

1992-93

AAAS Fellowships for Scientists and Engineers

Congressional

AAAS Congressional Science & Engineering Fellows Program

Fellows spend one year on Capitol Hill working with Members of Congress or congressional committees as special assistants in legislative and policy areas requiring scientific and technical input. Two fellowships will be offered, with annual stipends of \$38,000.

Executive Branch

AAAS-Sloan Executive Branch Science & Engineering Fellows Program

Fellows work in the White House Office of Science and Technology Policy, for one or two years, providing expertise in industrial R&D, technology transfer, international competitiveness, and related issues. One or two Fellows will be selected. Applications are invited from candidates with a minimum of five years industrial experience, through mid-level and senior executives. Stipends are negotiable, depending on qualifications and experience. Applicants must be U.S. citizens.

Diplomacy

AAAS Science, Engineering, & Diplomacy Fellows Program

Fellows work in international affairs on scientific and technical subjects for one year, either in foreign policy at the U.S. Department of State or in international development for the U.S. Agency for International Development. Approximately 12 Fellows will be selected. The annual stipend varies with experience, starting at approximately \$38,000. Applicants must be U.S. citizens.

Environmental

AAAS Environmental Science & Engineering Fellows Program

Fellows work as special research consultants with the Office of Research and Development of the U.S. Environmental Protection Agency for 10 weeks in the summer. The detailed, future-oriented research assists ORD in assessing the significance of long-range environmental problems. The stipend is \$900 a week. Applicants must be permanent residents of the U.S. Ten Fellows will be selected.

Applicants should be postdoctoral to midcareer scientists and engineers, from any physical, biological, or social science or any field of engineering. The programs are designed to provide each Fellow with a unique public policy learning experience; to make practical contributions to the more effective use of scientific and technical knowledge in the U.S. government; and to demonstrate the value of science and technology in solving important societal problems. All Fellows participate in a rigorous orientation on the relevant congressional and executive branch operations and foreign affairs plus a year-long seminar series on issues involving science, technology, and public policy. The Congressional, Diplomacy, and Executive Branch programs begin in September 1992 (application deadline January 15), and the Environmental program begins in June (application deadline February 15). For additional program information and application instructions, write:

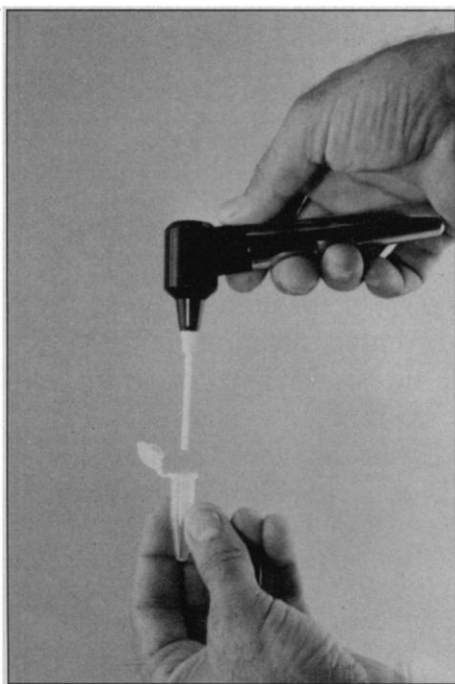
**Fellowship Programs/Directorate for Science and Policy Programs
American Association for the Advancement of Science
1333 H Street, NW, Washington, DC 20005 202/326-6600**

Ligand Binding Software

BINDING ANALYST is a program family for the analysis of equilibrium binding of ligands to macromolecules, cells, and cellular components. Analysis of data is done by nonlinear regression with options for multiple classes of sites using either the Scatchard or Adair equation. The program is user friendly with help screens, entry cutting, data verification, and error trapping. Rose Scientific. Circle 333.

Microtube Mixer

The BioVortexer microtube mixer and pellet disperser mixes samples in microcentrifuge tubes in seconds. Centrifugal



pellets, precipitates, and other solids can be rapidly dispersed by a combination of vigorous mechanical and vortex action. Cross-contamination is avoided through the use of throwaway polypropylene stirring tubes. Midwest Scientific. Circle 334.

