in **environmental or analytical chemistry**. The positions are likely to be filled at the **ASSISTANT PROFESSOR** level, but the department can consider outstanding candidates at higher levels. *UMCP encourages applications from women and members of minority groups and is an Equal Opportunity/Affirmative Action Employer.* Submit a résumé and a short description of research plans and arrange for three letters of reference to be sent to: **Faculty Search Committee, Department of Chemistry and Biochemistry, University of Maryland, College Park, MD 20742.** For additional information, call: **Prof. G. Helz at 301-405-1797.** We will begin evaluations on November 1, 1993, but new candidates can be considered until the positions are filled.

### DIRECTOR, BUREAU OF MARINE SCIENCES Maine Department of Marine Resources

State agency which conducts biological and ecological research, resource monitoring and assessments in support of resource management programs is seeking Bureau Director to manage and promote research activities at its new waterfront laboratory in Boothbay Harbor. Minimum qualifications are a Ph.D. in fisheries or marine science or a related field and three years of experience (or M.S. and eight years of experience) directing fisheries or marine science research programs. Prior experience in marine fisheries management is highly recommended. Salary range \$37,000 to \$52,000. Application deadline is November 29, 1993. For more information and application materials, contact: **Rick Record, Maine Department of Marine Resources, State House Station 21, Augusta, ME 04333; Telephone: 207-624-6550, FAX: 207-624-6024.** The state of Maine is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### PURDUE UNIVERSITY FOODS AND NUTRITION— FACULTY, TEACHING/RESEARCH POSITION

**ASSISTANT/ASSOCIATE PROFESSOR**, ten-month, tenure-track position in Foods and Nutrition beginning August 15, 1994. The position is 50% research in nutrition or a related discipline and 50% teaching. Teaching responsibilities include nutrition courses at the undergraduate and graduate level and student advising. The Ph.D. degree in nutrition science or a related area is required. Postdoctoral experience and teaching experience are preferred. The successful candidate is expected to obtain extramural funding and to publish scholarly work in his/her area of interest. Application deadline is February 28, 1994. Send curriculum vitae, transcripts, letter of application, and three (3) reference letters to: **April C. Mason, Ph.D., Chair, Search Committee, Department of Foods and Nutrition, 1264 Stone Hall, Purdue University, West Lafayette, IN 47907-1264; Telephone: 317-494-8539.** An Equal Opportunity/Affirmative Action Employer.

### ASSISTANT/ASSOCIATE PROFESSOR MOLECULAR BIOLOGIST

Department of Physiological Sciences  
College of Veterinary Medicine  
Oklahoma State University

This tenure-track position is available on or after January 1, 1994. Candidates should have a Ph.D. degree or equivalent in molecular biology, biochemistry or related field and demonstrated research productivity. Postdoctoral experience is highly desirable. The successful candidate is expected to establish an extramurally funded program in his/her area of research, and will be responsible for a veterinary medical course in metabolism and nutrition, and a graduate course in his/her specialty. Salary competitive and start-up funds available. Send curriculum vitae and names of three references by November 1, 1993, to: **Dr. Joseph McCann, Chair, Search Committee, 264 VM, College of Veterinary Medicine, Oklahoma State University, Stillwater, OK 74078.** Telephone: 405-744-6750. FAX: 405-744-8263. An Equal Opportunity/Affirmative Action Employer.

### FACULTY POSITIONS

Department of Biochemistry,  
Molecular Biology and Cell Biology  
Northwestern University

The Department of Biochemistry, Molecular Biology and Cell Biology seeks outstanding candidates for full-time faculty appointments (rank open). We particularly seek applicants in the areas of cell biology, signal transduction, developmental genetics, and structural biology. Candidates should submit curriculum vitae, a list of publications, a statement of future research objectives, and letters of reference from three persons knowledgeable of the candidate's research and teaching abilities to: **Chairman, Faculty Search Committee, Department of Biochemistry, Molecular Biology and Cell Biology, Northwestern University, Evanston, IL 60208-3500.** To ensure full consideration, complete applications should be received by December 31, 1993.

Northwestern University is an Affirmative Action/Equal Opportunity Employer.

### FACULTY POSITIONS

Institute of Biosciences and Technology

The Institute of Biosciences and Technology in Houston, Texas, a component of Texas A&M University (TAMU), invites applicants at all academic levels for tenure-track positions. The mission of the Institute is *Hereditary Studies related to Medicine and Agriculture*. Focus areas include: Genome Research, Mammalian Viruses, Matrix Biology, Cancer Biology, Human Nutrition, Carcinogen-Mutagen Research, Transgenic Animal Models of Disease, and Genetic Regulation. Faculty appointments will be at TAMU in College Station. Substantial resources are available in our new 11-story building in the Texas Medical Center. Applicants should submit curriculum vitae, a description of future research plans, and three references to: **Dr. Robert D. Wells, Director, Institute of Biosciences and Technology, Texas A&M University, 2121 West Holcombe Boulevard, Suite 202, Houston, TX 77030-3303.** FAX: 713-677-7725. Texas A&M University is an Affirmative Action/Equal Opportunity Employer.

**DEKALB Plant Genetics**, a leading agricultural seed company located in scenic Mystic CT, has openings for two M.S. level scientists to join our research program in maize biotechnology.

**Tissue-Specific Gene Expression** Genetic engineering approaches will be used for introducing or altering specific gene products in maize seed for improved seed composition. This position requires familiarity with current molecular biology techniques including vector construction, DNA sequencing, PCR, RNA and protein analysis. Plant cell culture experience is also desirable.

**Development of Gene Mapping Technology** This position will be part of a group involved in genetic mapping of quantitative trait loci in maize through the use of molecular biology techniques for application to our maize breeding programs. The successful candidate will investigate and develop new methodologies for molecular marker mapping. Experience with current molecular biology techniques such as DNA sequencing, genomic cloning and PCR is necessary. Knowledge in genetics, gene mapping or quantitative trait analysis is desirable.

In addition to a stimulating, team-oriented scientific environment, we offer excellent salary and benefit packages and relocation assistance. Qualified applicants should submit their resume to Katrina J. Henry, DEKALB Plant Genetics, 62 Maritime Drive, Mystic, CT 06355-1958.



An equal opportunity employer



**AVIGEN** is an exciting new gene therapy company that is developing treatments for selected diseases using adeno-associated viral (AAV) vectors to insert genes into patients' cells. The company believes that its proprietary gene delivery system represents a major step forward in the clinical utility and commercialization of gene therapy. Avigen has openings for outstanding individuals in the following areas:

### Hematology/ Molecular Biology

This individual will conduct state-of-the-art research in our sickle cell anemia program, and will be responsible for leading a major research effort to develop novel gene delivery vectors that target bone marrow. All applicants must have a Ph.D. or M.D. and several years' postgraduate research experience in hematopoiesis, bone marrow transplantation models, and molecular biology.

### Transcription Regulation

This individual will carry out innovative research to develop gene therapy vector systems for tissue specific gene expression. Applicants should have a Ph.D. and postgraduate research experience in gene regulation and transfer.

### Multidrug Resistance/ Tumor Biology

The successful candidate will develop *in vitro* and *in vivo* models to transfer chemotherapeutic drug resistance genes into hematopoietic stem cells and study their function in tumor models. The position requires a Ph.D. or M.D. and postdoctoral experience in gene transfer, tumor biology, and/or hematopoiesis.

Avigen is committed to providing exciting career opportunities to creative, highly motivated individuals. We are an equal opportunity employer. Submit resumes to: Human Resources, Avigen, Inc., 1201 Harbor Bay Parkway #1000, Alameda, CA 94501.

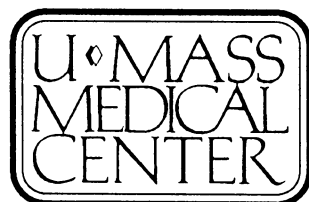


## Chairperson, Department of Pharmacology

Applications and nominations are invited for the Chair of the Department of Pharmacology at the University of Massachusetts Medical School in Worcester. We seek a candidate with a record of academic leadership within an internationally recognized research program, a desire to foster the development of strong research programs, and a commitment to graduate and medical education. Researchers in any field of modern pharmacology will be considered.

Letters of application or nomination should be sent to: Anthony R. Potcete, Ph.D., Chair, Pharmacology Search Committee, Department of Molecular Genetics and Microbiology, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655.

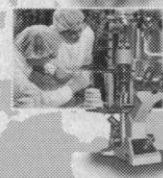
Candidates should include a curriculum vitae, description of research interests, and the names of three references.



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

# genzyme

The **strength** of an organization can be measured by the **scope** of its products. At Genzyme, we are developing a range of innovative **health care products and services** that are enabling us to **achieve success** on a global scale.



## Research Scientist Electrophysiology - Ussing Chamber

Your primary focus will be to establish and oversee the Ussing chamber functional assay in order to support our adenovirus and lipid gene therapy programs. You will contribute as a member of our Cystic Fibrosis gene therapy group with specific responsibility for establishing the equipment and protocols to evaluate the functionality of CFTR following transduction of the CFTR cDNA into airway cells. You will also oversee all aspects of functional analysis of CFTR using both Ussing chambers and fluorescent digital imaging microscopy/SPQ. Requires a Ph.D. with at least 2-3 years of postdoctoral training and experience in the use of electrophysiological approaches to study and characterize ion channels or transporters. Experience with Ussing chambers in the assay of membrane currents would be an advantage.

Genzyme rewards success with an excellent compensation and benefits package, including 3 weeks' paid vacation, a 401(k) plan with a company match, extensive insurance benefits and an Employee Stock Purchase Plan. Please forward your resume to: Human Resources Department, Dept. S1022, Genzyme Corporation, One Mountain Road, Framingham, MA 01701. An equal opportunity employer.

ADVANCING HEALTH CARE PRODUCTS AND SERVICES WORLDWIDE



## POSITIONS OPEN

**ASSISTANT/ASSOCIATE PROFESSOR:** The Department of Physiology and Pharmacology, College of Veterinary Medicine, Auburn University, is seeking applicants for a tenure-track position. The candidate should have a strong interest in professional and graduate education. The successful candidate will be expected to teach renal physiology to professional students and to develop a graduate course in the candidate's area of expertise. While the specific research interests are not specified, the candidate should demonstrate the potential for developing an independent research program.

The position requires a Ph.D. degree in physiology or pharmacology. A D.V.M. degree and/or postdoctoral experience is desirable. Interested applicants are invited to submit a letter of application, curriculum vitae, statement of career goals, and the names of three or more references to: **Dr. Charles E. Branch, Chair, Search Committee, Department of Physiology and Pharmacology, College of Veterinary Medicine, Auburn University, Auburn University, AL 36849-5520.** Applications will be accepted until January 5, 1994, or until a suitable candidate is identified.

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

## CHAIR, AND PROFESSOR OF BOTANY UNIVERSITY OF MARYLAND

The College of Life Sciences at the University of Maryland-College Park invites applications for the position of Professor and Chair of the Department of Botany. The Department of Botany consists of 23 tenure-track faculty with research and teaching interests in physiology, genetics, cell and molecular biology, ecology, evolution, systematics, and pathology. We seek an individual to provide academic and administrative leadership for the teaching, research and extension programs that are ongoing in the department. The successful candidate will also be expected to direct a research program in his/her specific area of expertise. Candidates must have an earned doctorate in an area of botany or a closely related field, and have internationally recognized professional accomplishments. Candidates should provide a letter of application accompanied by curriculum vitae, and arrange to have four letters of reference sent directly to the address below. For best consideration, completed applications should be received by December 15, 1993. The anticipated starting date for this position is July 1, 1994. Applications should be sent to: **Search Committee Chair, Department of Botany, University of Maryland, College Park, MD 20742-5815.** The University of Maryland is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

The Monell Chemical Senses Center, Philadelphia, Pennsylvania, is seeking a Junior Faculty Member at the **ASSISTANT MEMBER** level with primary research interests in the general area of molecular biology or molecular genetics. The successful applicant is expected to generate a creative and productive research program that will interface with research interests represented at the Monell Center. The Center is especially interested in persons who can apply expertise in molecular biology toward understanding the mechanisms underlying taste, olfaction and chemical irritation. Areas of interest may include but are not limited to the receptors and transduction mechanisms, second messengers, growth regulation, and/or gene regulation. Interested applicants should send a letter of application, curriculum vitae, one-page summary of research plans, recent publications and the names, addresses and telephone numbers of three references no later than January 1, 1994, to: **Dr. Gary Beauchamp, Director, Monell Chemical Senses Center, 3500 Market Street, Philadelphia, PA 19104-3308.** The Monell Chemical Senses Center is an Equal Opportunity Employer and encourages the application of qualified women and minorities.

**POSTDOCTORAL POSITION** available immediately to study protein-RNA interactions using site-directed mutagenesis, chemical modification of proteins, and fluorescence spectroscopy. A Ph.D. in chemistry or biochemistry is required. Experience in protein purification, molecular biology, and fluorescence spectroscopy preferred. Send curriculum vitae, names and addresses of 3 references to: **Karin Musier-Forsyth, University of Minnesota, Chemistry Department, 207 Pleasant Street S.E., Minneapolis, MN 55455.** The University of Minnesota is an Equal Opportunity Educator and Employer.

## POSITIONS OPEN

### NEUROSCIENCE FACULTY POSITIONS

Two tenure-leading faculty positions are available in the Department of Cell Biology and Anatomy at the University of Nebraska Medical Center (academic rank dependent on qualifications). We are seeking cellular and molecular neuroscientists with research programs in developmental neurobiology or neuroendocrinology. An ability to attract extramural funding is expected. Major teaching responsibilities will be in a 6-week medical neuroscience course and participation in the graduate neuroscience program. The University of Nebraska Medical Center is a dynamic and expanding facility that ranks high in national measurements of faculty productivity and academic atmosphere. Salary and research incentives are highly competitive. Send curriculum vitae and the names of three references to: **Dr. Robert Norgren, Chair, Neuroscience Search Committee, Department of Cell Biology and Anatomy, University of Nebraska Medical Center, 600 South 42nd Street, Box 986395, Omaha, NE 68198-6395.**

*The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer; minorities and women are encouraged to apply.*

**TENURE-TRACK FACULTY RESEARCH POSITIONS IN MOLECULAR AND CELLULAR PATHOLOGY.** The Department of Pathology, University of Alabama at Birmingham, is seeking individuals for positions at the faculty level who are interested in joining an active and growing group of investigators in basic research and graduate training. Applicants should have a Ph.D. or M.D. degree and are expected to develop independently funded research programs. Special consideration will be given to individuals with experience in cellular and molecular biology, signal transduction, a desire to interact with other investigators and a willingness to participate in graduate and postdoctoral training. Level of appointment will be determined by qualifications. Please send detailed curriculum vitae including description of research, recent reprints and names of three references to: **Thomas M. Lincoln, Ph.D., Acting Director, Division of Molecular and Cellular Pathology, Department of Pathology, University of Alabama at Birmingham, 1670 University Boulevard, Birmingham, AL 35294-0019.** UAB is an Affirmative Action/Equal Opportunity Employer and welcomes applications from women and minorities.

**RESEARCH INSTRUCTOR (Organic Chemistry)**—Perform cell culture experiments on human and animal cells. Isolate oligosaccharides and polysaccharides (oligosaccharides and polysaccharides are carbohydrates) using conventional and high-pressure gel filtration, reverse phase and adsorption chromatography. Characterize oligosaccharides and polysaccharides by metabolic labeling with radioisotopes and enzymatic degradation methods. Chemical synthesis of biologically active complex carbohydrates in order to examine their effects on the biosynthesis of glycoproteins, glycolipids and proteoglycans. Participate in studies on the role of complex carbohydrates in Herpes Simplex infection and other diseases. Train Ph.D. students and technical personnel in the experiments. Teach graduate students the general theory and practice of organic chemistry as applied to carbohydrate synthesis. Requires Ph.D. in Organic Chemistry and 2 years of experience in Carbohydrate Synthesis. Must be able to isolate oligosaccharides and polysaccharides from cell culture using conventional and high-pressure gel filtration, reverse phase and absorption chromatography. Must have experience characterizing synthetic carbohydrates by nuclear magnetic resonance (n.m.r.), infrared (IR) and gas chromatography-mass spectroscopy (GC-MS). 8:00 a.m. to 5:00 p.m. 40 hours per week. Salary \$30,000 per annum. Contact: **Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222.** RE: Job Order #4127051.

**POSTDOCTORAL POSITION** available immediately to work on a multidisciplinary approach to the Ah receptor, a novel ligand binding transcriptional activator (see Burbach, K. et al., *Proc. Natl. Acad. Sci.* 89:8185-8189, September 1992). Send curriculum vitae and names of two or three references to: **Dr. Alan Poland, McArdle Laboratory for Cancer Research, University of Wisconsin-Madison, Madison, WI 53706.** FAX: 608-262-2824. Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

**FOX CHASE CANCER CENTER—POSTDOCTORAL POSITIONS.** In Animal Virology—Fox Chase wishes to recruit postdoctoral fellows for advanced training in molecular virology or viral pathogenesis. Our Virology program includes the laboratories of: **Dr. Susan Astrin** (HIV-1 transformation), **Dr. Thomas London** (HBV epidemiology and interventions), **Dr. William Mason** (HBV and HCV persistence and replication), **Dr. John Pugh** (hepatitis virus receptors), **Dr. Christoph Seeger** (HBV and HCV replication), **Dr. Anna Marie Skalka** (retrovirus integration, protein processing and splicing regulation), **Dr. John Taylor** (hepatitis delta virus structure and replication), and **Dr. Philip Tschlis** (retrovirus pathogenesis). Applicants should submit curriculum vitae, description of research interests and a list of references. Mail before December 1, 1993, to: **Dr. John Taylor, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111-2497.** An Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL POSITION

Position available in the laboratory of Dr. John Krupinski at the Weis Center for Research in Danville, Pennsylvania. The successful applicant will have a Ph.D. in biochemistry, cell biology, or pharmacology with experience in molecular biology. The project will involve the expression and characterization of novel forms of adenylyl cyclase (see *J. Biol. Chem.* 267:24858-24862). Emphasis will be placed on determining those structural features of the adenylyl cyclases responsible for mediating unique physiological effects.