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

Oligonucleotide Purification Kit

Oligoclean provides an inexpensive alternative to high-performance liquid chromatography methods of oligonucleotide purification. It removes protecting groups from synthetic oligonucleotides in as little as 45 min. No sample preparation is required, and recovered oligonucleotides are ready for use without additional handling. United States Biochemical. Circle 335.

Miniature Materials Tester

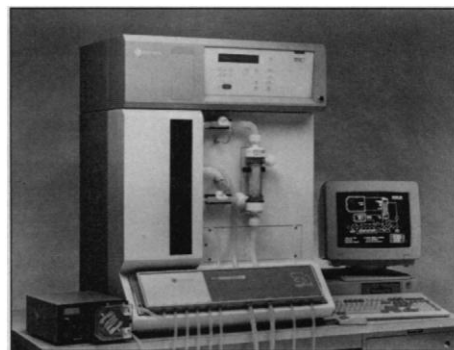
The Vitrodyne V-200 is a tabletop biomaterials tester for characterizing physical properties of lightweight natural and synthetic materials in ranges not previously accessible with conventional testing apparatus. Applications include determination of stiffness and elastic modulus of catheters, polymer fibers and artificial tissues in vitro; tensile strength of contact lens hydrogels, skin, and corneal explants; spring rate of intraocular lens fibers; thickness of viscoelastic tissues such as pericardium and skin; and flexural properties of sensor leads, small surgical plastic devices, and sections of bone and tooth. Liveco. Circle 336.

Anti-Virus Software

D-FENCE is a memory-resident utility that prevents the use of unauthorized floppy disks, thereby greatly reducing the chance of virus infections from outside. It acts as a security guard, allowing only "company" disks to be used on personal computers, while still permitting normal exchange of disks within the company. Unlike conventional control packages, D-FENCE does not interfere with normal operation of the computer. Sophos Ltd. Circle 337.

Automated Cell and Protein Separations

The TRIO Clarifier is an automated, self-contained microfiltration system that performs cell and protein separations from cell culture supernatant and other feed streams. Featuring sanitizable hollow-fiber microfiltration membrane modules, the system allows rapid process development and pilot-scale production in a variety of separation applications, including cell washing, perfusion, and cell harvesting. Product recovery is enhanced via automated diafiltration. The system can be adapted to



membrane purification or column chromatography by changing the tubing cassette, software, and membrane module. Sepracor. Circle 338.

Monoclonal Antibodies

The Integri-T $\beta 1$ Integrin is the first monoclonal antibody (MAb) in a new line. This murine MAb binds to the human CD29 ($\beta 1$ chain) complex of the integrin $\alpha\beta$ heterodimer. It can be used in flow cytometry; immunoprecipitation procedures; and immunochemical staining of live, fixed, and frozen cells. T Cell Diagnostics. Circle 339.

The Silenus line of flow cytometry MAbs are for use in a range of lymphocyte and myeloid investigations. Accurate Chemical & Scientific Corp. Circle 340.

Literature

Microdialysis is a brochure that describes this technique and provides information on instruments. CMA/Microdialysis AB. Circle 341.

Made to Measure is a six-page catalog with the specifications, benefits, and applications of a series of spectrometers. SPEX Industries. Circle 342.

1991-1992 Products and Services Catalog contains information on lasers and laser applications. Laser Institute of America. Circle 343.

Softube Fittings details a line of connectors for soft-walled tubing. Colder Products Co. Circle 344.

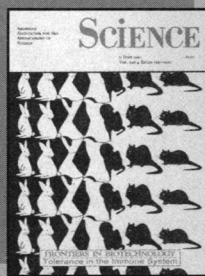
Macintosh Data Acquisition and Instrument Control Products is a six-page brochure. National Instruments. Circle 35.

The Power of Microplate Analysis is a wall chart loaded with ideas and references on the microplate reader as an analytical tool. Bio-Rad Laboratories. Circle 346.