The Weis Center is a well-equipped, modern research facility in a semi-rural environment. Competitive salary and fringe benefits are available. Please send curriculum vitae with the names and telephone numbers of three references to: **Geisinger Human Resources (JK), 100 North Academy Avenue, Danville, PA 17822-1529.** Equal Opportunity Employer, M/F/H/V.

**POSTDOCTORAL POSITION.** Available immediately to assist staff of the NYS Department of Environmental Conservation on USEPA-funded studies of Lake Champlain. Appointee will also assist with basin-wide planning efforts to reduce nutrient and toxic contaminant loadings to Lake Champlain. Field and laboratory experience are assets. A Ph.D. in limnology or a related discipline is preferred. Send résumé, statement of research interests, selected reprints and names, addresses and telephone numbers of references to: **Dr. James W. Sutherland, Chief Scientist, New York State Freshwater Institute, Room 301, 50 Wolf Road, Albany, NY 12233-3502.**

### POSTDOCTORAL POSITION IN ECOSYSTEM ECOLOGY

Available immediately to study the response of plants with C3 and C4 photosynthetic pathways to climate change. A cooperative project between the Rocky Mountain Forest and Range Experiment Station (Fort Collins) and the Ecosystem Center, Marine Biological Lab (Woods Hole, Massachusetts) is studying the impacts of climate change on the ecological function of grasslands and shrublands in the Western United States using a biogeochemical model. Individuals with interests in ecosystem ecology and mathematical modeling are invited to apply by November 1, 1993, for this one-year position in Fort Collins. Salary is \$29,000. Contact: **Don Gray (303) 229-0414. MACA, 2629 Redwing Road, Suite 110, Fort Collins, CO 80526.** MACA is an Equal Opportunity Employer.

### POSTDOCTORAL POSITION

Postdoctoral applications are invited from individuals interested in joining a group studying botulinum and ricin toxicity at the cellular/subcellular level. Applicants for these positions obtain support by applying for a National Research Council Research Associateship. The minimum starting stipend is \$32,400 per annum. Requirements: Ph.D. or equivalent; U.S. citizen or permanent resident; expertise in neurophysiology, neuropharmacology, cell biology, or biochemistry would be advantageous. Please forward curriculum vitae (including names and addresses of three references) to: **Dr. Richard D. Crossland or Dr. Robert B. Wellner, Toxinology Division, U.S. Army Medical Research Institute of Infectious Diseases, Frederick, MD 21702-5011.** FAX: 301-619-2348. Telephone: 301-619-7181.

**M**iles Inc., Pharmaceutical Division, located near Yale University, has professional career opportunities for self-motivated, research-oriented scientists. Research positions are available in the structural chemistry group at the Miles Research Center. Structural Chemistry is an integrated, multidisciplinary group that includes NMR, X-ray Crystallography, Mass Spectrometry and Computational Chemistry. Working closely with medicinal chemistry and biology, the focus of the group is to use structural information to understand molecular mechanisms and aid in the design of therapeutic agents. We are currently seeking qualified scientists in the following areas:

## **PROTEIN BIOCHEMISTRY AND PROTEIN PURIFICATION**

Candidates should have a BS/MS degree, 2-4 years of experience in protein isolation and characterization and an interest in protein structure determination. Experience with protein purification techniques such as HPLC, FPLC, affinity chromatography and electrophoresis is required.

## **COMPUTATIONAL CHEMISTRY**

Candidate should have a PhD and 1-3 years of postgraduate or industrial experience in computational chemistry/molecular modelling applications to drug design, a strong background in the chemical and mathematical principles required in computations, and a working knowledge of current molecular mechanics, quantum mechanics software and of organic chemistry.

## **NMR SPECTROSCOPIST**

Candidate should have a BS/MS in Chemistry with 1-4 years of experience in NMR spectroscopy. A background in 1D and 2D NMR data collection, data processing and structure elucidation of organic molecules is required. A strong background in synthetic organic chemistry is desirable.

We are seeking individuals who are highly motivated, independent and able to interact effectively with diverse scientific disciplines including structural, medicinal and biological chemistry.

Miles Inc. has an expanding Pharmaceutical discovery effort that offers a campus-like research environment, stimulating research programs, competitive salaries and comprehensive benefits. Please send resume in complete confidence to: **Miles Inc., Pharmaceutical Division, Dept. AART, 400 Morgan Lane, West Haven, CT 06516.**

An Equal Opportunity Employer M/F/D/V.

### **FACULTY POSITION IN MOLECULAR BIOLOGY OF CANCER UNIVERSITY OF FLORIDA CANCER CENTER**

The Cancer Center and Department of Biochemistry and Molecular Biology invite applicants for a tenure track faculty position at the level of Assistant Professor. Applicants should have experience and a strong research interest in the molecular biology of cancer and cancer related diseases. The Cancer Center has chosen anticancer gene therapy as an area of emphasis, so that applicants whose research is related, even in the broadest sense, are encouraged to apply. The appointee will have excellent laboratory facilities in the recently opened Academic Research Building, access to molecular biology core facilities, a competitive salary, and an attractive start-up package. This interdisciplinary appointment is designed to encourage interaction and collaboration within the College of Medicine and the University of Florida.

Candidates should have a Ph.D. and/or M.D. degree, at least two years of post-doctoral training, and a record of accomplishments indicating potential for developing a strong, independent research program. The anticipated start date is 6/1/94 and the salary is negotiable. A curriculum vitae, a description of research experience and interests, and three letters of reference should be sent to: Gail B. Zavelson, Administrator, Cancer Center, Box 100277 JHMHC, Gainesville, FL 32610-0277.

The closing date for submission of completed applications is December 31, 1993

*The University of Florida is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from qualified women and minority candidates.*



## **EXECUTIVE VICE PRESIDENT**

The Massachusetts Medical Society is seeking to fill the full-time position of Executive Vice President to begin in June 1994. The Society supports over 15,000 physicians and enjoys being the country's oldest continuously operating state medical association. Employing over 300 staff, the Society is a dynamic organization which owns and publishes the New England Journal of Medicine and a number of other publications.

Working under the direction of the Society's President and Board of Trustees, the EVP will carry out a wide range of legislative, health policy, and community relations initiatives. Articulating the Society's positions on a multitude of issues before government regulatory bodies and other forums will be fundamental to this role. The EVP will also be entrusted with directing the executive officers, staff, and their operations. In addition, he/she will, through the VP for Publishing, oversee the Society's extensive publishing operations.

An MD degree is required, along with a record of active participation in organized medicine (preferably at state/national levels). Exceptional leadership, coalition building, presentation, and negotiation skills are essential. Developing and implementing appropriate action plans to deal with the critical issues confronting today's physicians will be a major focus. Significant administrative/management skills, the ability to work effectively with trustees/corporate offices, direct staff, prepare budgets and oversee public/community relations are required.

Qualified candidates should submit a letter of interest and a curriculum vitae to: EVP Search Committee, Massachusetts Medical Society, 1440 Main Street, Waltham, MA 02154. An Equal Opportunity Employer.

**MASSACHUSETTS  
MEDICAL SOCIETY**

## POSITIONS OPEN

### INSTRUCTOR AND ASSISTANT PROFESSOR NON-TENURE-TRACK POSITIONS

The Department of Physiology and Biophysics at the University of Tennessee, Memphis, seeks applications for non-tenure faculty positions at the levels of Instructor and Assistant Professor in the laboratories of the faculty members in the Department of Physiology and Biophysics. These positions involve bench research in the areas of cardiovascular, respiratory, central nervous system, gastrointestinal, developmental, endocrine or epithelial physiology. Candidates should have a Ph.D. or M.D. and, at least 2 to 3 years of postdoctoral experience. *American citizens or permanent residents are preferred.* Applications are accepted for all areas, although position availability in any specific area is dependent upon funding. Applicants should send curriculum vitae, copies of three representative publications and the names of three references to: **Carolyn Holland, Assistant to the Chairman, Department of Physiology and Biophysics, 894 Union Avenue, Memphis, TN 38163. An Equal Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer. Minorities and women are encouraged to apply.**

### MOLECULAR BIOLOGIST M.D. ANDERSON CANCER CENTER

**Immediate Opening** for a molecular biologist with experience in developing recombinant and chimeric antibodies.

Primary responsibilities will include design, production and testing of novel fusion proteins and development of unique immunotoxins for cancer therapy. Substantial opportunities also exist for collaboration within our large, diverse group focusing on development of immunotherapeutic strategies.