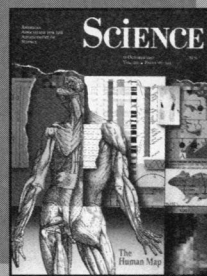
Light and Electron Microscopy is a brochure that lists chemicals, fixatives, stains, markers, embedding media, and other reagents for this field. Polysciences. Circle 347.



P-15



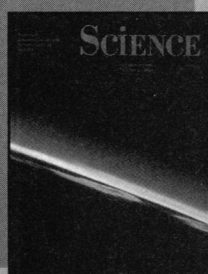
P-14



P-13



P-12



P-11



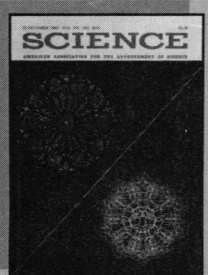
P-10



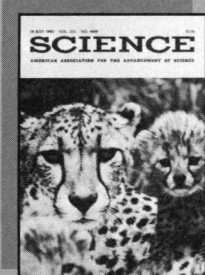
P-09



P-06



P-05



P-03

Choose from a selection of 10 stunning SCIENCE covers for you, your friends, and family. Mail in your order today for fast delivery.

Poster Your Walls with SCIENCE

ITEM	DESCRIPTION	ISSUE DATE	SIZE	QTY
P-15	Landsat Image of Eastern Mojave Desert	25 May 1990	18" X 24"	
P-14	Tolerance in the Immune System	15 June 1990	18" X 24"	
P-13	The Human Map	12 October 1990	18" X 24"	
P-12	Pistil and Stamen from Snapdragon	16 November 1990	18" X 24"	
P-11	Atmospheric Layering on Earth's Edge	10 February 1989	18" X 24"	
P-10	Caterpillar/You Are What You Eat	3 February 1989	18" X 24"	
P-09	Moons of Uranus	9 September 1988	18" X 24"	
P-06	Neurons in Motor Cortex	26 September 1986	18" X 24"	
P-05	Cathedral Window/DNA Molecule	23 December 1983	18" X 24"	
P-03	Cheetah and Cub	29 July 1983	18" X 24"	

METHOD OF PAYMENT

☐ Visa ☐ MasterCard ☐ Check enclosed

Card # _____ Exp. _____

Total number ordered @ \$7.95

Subtotal (please add \$4.00 for postage **per order**)

Tax: California residents only
add applicable sales tax

Total

ORDERED BY

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Due to popular demand, the SCIENCE cover posters are back. These beautiful, full-color reproductions are suitable for framing, and the sturdy mailing tube keeps them crease-free during shipment. Buy them to hang in your office or your home. They make great gifts too.

Only \$7.95 plus postage.

MAIL TO:
AAAS Books, Dept. 8
P.O. Box 753
Waldorf, MD 20604

Science

PERSONNEL PLACEMENT

LINE CLASSIFIED ADVERTISEMENTS

- **Deadlines:** Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* is published each Friday, except the last Friday of the year. Advertisements must be submitted in writing.
- **How to Submit a Classified Ad:** Prepare double-spaced typewritten copy. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Deadline for applications stated in ad must be at least 2 weeks after date of publication. Include billing information, and desired publication date.
- **Mail or FAX materials to:**
Science Classified Advertising
 1333 H Street, N.W., Room 940
 Washington, DC 20005
 Telephone: 202-326-6555
 FAX: 202-682-0816
- **Rates:** Ads are \$41 per line; \$410 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces. A 3% cash discount is granted to all prepaid ads. If you would like *Science* to give estimated cost, indicate on letter.
- **Ads from Outside the U.S.:** Prepayment made in U.S. dollars by checks drawn on U.S. banks is required.
- **Credit Cards:** *Science* accepts MasterCard and VISA. Discount does not apply to credit cards.
- **Cancellations:** Deadline for cancellation is 10 a.m., Tuesday, 10 days prior to issue date.

DISPLAY PERSONNEL ADVERTISEMENTS

For rates and information about fractional display ads (all ads 1/2 page and larger) and all Marketplace listings, contact:
 Daniel Moran
Science Classified Advertising
 Telephone: 202-326-6541
 FAX: 202-682-0816

CONDITIONS: Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap or sexual preference. The AAAS encourages employers to actively recruit and employ underrepresented minority groups. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it.

POSITIONS OPEN

ASSISTANT PROFESSOR BIOCHEMISTRY

A tenure-track position in biochemistry is available at Brown University beginning 1 July 1992. Candidates with outstanding research and teaching ability in the area of the biochemistry of gene expression/regulation are encouraged to apply. Applicants must have a Ph.D. or M.D. and a minimum of 2 years of postdoctoral experience. The successful candidate will be expected to develop a competitive research program and contribute to undergraduate and graduate instruction in biochemistry. Research opportunities at Brown include participation in a graduate program in molecular, cell biology, and biochemistry and an interdisciplinary program in biochemistry, administered jointly with the Department of Chemistry. Applicants should forward curriculum vitae, summary of research interests, and three letters of recommendation by 1 January 1992 to: **Dr. John Biggins, Section of Biochemistry, Box G-J261, Brown University, Providence, RI 02912.**

Telephone #401-863-2540
 E Mail ME599001 @ Brown VM

Brown University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN BIOCHEMISTRY.

The Biochemistry Division of the Department of Chemistry of Purdue University invites applications for a tenure-track position at the ASSISTANT PROFESSOR level. Candidates should have a doctoral degree and postdoctoral experience in a contemporary field of biochemistry, and should demonstrate exceptional promise in research and teaching. Applications including (1) curriculum vitae, (2) names, addresses and telephone numbers of three to five references, (3) a description of current research activities, and (4) a statement of future research interests should be sent to: **Professor Harry Morrison, Attention: Biochemistry Faculty Search Committee, Department of Chemistry, Purdue University, West Lafayette, IN 47907-1393.** Applications will be accepted until 15 December 1991 or until a qualified candidate is found. *Purdue University is an Affirmative Action/Equal Opportunity Employer.*

BIOLOGY FACULTY. Full-time, tenure-track ASSISTANT PROFESSOR faculty position in botany/plant physiology beginning September 1992. Individual to teach plant physiology, general botany, introduction to environmental science, ecosystem ecology as needed, and introductory biology to nonmajors. Candidate will be assigned advises in the environmental science program. College teaching experience and Ph.D. required. Applications will be considered after résumé, three letters of recommendation, and official transcripts have been received. Send to: **Dr. Anne E. K. Zayaitz, Chairperson of the Search Committee, Biology Department, Kutztown University, Kutztown, PA 19530.** *Kutztown University is an Affirmative Action/Equal Opportunity Employer and actively solicits applications from qualified minority applicants.* Last date for receiving completed applications is 31 December 1991.

SPELMAN COLLEGE TENURE-TRACK POSITIONS

Spelman College invites applications for the tenure-track positions listed below for the 1992-93 academic year beginning August 1992. Founded in 1881, Spelman College is a private 4-year liberal arts college located in Atlanta, Georgia. The oldest predominantly black college for women in the United States, Spelman is a member of the Atlanta University Center.

Spelman College seeks faculty dedicated to excellence in teaching. Competitive salaries and an excellent fringe benefits program are available.

BIOLOGY ASSISTANT PROFESSOR with specialty in neurobiology. Responsibilities include teaching courses in general biology as well as neurobiology, and carrying on research that involves undergraduates. Ph.D. required; postdoctoral experience desired. **ASSISTANT PROFESSOR** with specialty in molecular genetics. Responsibilities include teaching courses in general biology as well as molecular genetics and carrying on research that involves undergraduates. Ph.D. required; postdoctoral experience desired.

Send letter of application, curriculum vitae and statement of research interests to: **Dr. Rena T. Jones, Chair, Department of Biology, Spelman College, Box 264, 350 Spelman Lane S.W., Atlanta, GA 30314.**

Spelman College is an Equal Opportunity, Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR

The Department of Biology of Queens College of the City University of New York is seeking applications for a full-time, tenure-track position to begin in fall 1992. Applicants must have a Ph.D., appropriate postdoctoral training, and demonstrated ability to establish a strong independent research program in immunology or related fields. Competitive salary (\$30,078 to \$49,026, commensurate with qualifications and experience) and start-up funds are available. The department has excellent laboratory space in a new building provided with high-level core equipment and animal facilities. Queens College offers a stimulating scientific environment and is committed to high quality research and teaching. Participation in both undergraduate and Ph.D. level programs is expected.