Salary commensurate with experience. Contact: **Dr. Michael Rosenblum, Ph.D., Chief, Immunopharmacology Section, Department of Clinical Immunology and Biological Therapy, M.D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.**

*Equal Opportunity/Affirmative Action Employer. Smoke-free environment.*

### POSTDOCTORAL POSITION ONTARIO CANCER INSTITUTE UNIVERSITY OF TORONTO

A postdoctoral position is available in the areas of peptide and protein design with emphasis on the development of cellular and intracellular targeting agents. Candidates must possess a Ph.D. or M.D. degree with training and experience either in cell biology, peptide synthesis, or molecular biology.

Send your curriculum vitae and a letter indicating your research interests to: **Dr. Jean Gariépy, Ontario Cancer Institute, Princess Margaret Hospital, 500 Sherbourne Street, Toronto, Ontario, Canada M4X 1K9.**

### POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE POSITIONS CENTER FOR GENE THERAPY BAYLOR COLLEGE OF MEDICINE

Postdoctoral/Research Associate positions are available in the Center for Gene Therapy at Baylor College of Medicine, which is supported by NIH-funded program project grants entitled "Gene Therapy for Hepatic Deficiencies" and "Gene Therapy for Cardiovascular Diseases". The project areas are (1) development of recombinant viral vectors and DNA-based vectors for hepatic, endothelial and muscle gene delivery and (2) application of vector technologies to treat existing animal models of human diseases such as phenylketonuria, hemophilia B and atherosclerosis. Salary is commensurate with research experience and Baylor is an *Equal Opportunity Employer*. Applicants must have a Ph.D. and/or M.D. Applications should be sent with updated curriculum vitae to: **Savio L. C. Woo, Ph.D., Director, Center for Gene Therapy, Baylor College of Medicine, One Baylor Plaza, Room T721, Houston, TX 77030.**

## POSITIONS OPEN

**TWO POSTDOCTORAL POSITIONS** available in Cystic Fibrosis Research. **Pathobiology of *Pseudomonas aeruginosa*.** Experience with biochemical/molecular biologic aspects of bacteria is essential. Contact: **Daniel J. Hassett, Ph.D. (513) 558-1154. Liposome-based gene therapy.** Qualified candidate must have experience in general molecular biology using eukaryotic cells. Contact: **Richard G. Sleight, Ph.D. (513) 558-5537.** For both positions animal experience is desirable but not essential. Send curriculum vitae to appropriate laboratory directory, **Department of Molecular Genetics, Biochemistry, and Microbiology; University of Cincinnati College of Medicine; 231 Bethesda Avenue; Cincinnati, OH 45267-0524.**

**POSTDOCTORAL POSITION** available to study developmental changes in transmembrane transport using mammalian embryos and embryonic cells. Focus is on antiporter-mediated ion transport and intracellular pH control, a possible novel H<sup>+</sup> permeability in undifferentiated embryonic cells, and changes in transporters upon differentiation. A doctorate in biophysics, physiology, or related discipline is required. Experience relevant to quantitative fluorescence videomicroscopy with ion-sensitive fluorophores is necessary; some in molecular biology is desirable. Initial appointment for one year. Please send curriculum vitae and names of three references to: **Jay M. Baltz, Ph.D., Loeb Medical Research Institute, Ottawa Civic Hospital, 1053 Carling Avenue, Ottawa, Ontario K1Y 4E9 Canada.**

**POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE** position is available to investigate protein phosphorylation and Ca<sup>2+</sup>-signalling mechanisms associated with contraction of vascular/visceral smooth muscle. Studies include experiments with intact and permeabilized smooth muscle as well as imaging techniques with cultured cells. Salary is competitive and negotiable. Position is for 2 to 3 years. Candidates should send curriculum vitae and 2 letters of reference to: **Dr. J. Di Salvo, Department of Medical and Molecular Physiology, School of Medicine, University of Minnesota-Duluth, 10 University Drive, Duluth, MN 55812-2487.**

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

### POSTDOCTORAL FELLOW— ENVIRONMENTAL MICROBIOLOGY

**SOUTHERN RESEARCH INSTITUTE** has an opening for a postdoctoral fellow. The position requires a thorough understanding of microbial physiology and microbial metabolism to apply in the degradation of important environmental pollutants and in the study of microbial survival in unusual environments. This is a new position and is located in the Fermentation and Bioprocess Technology Section of the Microbiology Department. The position is designed to further train the proper individual in the growing field of environmental microbiology while drawing upon the individual's expertise to help expand our current business base. The position is also designed to instruct the individual in the art and practice of successful proposal preparation and project management necessary to be successful in the highly competitive contract and grant area. Southern Research was founded in 1941, as an independent organization conducting research and development in the biological, chemical, and engineering sciences. *This position requires U.S. citizenship.* For information concerning this position, please contact: **Karen Luster in the Human Resources Office, P.O. Box 55305, Birmingham, AL 35255-5305 or call (205) 581-2509.**

**POSTDOCTORAL FELLOWSHIP, HARVARD MEDICAL SCHOOL, CARDIOVASCULAR DIVISION.** NIH-funded position(s) available January 1994 to study the role of the protein kinase C gene family in vascular and megakaryocyte-lineage cells (*J. Biol. Chem.* 267:10011, 1992; 268:5543, 1993; 268:14208, 1993). Project includes analysis of cellular signal transduction mechanisms, including gene expression and regulation. An advanced degree in molecular biology or biochemistry with experience in recombinant DNA methodology is highly desirable. Curriculum vitae and the names of three references should be forwarded to: **Dr. J. Anthony Ware, Cardiovascular Division, Harvard Medical School, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215.**

## POSITIONS OPEN

### POPULATION GENETICS/ CONSERVATION BIOLOGY

The Population Change and Genetic Diversity research group at the University of North Dakota and North Dakota State University seeks applications for a **POSTDOCTORAL ASSOCIATE** with interests in molecular approaches to the population genetics of tropical rainforest trees and ecological factors associated with genetic variation. Applicants should send a letter stating research interests and experience, curriculum vitae, and names of references to: **Dr. Diana Lieberman, Department of Biology, University of North Dakota, Grand Forks, ND 58202-9019.** Review of applications will begin immediately. *An Affirmative Action/Equal Opportunity Employer.*

### TOXICOLOGISTS

The California Environmental Protection Agency, Department of Pesticide Regulation seeks Staff Toxicologists in its pesticide regulatory program. Incumbents will evaluate toxicology studies and/or conduct risk assessments. Positions exist for individuals with Doctorate degrees in toxicology, pharmacology, or a closely related field with suitable experience in animal toxicology. Salary range begins at \$4378 per month (minimum, Ph.D. and 3 years of experience). Comprehensive benefits package. Continuous testing, oral exam required. Submit résumés to:

**Department of Pesticide Regulation  
Examinations Unit  
1220 N Street, Room 154  
Sacramento, CA 95814**

### CELEX LABORATORIES INC.

**Permanent positions for two RESEARCH ASSOCIATES** are available immediately.

**PLANT MOLECULAR BIOLOGIST:** The candidate must be specialized in genetic transformation using different techniques preferably with experience in plant tissue culture. A Ph.D. in Biochemistry or Plant Molecular Biology is required.

**PHYTOCHEMIST:** The candidate must be experienced in isolation, characterization and identification of natural secondary plant products. A Ph.D. in Biochemistry, Bioanalytical Chemistry, Chemistry or Botany is required. Interested applicants are invited to send curriculum vitae and names and telephone numbers of three references by October 30, 1993, to: **Celex Laboratories Inc., Suite 1300, United Kingdom Building, 409 Granville Street, Vancouver, B.C., V6C 1T2 Canada. FAX: (604) 688-3211.**

**MATERIALS SCIENTIST** in Ceramic Engineering: Will conduct advanced research in ceramic material synthesis by sol-gel route. Will perform and must have demonstrated expertise in performing research in the following areas: (a) Sol-gel-derived mullite composite with SiC whiskers inclusions; (b) Sol-gel-derived particulate Si<sub>3</sub>N<sub>4</sub> and ZrO<sub>2</sub> reinforced mullite composite; (c) Supercritical drying of mullite gel; (d) Sintering of powder compacts with SiC whisker inclusions. Ph.D. in ceramic engineering required plus ability to operate and interpret data from XRD, SEM and TEM machinery and to operate characterization equipment including TGA, DTA, TMA, rheometer, BET, ICP-AES and FTIR. \$56,000 per year. Send ad and résumé to: **Alison Morgan, #CP-01, YTC America, Inc., 550 Via Alondra, Camarillo, CA 93012. Equal Opportunity Employer.**