Candidates should submit curriculum vitae and request that three letters of recommendation be sent to the Search Committee. A summary of present and future research interests is also required. Applications will be accepted until 3 January 1992 and should be sent to: **Dr. Corinne Michels, Chair of Search Committee, Department of Biology, Queens College of CUNY, 65-30 Kissena Boulevard, Flushing, NY 11367.**

Queens College/CUNY is an Affirmative Action/Equal Opportunity Employer. Women, minorities and disabled individuals are encouraged to apply.

Connecticut College will be making **TWO TENURE-TRACK FACULTY APPOINTMENTS** starting in 1992-93, one each in the Departments of Botany and Zoology. Both positions will be filled at the ASSISTANT PROFESSOR level.

(1) The botany position is in cell biology/plant development/electron microscopy. Course responsibilities include cell biology; plant structure and development; electron microscopy; and participation in general botany.

(2) The zoology position is in molecular biology. Research interests may emphasize either prokaryotic or eukaryotic organisms. Course responsibilities include molecular biology; a course in one's area of interest; and participation in general zoology.

Each department has five regular faculty and a laboratory instructor. The two departments share modern research and teaching facilities, including a new Zeiss EM 109A TEM/SEM and a well-equipped molecular biology laboratory. Teaching and research are considered mutually supportive and faculty are expected to sustain active research programs involving undergraduates.

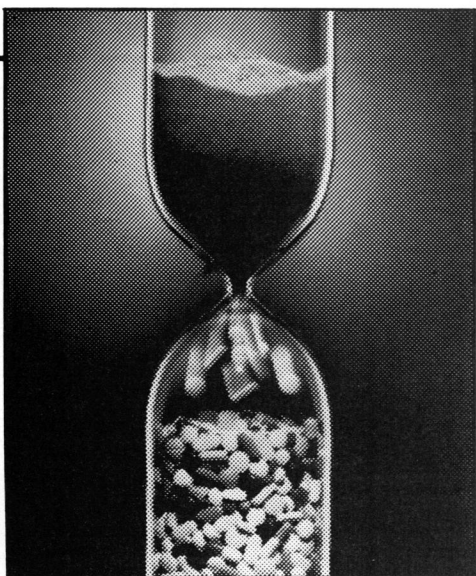
Connecticut College is a highly selective, coeducational, private liberal arts college enrolling about 1600 undergraduates. Faculty normally teach five courses per year; each laboratory section counts as a course. Untenured faculty on full-time appointments receive funding for summer and other research.

Applicants should submit curriculum vitae and a statement of teaching and research interests, and should arrange for three letters of reference. The deadline is 2 January 1991. Address for Botany Department position is **Dr. William A. Niering, Box 5511, Connecticut College, 270 Mohegan Avenue, New London, CT 06320-4196;** for the Zoology Department position, **Dr. Robert A. Askins, Box 5461, Connecticut College, 270 Mohegan Avenue, New London, CT 06320-4196.**

Connecticut College is an Affirmative Action/Equal Opportunity Employer and is actively seeking to increase the diversity of its faculty and staff.

ASSISTANT PROFESSOR POSITIONS

The University of Nevada, Reno (UNR) seeks two innovative faculty members to fill positions in animal physiological ecology and plant systematics. The successful candidates will be expected to develop nationally recognized, extramurally funded research programs, contribute to a new and rapidly growing interdisciplinary graduate program in ecology, evolution and conservation biology, and participate in undergraduate teaching. Ph.D. required, postdoctoral experience desirable. Research on taxa of desert and/or montane ecosystems desirable. Salaries commensurate with qualifications and experience. Application review will begin on 1 December 1991. Send letter outlining research and teaching interests and experience, current curriculum vitae and the names, addresses, and telephone numbers of at least three references to: **Dr. Peter F. Brussard, Chairman, Department of Biology, University of Nevada, Reno, NV 89557.** *UNR is an Equal Opportunity, Affirmative Action Employer.*



A TIME FOR ACHIEVEMENT

The recent opening of the Glaxo Inc. Girolami Research Institute, located in Research Triangle Park, North Carolina, represents our monumental commitment in the pharmaceutical industry to the discovery of drugs for unmet patient needs. Come to Glaxo Inc., one of the largest pharmaceutical firms in the U.S., and experience the challenges and accomplishments a future with us holds for you. The following opportunities are now available.

SENIOR SCIENTIST

The successful candidate will have a Ph.D. in Pharmacology, or a related discipline, with extensive experience in receptor biochemistry. Preference will be given to individuals with a strong background in receptor isolation, characterization and reconstitution.

Please refer to Job #9115B823-SC on all resumes.

ASSOCIATE SCIENTIST

The successful candidate will have a BS/MS in a Life Science with experience in cell/tissue culture, receptor binding techniques and biochemical assay development. Preference will be given to individuals with experience investigating intracellular messenger systems (phospholipases C and D and relevant products).

Please refer to Job #9115B818-SC on all resumes.

POSTDOCTORAL FELLOW

The successful candidate will have a Ph.D. in a Life Science with 0-2 years previous postdoctoral research experience and a keen interest in the general areas of receptors and cell signalling.

Please refer to Job #9115-SC on all resumes.

*The three above positions are available immediately and represent challenging opportunities for energetic and innovative scientists in the general areas of RECEPTOR RESEARCH and TRANSMEMBRANE SIGNALLING. These individuals will function as integral members of multi-faceted teams committed to the discovery and development of therapeutics.

TOXICOLOGISTS

Drug Safety Assessment (2 Openings)

While assisting Senior Toxicologists, the selected individuals will be responsible for the planning, execution, interpretation and reporting of general toxicology studies to include the monitoring of contracted safety assessment studies.

Candidates should possess a BS or MS Degree in Toxicology, or a related area, with 5-7 years relevant experience, to include a minimum of 3 years experience conducting GLP Toxicology studies in the pharmaceutical or contract industries.

Please refer to Job #8111X055/057- SC on all resumes.

HISTOLOGY LABORATORY SUPERVISOR

This exciting opening (B.A., H.T., H.T.L.) within our new histology laboratory will be responsible for setting up, managing and directing the laboratory for veterinary specimens. Duties will include establishing, meeting, and scheduling deadlines for routine toxicologic histology (paraffin, plastic and frozen section).

Background must include a BS in Medical Technology with 5-7 years GLP experience, preferably in an industrial or contract safety testing/toxicology laboratory situation, or an MS Degree with 3-5 years relevant experience. Certification by ASCP is required, along with experience in various special and standard stains and immunocytochemistry. Previous management experience is preferred.

Please refer to Job #8111B206-SC on all resumes.

POSTDOCTORAL FELLOW

Mass Spectrometry

As part of our continued commitment to excellence in scientific research, we have an established and successful program for a Postdoctoral Fellow in the area of Mass Spectrometry.

Experience in biopolymer mass spectrometry or protein biochemistry is desirable to study electrospray ionization mass spectrometry of proteins and glycoproteins. Instrumentation includes a Sciex API-III triple quadrupole and JEOL SX-102, double focusing sector mass spectrometer. We maintain a stimulating environment with an active seminar program and have strong interactions with neighboring universities. Publication of research results is strongly encouraged.

Please refer to Job #9141T703-SC on all resumes.

Join Glaxo and enjoy excellent salaries, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction. Equally appealing is our world famous scientific, industrial and academic community in Research Triangle Park, N.C.

Send your resume, including salary history and three references, INDICATING THE CORRESPONDING JOB #, to: Human Resources Department, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709. (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/H/V.

Glaxo Inc.