### SURGICAL CRITICAL CARE

The Department of Surgery at Duke University Medical Center is seeking to hire a **RESEARCH ASSOCIATE** or **RESEARCH SCIENTIST** to conduct studies related to the molecular mechanisms in critical illness and sepsis. Applicants should have a strong background in molecular biology and microbiology. They should have expertise in recombinant DNA technology, Southern, Northern and Western analyses, PCR techniques for the evaluation of DNA and messenger RNA, and tissue and bacterial culture. This individual will interact with other basic scientists and clinicians involved in basic and clinical studies. Additionally, this individual would work closely with and help direct research fellows in the basic laboratory. Contact: **Dr. R. Lawrence Reed at (919) 681-5080. Duke University is an Equal Opportunity Employer.**





## MOLECULAR AND CELLULAR BIOLOGY MOLECULAR MEDICINE AND GENETICS

Wayne State University

**ASSISTANT, ASSOCIATE AND FULL PROFESSOR (RESEARCH)** - The new Center for Molecular Medicine and Genetics is expanding its research and training programs. Applications are invited for University-funded research-track faculty positions at the assistant, associate, or full professor (research) level. Excellent research laboratories and support facilities are located in the School of Medicine and in the Biological Sciences Building on the main campus of the University in proximity to one of the largest medical centers in the United States. Candidates should have a Ph.D. degree in molecular biology, cellular biology or genetics, or a related area or an M.D. or M.D./Ph.D. degree and also have several years of postdoctoral training. The successful candidates will be expected to establish vigorous independent research programs that will be highly competitive for extramural funding. While all research areas will be considered, candidates with expertise in eukaryotic molecular, cellular, or developmental genetics, human genetic diseases or their animal models, human or model organism genome analysis, or gene therapy are especially encouraged to apply. Applicants should send complete *Curriculum Vitae*, a brief description of current and future research interests (3-4 pages), a bibliography and reprints of significant publications, and recommendations from at least three references by December 15, 1993, to:

**Dr. Robert H. Rownd, Director**  
**Center for Molecular Medicine and Genetics**  
**Wayne State University School of Medicine**  
3216 Scott Hall  
540 East Canfield  
Detroit, MI 48201

Wayne State University is an equal opportunity/affirmative action employer and invites applications from all qualified individuals.

## RESEARCH SCIENTIST

### New Leads Discovery

LIGAND Pharmaceuticals, a rapidly expanding drug discovery and development company, has an exceptional opportunity available for a talented Research Scientist to join us in working to discover novel drugs for the treatment of human disease.

As part of our New Leads Discovery team, the successful candidate will participate in supervision of departmental screening (cotransfection) activities, characterization/analysis of recombinant Intracellular Receptors using radioligand binding techniques, and development/optimization of novel screening assays for new lead identification.

The selected individual must have Intracellular Receptor binding and data analysis experience, as well as familiarity with enzyme and cotransfection assays. Post doctoral plus 2 years' industrial experience is preferred.

LIGAND provides a challenging intellectual environment with state-of-the-art research facilities. We offer competitive salaries and benefits, a premier team of colleagues and ample opportunities to have scientific impact. Please send your resume to: **LIGAND Pharmaceuticals, Human Resources, Dept. MG, 9393 Towne Centre Drive, San Diego, CA 92121.** EOE.



**LIGAND**  
PHARMACEUTICALS

## GENE DISCOVERY

**Human Genome Sciences** is an exciting new biotechnology company that utilizes automated large-scale sequencing to identify new human genes and to analyze patterns of gene expression under defined conditions of cell activation and development. We have opportunities for individuals with strong interactive skills in the following areas:

### Molecular Biology

Several positions exist for Scientists (PhD/MD plus 3 years postdoctoral experience) and Research Associates (BS/MS plus several years experience) with experience in cDNA library construction, differential and subtractive screening and protein expression and purification.

### Developmental Biology/ Signal Transduction

Several positions exist for Scientists and Research Associates to participate in studies of developmentally regulated gene expression in cells of lymphoid and hematopoietic lineages. Successful candidates should possess a strong background in molecular biology and have practical experience in the manipulation of lymphoid and hematopoietic cells. Familiarity with signal transduction mechanisms involved in cytokine and growth factor regulated events is preferred. Opportunities for Scientists with expertise in *in situ* hybridization analysis as applied to the whole organism also exist.

### Bioinformatics

Several positions exist for individuals with expertise in database management design, comparative sequence analysis and pattern recognition. Candidates should have extensive experience in DNA and protein sequence analysis, software development and programming skills in UNIX and Macintosh client/server applications.

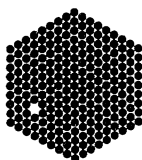
HGS is located in Rockville, Maryland in a region of intense scientific and biotechnological activity. The company encourages the pursuit of academic excellence and offers a comprehensive benefits package including medical/dental insurance, 401(k) and tuition reimbursement. *For immediate consideration, please forward your resume to:*

**Human Resource Department**  
**Human Genome Sciences, Inc.**  
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# EMBL

*The European Molecular Biology Laboratory, an international research organization situated in Heidelberg, Germany, has a vacancy for a*

## **GROUP LEADER** for a nucleic acid chemistry group

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*Please send CV with names and addresses of three referees or write briefly for an application form, quoting ref. no. 93/24*

EMBL  
Personnel Section,  
Postfach 10 22 09  
D-69012 Heidelberg  
Germany

(W1145)A

## **Director, School of Chemical Sciences** **University of Illinois at Urbana-Champaign**

The School of Chemical Sciences at the University of Illinois at Urbana-Champaign includes the Departments of Biochemistry, Chemistry, and Chemical Engineering. It encompasses a large general chemistry program. Support facilities include special service laboratories, shops, storerooms, a business office, and a placement office. Many faculty in the School share appointments in the School of Medicine and in the College of Engineering located on the campus. The Director is the chief academic and administrative officer of the school, with responsibility for administrative and budgetary decisions and for leading the faculty in the development of educational and research policy. The Director reports to the Dean of the College of Liberal Arts and Sciences.

The search committee seeks candidates with distinguished research records in the chemical sciences who will continue active research while serving as Director. The Director will have an important role in determining the future of the chemical sciences on this campus. Commitment is expected to research and educational excellence throughout the full spectrum of chemical sciences, ranging from chemical engineering and chemical physics to molecular biology. Ph.D. is required in one of the fields within the School of Chemical Sciences. Prior experience in academic administration is preferred, though not required. The individual's scholarly record and reputation must qualify him/her as a tenured professor in one of the units within the School of Chemical Sciences. The Director's position is half-time and does not carry tenure.

Salary is negotiable and commensurate with experience. Starting date is August 21, 1994, or as negotiated according to personal circumstances. Completed applications should be received no later than November 24, 1993. Applications (letter of interest and curriculum vitae) should be sent to: Professor Ansel C. Anderson, Search Committee for the Director of the School of Chemical Sciences, 294 Lincoln Hall, 702 S. Wright Street, Urbana, IL 61801. Phone: 217-333-1350.

Interviews may be conducted before the November 24, 1993 closing date, but all applications received by that date will be given full consideration.

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## **Dean** **School of Arts and Sciences** **The Johns Hopkins University**

The Johns Hopkins University is seeking applications and nominations for the position of Dean of the School of Arts and Sciences. The School has a full-time faculty of 245, and undergraduate student population of 2400, a graduate student population of 900, and a new and growing program for part-time students (both academic year and summer sessions). The School covers a wide range of fields and specialties in its twenty-seven departments in the humanities, social sciences, and natural sciences as well as in several interdepartmental degree programs. Sharing the same campus and many of the same facilities, Arts and Sciences has a close relationship with the G.W.C. Whiting School of Engineering and works collaboratively with each of the other six academic divisions of the University.

The Dean has responsibility for and authority over the School's programs and budget within the context of a highly decentralized university. The University seeks an individual of distinguished accomplishment to work with the faculty and the University in leading a School with a tradition of excellence in research, teaching, and service. Candidates should have demonstrated skills in academic leadership, administration, and fund raising.

Nominations and applications should be sent to:

**Dr. Joseph Cooper, Provost**  
**Chair, Arts and Sciences Search Committee**  
**The Johns Hopkins University**  
**Room 265, Garland Hall**  
**3400 N. Charles Street**  
**Baltimore, Maryland 21218.**

The Search Committee will begin reviewing nominations and applications on November 1, 1993. The University expects to fill this position before July 1994.

The Johns Hopkins University is an Equal Opportunity/Affirmative Action employer.



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## Director of Business Development

Provide the leadership to develop strategic business plans for the Applied Genetic Analysis group. Your prime responsibility will be analyzing business opportunities to leverage Perkin-Elmer's and Applied Biosystem's DNA analysis technologies into the human diagnostic and other applied markets. Working closely with product development teams, you will assist in technology assessment, product and systems definition and prioritization of programs. In addition, you will play a key role in technology licensing.

Requirements include an advanced degree in the biological sciences and several years of experience in one or more of the following areas: diagnostics using DNA probe technologies, DNA amplification and detection techniques, molecular genetics, business development and/or product management. Other experience should include working with regulatory agencies in bringing new products to market. Our ideal candidate will have excellent leadership, negotiating and interpersonal skills. (Ref. #1291)

## Scientist

In this environmental analysis-related R&D position, you will plan and implement projects and develop new collaborations and products. You will also provide support for environmental analysis.

Requires either a Ph.D. in Microbiology or a B.S./M.S. and 5 years' experience. All candidates must possess at least two years of new product development experience and two years' experience performing environmental analysis, with excellent analytical and instrumentation skills and familiarity with PCR, DNA sequencing, and template preparation. (Ref. #1972)

## Scientist

Your research will form the foundation of new human identification applications and products. Responsibilities include project planning and implementation, forensic validation and casework, and developing new collaborations and new products.

Requires either a Ph.D. in Biochemistry or a B.S./M.S. and 5 years' experience. All candidates must possess at least two years of new product development experience and two years of forensic validation work, with excellent analytical and instrumentation skills and familiarity with PCR, DNA sequencing, and template preparation. (Ref. #1974)

We offer a competitive salary and generous benefits package. Please send your resume, indicating appropriate Reference# to: Applied Biosystems, Human Resources, 850 Lincoln Centre Drive, Foster City, CA 94404. We are an equal opportunity employer.



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## SIGNAL TRANSDUCTION

The University of Calgary Faculty of Medicine invites applications for a full-time academic position at the Assistant Professor level in the molecular biology of signal transduction. Duties include teaching and graduate student supervision; the position offers an excellent opportunity to develop a vigorous independent research program and collaborative interactions with other researchers at the university. Applications are especially encouraged from scientists studying the regulation of gene expression by transcription factors or the molecular biology of ion channels. Qualifications include a Ph.D. and/or M.D. with a minimum of two years' postdoctoral experience.

The selected candidate must compete successfully for operating funds as a member of the Signal Transduction Group Grant funded by the Medical Research Council of Canada, will have 75% of time protected for research, and will be appointed in an appropriate faculty department.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary has an Employment Equity Program and encourages applications from all qualified candidates, including women, aboriginal people, visible minorities, and people with disabilities.

Please submit a curriculum vitae, a statement of aims and research interests, and arrange to have three letters of reference sent directly, by December 15, 1993, to:

Dr. P.P.M. Schnetkamp  
Department of Medical Biochemistry  
The University of Calgary  
3330 Hospital Drive N.W.  
Calgary, Alberta, Canada T2N 4N1

## BIOTECHNOLOGY RESEARCH SCIENTISTS

**Battelle**, a world leader in applying technological solutions to government and industrial problems, has two research positions available to meet the expanding work in molecular and microbial technology. Both positions require a Ph.D. in molecular biology, microbiology, a related field, or an advanced degree and relevant work experience. An established publication record is essential. Applicants selected for these positions will be subject to a security investigation and must meet eligibility requirements for access to classified information.

**MICROBIOLOGIST** — Involves working with a professional team developing and refining nucleic acid and immunological methods for detection of infectious agents. Applicants with experience with standard bacterial identification methods, PCR, immunological techniques, environmental sampling, and/or GLP procedures will be favored.

**MOLECULAR BIOLOGIST** — Involves contributing to a broad range of programs including the development of improved bacterial gene expression systems, pathway engineering, and the cloning of factors important to CNS diseases. The candidate selected will be expected to design and lead research tasks.

Battelle offers competitive salaries, comprehensive benefits, and opportunities for career advancement. If interested, please send your resume to: **Mr. Richard Shaw, Dept. 91, BATTELLE, 505 King Avenue, Columbus, Ohio 43201-2693.** An Equal Opportunity/Affirmative Action Employer M/F/D/V.



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## POSITIONS OPEN

**RESEARCH ASSOCIATE POSITIONS.** Two positions—one at a Senior level to work on the expression of biologically important proteins and receptors in heterologous cells. Prior experience in Molecular Biology documented by published work is necessary. Send curriculum vitae to: **Dr. O. P. Bahl, Department of Biological Sciences, State University of New York at Buffalo, 347 Cooke Hall, Buffalo, NY 14260.** *SUNY is an Equal Opportunity/Affirmative Action Employer.*

### RESEARCH ASSOCIATE POSITIONS RAS ONCOGENE

Two Research Associate positions are available immediately investigating (a) the role of p21ras in tyrosine kinase growth factor signal transduction, (b) p21ras CAAX peptidomimetics as inhibitors of p21ras farnesyltransferase: a novel anticancer therapy target and (c) synthesizing peptidomimetics (*J. Biol. Chem.* October 1993 issue). Stipends range from \$22,000 plus health benefits. Interested individuals should send curriculum vitae and letters of reference to: **S. M. Sebt, Ph.D., University of Pittsburgh School of Medicine, Department of Pharmacology, W1354 BST, Pittsburgh, PA 15261.** *An Equal Opportunity/Affirmative Action Employer.*

**FOX CHASE CANCER CENTER—ANIMAL VIROLOGIST.** Fox Chase invites applications for a tenure-track, faculty-level position. Candidates should be interested in viral pathogenesis, viral immunology or molecular virology, and will be expected to maintain an independent, competitive research program. Opportunities exist for interaction with eight principal investigators in the existing Virology program which includes the laboratories of **Dr. Susan Astrin** (HIV-1 transformation), **Dr. Thomas London** (HBV epidemiology and interventions), **Dr. William Mason** (HBV and HCV persistence and replication), **Dr. John Pugh** (hepatidnavirus receptors), **Dr. Christoph Seeger** (HBV and HCV replication), **Dr. Anna Marie Skalka** (retrovirus integration, protein processing and splicing regulation), **Dr. John Taylor** (hepatitis delta virus structure and replication), and **Dr. Philip Tsichlis** (retrovirus pathogenesis). Applicants should submit curriculum vitae, description of research interests and a list of references. Mail before December 1, 1993, to: **Dr. Anna Marie Skalka, Director, Basic Science Division, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111-2497.** *An Equal Opportunity/Affirmative Action Employer.*

**MRI SCIENTIST** wanted by the Department of Radiological Sciences, Deaconess Hospital. Candidates should have: • Experience with operation and pulse sequence programming of the Siemens Medical Systems Magnetom SP MRI unit; • Experience with FORTRAN, C and UNIX; • Familiarity with the standard MRI techniques currently used in clinical practice; • An interest in applying new MRI techniques in the clinical setting and supporting MRI physicians' clinical research; • A Ph.D. in physics, chemistry or related field; • Expertise in 3-D imaging and post-processing techniques. Deaconess Hospital's Department of Radiological Sciences currently has a whole-body imaging system: Siemens Magnetom 41SP (1.0T). This system will be upgraded to a Siemens 1.5T system by January 1995. Other equipment on site includes: a Bruker Biospec 4.7T, 30 cm bore imaging system and GN300 spectrometer. *Deaconess Hospital is an Affirmative Action and Equal Opportunity Employer.* Send curriculum vitae to: **Melvin E. Clouse, M.D., Department of Radiological Sciences, Deaconess Hospital, 185 Pilgrim Road, Boston, MA 02215.**

**BIOCHEMIST.** Temple University School of Medicine is seeking a Biochemist to join a research group studying protein interactions in the early stages of blood coagulation. Applicants should have a Ph.D. in Biochemistry with at least 3 years of postdoctoral experience in protein chemistry, including purification, characterization, kinetics and selected physical methods. Familiarity with HPLC, immunochemical methods and molecular biological methods desirable.

This is a non-tenured faculty position with full benefits and the rank of **RESEARCH ASSISTANT PROFESSOR.** Send curriculum vitae and 3 references to: **Robert W. Colman, M.D., Director, Thrombosis Research Center, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140.** *Temple University is an Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.*

## POSITIONS OPEN

### MACROMOLECULAR X-RAY CRYSTALLOGRAPHER

The Institute for Cancer Research, Fox Chase Cancer Center (FCCC), has a long and distinguished history in the forefront of X-ray crystallography. FCCC is looking to expand its efforts in macromolecular crystallography with the addition of a tenure-track independent investigator interested in applying the technique of X-ray crystallography to questions of macromolecular structure. FCCC will provide generous start-up funds. Please send curriculum vitae, a brief description of research plans, and the names of three professional references to: **J. P. Glusker, Chair, X-ray Crystallography Search Committee, ICR/FCCC, 7701 Burholme Avenue, Philadelphia, PA 19111.** Applications will be accepted until November 10, 1993, or such time as the position is filled.

### BIOLOGIST

Full-time tenure-track biologist sought for September 1994 to join a faculty of five in an undergraduate department. Teaching will include vertebrate anatomy and embryology. Research with undergraduates and advising of pre-health students expected. Area of specialization may include endocrinology, neurobiology, immunobiology, or developmental biology. Ph.D. required. Applications should include curriculum vitae, a letter indicating interest and skills in teaching, a statement of research activities, and the names and addresses of three references. Applications must arrive by 4:00 p.m., November 1, 1993. Send applications to: **Dr. James Malcolm, Department of Biology, University of Redlands, P.O. Box 3080, Redlands, CA 92373-0999.** The University of Redlands is a private, liberal arts university. The College of Arts and Sciences, in which this position exists, enrolls 1500 undergraduates. The University lies between Los Angeles and Palm Springs. *The University of Redlands is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

### MOLECULAR GENETICIST

The Department of Biology at Occidental College invites applications for a tenure-track position for a Molecular Geneticist. Applicants should have a strong commitment to teaching at the undergraduate level and to research. The successful candidate will normally teach courses in genetics and biochemistry. s/he is expected to develop a rigorous research program involving undergraduates. The exact area of research is open. The new faculty member will have the opportunity to participate in the Cell and Molecular Biology Emphasis and to be involved in the interdisciplinary Biochemistry major. Occidental College is a selective, small liberal arts college with excellent research and teaching facilities, located in Los Angeles. It is also a nationally recognized leader in multicultural education. Send curriculum vitae, statement of your research and teaching interests, copies of significant publications, and arrange to have three letters of reference sent, by December 1, 1993, to: **Dr. Roberta Pollock, Department of Biology, Occidental College, 1600 Campus Road, Los Angeles, CA 90041.** *Occidental College is an Equal Opportunity/Affirmative Action Employer. Women and people of color are particularly encouraged to apply.*

### UNIVERSITY OF CALIFORNIA, SAN FRANCISCO DEPARTMENT OF DERMATOLOGY

Applications are now being accepted for an **ASSISTANT RESEARCH BIOCHEMIST.** Qualifications: Ph.D. with skills in electron microscopy and immunolocalization methods, particularly immunoelectron microscopy. Prior experience working with skin/epidermis and with *in situ* hybridization is desirable, but not necessary. Prior technical experience is a prerequisite; extensive prior work experience is not. **Responsibilities:** Duties include supervision of the Morphology Core Facility of an NIH-funded program project with possible role as co-investigator on another NIH-funded grant, as skills and interests dictate. **Salary:** Negotiable. **Contact:** Please forward applications to: **Bruce U. Wintroub, M.D., Chairman, Department of Dermatology, University of California, San Francisco, CA 94143-1214** by October 31, 1993. *The University of California is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

## POSITIONS OPEN

**BIOCHEMIST.** The Chemistry Department of Williams College invites applications for a temporary (one-semester) position in biochemistry for spring 1994. The teaching responsibilities involve a senior seminar course on biochemistry (to review current literature in biochemistry and molecular biology) and the supervision of two introductory chemistry laboratory sections. Candidates should have a Ph.D. or be completing dissertation in biochemistry or related areas. The minimum salary for the position is \$16,000. Williams College is a highly selective, coeducational liberal arts institution of approximately 230 faculty and 2000 undergraduates, located in northwestern Massachusetts. The Chemistry Department, with ten faculty members and 25 to 35 majors each year, is accredited by the ACS and has excellent facilities for teaching and research. Send résumé, undergraduate and graduate transcripts, and two letters of recommendation to: **Dr. Charles Lovett, Jr., Department of Chemistry, Williams College, Williamstown, MA 01267,** by November 23, 1993. *As an Affirmative Action/Equal Opportunity Employer, Williams College is especially interested in identifying minority and women candidates.*

### RESEARCH TECHNICIAN

Mayo Clinic Jacksonville's Alzheimer's disease research group is seeking a research technician with laboratory experience using molecular biological and/or pharmacological approaches in studies of the brain. Ongoing projects include studies of muscarinic receptor function, development of therapeutic anticholinesterases and gene expression in aging central cholinergic systems. A Master's-level degree or a Bachelor's degree with several years of research experience in a relevant field is required.

Mayo provides a competitive salary and an excellent benefits package. Qualified individuals should forward their résumés to: **Dr. M. McKinney, Ph.D., Department of Pharmacology, Mayo Clinic Jacksonville, 4500 San Pablo Road, Jacksonville, FL 32224.**

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### CELL SCIENTIST

KRUG Life Sciences Biotechnology Laboratory at the NASA Johnson Space Center is seeking to fill a Ph.D.- or M.D.-level position to lead comparative ground-based and microgravity-based cell-culture studies. The successful applicant will possess at least ten (10) years of experience with mammalian cell-culture technique, a solid background in molecular biology, and experience with cell differentiation, cell-surface receptors, protein biochemistry, and cell interactions. The applicant's research must directly complement the existing strengths of the laboratory, which include applying state-of-the-art molecular-biology techniques to the study of cell function and structure in two and three dimensional cultures. Preference will be given to applicants who have sustained productive research in an industrial or academic tissue-engineering program. Experience with bioreactors and lab supervision are desirable.

Please send curriculum vitae, a description of career goals and research objective, the names of three references and a salary history, indicating **POSITION #93-123-10**, to: **KRUG Life Sciences Inc., Human Resource Department, P.O. Box 58827, Houston, TX 77258-8827.** *Employment Eligibility Verification Required. Equal Opportunity Employer, M/F/H/V. Smoke-free workplace.*

## ANNOUNCEMENTS

**REQUEST FOR REVIEWERS—LAKE MICHIGAN MASS BALANCE STUDY.** The U.S. Environmental Protection Agency, Great Lakes National Program Office (GLNPO), will conduct a mass balance study for several toxic contaminants in the Lake Michigan basin in 1994. A draft work plan for the study addresses areas of monitoring and research in: contaminant loads (tributaries and atmosphere), sediment, water column contaminant measurements, food web dynamics, and modelling. Interested scientists are invited to review and comment on the workplan by November 15, 1993. To receive a copy for review, contact: **Mr. Wade Jacobson, U.S. Environmental Protection Agency, Great Lakes National Program Office GS-9J, 77 West Jackson Boulevard, Chicago, IL 60604.** (FAX: 312-353-2018, Attention: Wade Jacobson).

# DIRECTOR OF THE MRC CELLULAR IMMUNOLOGY UNIT

The MRC wishes to appoint a scientist with a distinguished research record to the position of Director at the MRC Cellular Immunology Unit which is located within the Sir William Dunn School of Pathology in Oxford. He or she will be responsible for providing leadership and strategic direction to the staff of the Unit, as well as directing his or her own research team.

The Unit has a distinguished record. It was created and first directed by Sir James Gowans FRS who on his retirement was succeeded by Dr Alan Williams FRS. The existing research programme focuses on lymphocytes, their cell surface structures, differentiation and functions. Immunology is a particular strength in Oxford and the applicant will be expected to build upon existing research interests in the Unit as well as developing key interactions and collaborations with the broader scientific community.

The new Director will be responsible to the MRC for Unit staff and the

allocation of resources within the Unit, in accordance with Council policies and the outcome of peer review.

The salary will be negotiable in the range for Council's Special Appointments (equivalent to UK University professorial salaries). In addition, assistance with the costs of relocation will be available.

A job description and other additional information may be obtained from Dr Jane Frew at MRC Headquarters Office, 20 Park Crescent, London W1N 4AL. Telephone 071-636 5422, ext 6284.

Applications should consist of outline proposals for the strategic direction of the work of the Unit and brief future proposals for the applicant's own research, together with a curriculum vitae, an up-to-date publications list and the names of three referees. These should be sent, no later than 10 December 1993 to Sir Dai Rees, Secretary to the Council at the above address



*An Equal Opportunities Employer.*

## CHAIR

Department of Biology and Biotechnology  
Worcester Polytechnic Institute  
Worcester, Massachusetts

Worcester Polytechnic Institute is seeking applications and nominations for the position of Professor and Chair of the Department of Biology and Biotechnology. WPI is a recognized leader in Biotechnology education with strong ties to the Massachusetts Biotechnology Park in Worcester, and the biotechnology industry in New England. Applicants for this position are expected to have a commitment to undergraduate education and an outstanding record of achievement relevant to Biology and Biotechnology education and research. Research in the department addresses both basic and applied problems in Biology. The successful candidate will lead a growing department of 9 faculty members, 220 undergraduates, and 38 graduate students, and be committed to maintaining and enhancing our nationally recognized and comprehensive undergraduate programs, an in further developing our evolving graduate programs in biology and biotechnology. Minimum qualifications include a Ph.D. in any field of Biology/Biotechnology or Bioengineering and a distinguished record of achievement both in education and funded research with demonstrated leadership abilities. A salary and benefit package will be commensurate with qualifications and experience.

Applicants should provide full curriculum vitae, along with names and addresses of three references. Applications should be sent in confidence to: Search Committee for Biology & Biotechnology, Office of the Provost, Worcester Polytechnic Institute, Worcester, MA 01609. Consideration of applicants will begin immediately and will continue until a suitable candidate is found.

WPI is an Equal Opportunity/Affirmative Action Employer. Women and Minorities are Encouraged to Apply.



Faculty Positions  
Department of  
Biological Sciences  
Southern Methodist  
University

Applications are invited for two tenure-track positions at the ASSISTANT PROFESSOR level to begin Fall 1994. Applicants should have significant post-doctoral experience. Preference will be given to candidates whose research interest complement existing departmental strengths in molecular and cellular biology. Successful candidates will be expected to establish extramurally funded research programs and to supervise the training of doctoral students.

**Position 1.** We are seeking applicants with expertise in Molecular Biology and Biochemistry. Individuals working with microbial eukaryotic organisms are encouraged to apply. Primary teaching responsibilities will be in microbiology or biochemistry at the advanced undergraduate/graduate level.

**Position 2.** We are seeking applicants with expertise in the general area of Molecular or Cellular Biology, although the topic of research interest is flexible. Primary teaching responsibilities will consist of an introductory biology course with a large component of organismal and evolutionary biology, and ecology. This position is designated as **The James Trustee Endowed Assistant Professorship**.

Applications consisting of curriculum vitae, statement of research interests, sample reprints and the names of three references should be forwarded to: Faculty Search Committee, Position 1 or 2, Department of Biological Sciences, 220 Fondren Science Building, Southern Methodist University, Dallas, Texas 75275. The closing date is December 15, 1993.

Southern Methodist University is an Equal Opportunity/Title IX/Affirmative Action Employer.

## CHAIR Biochemistry and Biophysics

Iowa State University is committed to the growth of its programs in the biological sciences with the Department of Biochemistry and Biophysics in a leadership role. Recent major investments in a new Molecular Biology Building, state-of-the-art instrumentation and new faculty have created a stimulating research environment. The Department strives for prominence in research, as evidenced by strong extramural funding of its faculty, and excellence in teaching at both the undergraduate and graduate levels. The Department administers B.S., M.S. and Ph.D. programs in biochemistry and biophysics, and participates in several interdepartmental graduate programs.

Applications and nominations are invited for the position of Chair, Department of Biochemistry and Biophysics, Iowa State University. The successful candidate is expected, and will be provided with the means, to promote the national and international stature of the Department. The candidate of choice must have an active, well-funded program of research, a distinguished record of scholarly contributions, and experience in teaching, as well as proven skills in leadership.

Applications and nominations will be received until the opening is filled, but the screening process will begin in January. Applications with curriculum vitae and the names and addresses of three or more references should be sent to: **Dr. Duane Enger, Chair, Search Committee, Department of Biochemistry and Biophysics, Molecular Biology Building, Rm 1210, Iowa State University, Ames, IA 50011, Telephone (515) 294-0320.**

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**12 November 1993 Issue**  
**Cover Story in SCIENCE**

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**Space Reservation Deadline: Tuesday, October 26**



### **Pre- and Post- Doctoral Education and Training in Molecular Virology at the University of Kentucky**

The University of Kentucky announces a program of interdisciplinary graduate and postdoctoral education and research in molecular virology. This program provides a unique opportunity for formal instruction and research training in plant, animal, and insect virology. Participating faculty and their research interests include:

George Allen: T-lymphocyte recognition of equine herpesvirus antigens  
Thomas Chambers: Equine influenza virus  
Sunit Chatterjee: Vaccinia vectors for gene therapy  
Donald Cohen: Mechanisms of immunodeficiency in murine AIDS  
Peter Crooks: Design, synthesis, and evaluation of antiviral compounds  
Said Ghabrial: Molecular biology of satellite RNAs of plant and fungal viruses  
Arthur Hunt: Genetic engineering of virus resistance in plants  
Charles Issel: Persistence and control of the equine lentivirus  
Patricia Klein: RNA recombination in virus-infected transgenic plants  
Robert Jacobs: Molecular pathogenesis of herpes virus infections  
Judy Lesnaw: Mechanisms of RNA replication by negative-strand RNA viruses  
William McCollum: Equine virology  
Craig Miller: Early events in herpes virus latency  
Tom Pirone: Plant viral genes that regulate insect transmission  
John Shaw: Replication and pathogenesis of plus sense RNA plant viruses  
Robert Shepherd: Molecular biology of caulimoviruses  
Peter Timoney: Mechanisms of persistence of equine arteritis virus  
Mary Lynn Vickers: Diagnostic veterinary virology  
Steve Zimmer: Viral transformation and adenovirus vectors for gene therapy

For more information and application materials, contact:

Dr. Arthur G. Hunt  
Department of Agronomy  
University of Kentucky  
Lexington, KY 40546-0091  
Tel: (606) 257-3637  
Fax: (606) 258-1952

### **UNIVERSITY OF ILLINOIS AT CHICAGO OFFICE OF THE VICE CHANCELLOR FOR RESEARCH**

#### **Associate Director**

The Office of the Vice Chancellor for Research (OVCR) at the University of Illinois at Chicago (UIC) seeks candidates for an Associate Director reporting to the Director, Office of Research Services. This position is responsible for the oversight of a staff of five program coordinators responsible for proposal development. Major responsibilities include: Planning and implementing campus research developments programs across all disciplines, targeting own research development efforts within the College of Medicine; increasing federal, state, and corporate support for faculty research projects; developing and maintaining networks of contact within sponsoring organizations for the purpose of cultivating and expanding potential funding sources; and marketing research proposals to potential sponsors.

Candidates must have a demonstrated ability to work and communicate with faculty. A minimum of three years experience in program and proposal development and/or program and project management is required; experience in acquiring research funding from federal government, industry and foundations for a College of Medicine is highly desirable. Candidates must possess a master's degree preferably in a life science, a Ph.D. is preferred.

To ensure full consideration, send a cover letter, complete resume, and the names and addresses of five references by November 15, 1993 to:

Ms. Donna J. Debelak, Search Coordinator  
Office of the Vice Chancellor for Research (M/C 672)  
University of Illinois at Chicago  
1737 W. Polk Street, 310 AOB  
Chicago, IL 60612

*The University of Illinois is an Affirmative Action/  
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**Wayne State University**

### **Chair, Department of Biological Sciences**

Wayne State University invites applications for the position of Professor and Chair of the Department of Biological Sciences in the newly formed College of Science. There are currently 26 faculty members in the Department and at least six additional full-time appointments are anticipated. Over 160 graduate students are enrolled in the Ph.D. and M.S. programs in Biological Sciences and in the M.S. program in Molecular Biotechnology. The Department is housed in over 65,000 square feet of research space, including a recently completed six story research building. There are strong ties between the Department and the Wayne State University School of Medicine and the new interdisciplinary Center for Molecular Medicine and Genetics. Wayne State University, located in Detroit's Cultural Center, is an urban research University serving 34,000 students.

We seek an academic leader to enhance the research and teaching programs of the Department. Candidates should have a distinguished record of scholarly activity, an internationally recognized research program, and a strong commitment to graduate and undergraduate education in the life sciences. The incoming chair will have an exceptional opportunity to enhance significantly the research and teaching programs of the Department. In order to be assured of full consideration, applications should be received by December 15, 1993. Letters of application, curriculum vitae, and names of at least 4 references should be sent to:

Professor Robert H. Rownd, Chair  
Biological Sciences Chair Search Committee  
1360 Biological Sciences Building  
Wayne State University, Detroit, MI 48202

*Wayne State University is an Equal Opportunity/  
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### **Director and Professor Department of Biology Kansas State University**

The Division of Biology seeks applications and nominations for an individual to lead a dynamic teaching and research unit. The Division, a unit of the College of Arts and Sciences, has 60 faculty/staff, 62 graduate students, 36 postdoctoral researchers, 17 support staff, and over 500 undergraduate majors. Undergraduate degrees are offered in Biology, Microbiology, and Fisheries and Wildlife. The Division is organized into five sections (Genetics, Developmental and Cell Biology, Microbiology and Immunology, Physiology, Systematics and Ecology, and Virology and Oncology) and includes several major research units. Extensive extramural funding and the Kansas Agricultural Experiment Station support a strong research program at the M.S., Ph.D., and postdoctoral level.

The Director will be responsible for the administrative leadership and future development in research, instruction, and service of the Division. In addition to evidence of administrative ability, essential qualifications include a record of outstanding accomplishment in research and instruction commensurate with the rank of Professor and commitment to the goals of Affirmative Action. Candidates should submit a statement of experience (including that pertaining to the breadth of disciplines in the Division) and career goals, and curriculum vitae, and the names, addresses, telephone and FAX numbers of five persons capable of providing information on the applicant's qualifications. Applications or nominations should be addressed to Dr. O.J. Reichman, Biology Directorship Search Committee, c/o Dean of Arts and Sciences, Eisenhower Hall, Kansas State University, Manhattan, KS 66506-1005. Evaluation of applications will begin December 20, 1993.

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#### **Division of Cancer Biology Department of Radiation Oncology**

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The Division of Cancer Biology is a newly established research unit and is well equipped with centralized state-of-the-art core resources for conducting molecular biological, biochemical, and radiation biology research.

Interested applicants should send their curriculum vitae and the names and addresses of three references to the appropriate investigators at the following address:

Division of Cancer Biology  
Department of Radiation Oncology  
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