DEAN SCHOOL OF COMPUTER SCIENCE

Carnegie Mellon University invites qualified applications and nominations for the position of Dean of the School of Computer Science. The Dean is responsible for the administration and supervision of all aspects of the School, which includes PhD programs in Computer Science, Robotics, Algorithms Combinatorics & Optimization and Pure & Applied Logic. The School is home to the Robotics Institute, the Center for Machine Translation, the Information Technology Center, an undergraduate Computer Science program and a Masters program in Software Engineering. Research is actively pursued in an exceptionally broad range of areas including artificial intelligence, theory of computation, computer systems, programming systems, vision, manipulation and robotics. Carnegie Mellon and the School of Computer Science place special emphasis on basic research, interdisciplinary cooperation and the transfer of research technology to society at large.

Candidate must be a nationally recognized leader in Computer Science with a record of excellence in teaching and research and a proven record of administrative ability.

Nominations and applications will be accepted until January 1, 1992. Curriculum vitae should be sent to: Professor Merrick L. Furst, Chair of the Dean Search Committee, School of Computer Science, **CARNEGIE MELLON UNIVERSITY, 5000 Forbes Avenue, Pittsburgh, PA 15213-3890**. An Affirmative Action/Equal Opportunity Employer.

**Carnegie
Mellon**

Director of Pharmaceutical Development/Drug Delivery Research

ACCESS Pharmaceuticals, Inc. is seeking an outstanding hands-on scientist with extensive industrial product-development experience and research and management expertise to direct a growing group of formulations and analytical scientists engaged in developing novel sterile/aseptic parenteral dosage forms (initially, coated nanodispersions) and to conduct/lead ACCESS' related scientific and formulations research. This individual will direct and carry out the preparation of laboratory and pilot-scale formulations, direct the development of analytical methods, direct and carry out in-house research, coordinate collaborative studies, address regulatory issues, and help oversee technology transfer to manufacturing and clients.

This challenging position requires a Ph.D. in pharmaceuticals with strong scientific background in physical pharmacy and a preferred undergraduate degree in pharmacy, chemistry or biochemistry. Scientific and practical experience is required to address both new and standard issues in solid-dispersion formulation, small-particle and surface chemistry/analysis, stability testing, and regulatory interfaces related to sterile, parenteral products. Facility with computers is also needed. This individual should currently hold a position as Director of Development/Research or Group Leader with direct, senior managerial responsibility.

ACCESS Pharmaceuticals is a closely held corporation engaged in the development of leading-edge, non-antibody, non-liposome, hydrophilic formulations of therapeutic and diagnostic agents (Hydrosomes™) with improved ACCESS to target tissues and sites of disease. Send full resume with publications and references to: Dr. David Ranney, ACCESS Pharmaceuticals, Inc., 2600 N. Stemmons Frwy, Suite 210, Dallas, TX 75207. An equal opportunity employer. No agencies please.



ACCESS Pharmaceuticals, Inc.

POSITIONS OPEN

ASSISTANT PROFESSOR, BIOLOGY, Ohio University. Tenure-track position beginning fall 1992. We are looking for a broadly trained biologist to teach comparative vertebrate anatomy, a core course in the undergraduate biology curriculum. Other teaching will be required. Candidates must have a Ph.D. (postdoctoral experience preferred) and be able to maintain a fundable independent research program. Research area is open; we want to complement the existing breadth in a department of 45 faculty and 85 M.S./Ph.D. students. Minimum salary: \$34,000. Please send curriculum vitae, statement of research and teaching interests and three letters of recommendation by 31 December 1991 to: Jean Witkowski, Department of Biological Sciences, Ohio University, Athens, OH 45701.

BIOCHEMIST. Knox College invites applications for the new faculty position of biochemist at the **ASSISTANT PROFESSOR** rank with a joint appointment in biology and chemistry. It is funded by a Howard Hughes Medical Institute grant to Knox. The candidate is expected to teach introductory chemistry and biochemistry as well as upper-level biochemistry courses. Undergraduate research is an essential part of our program and the candidate will develop an undergraduate research program. Central to the expectations for this position will be to assist biology and chemistry to shape a new biochemistry major. A Ph.D. in biochemistry is required; some experience in cell tissue culture methods is preferred. The Biology and Chemistry Departments are renowned for the vigor of their programs, quality of the facilities, and extent of undergraduate research. The Chemistry Department is ACS certified. To apply send current curriculum vitae, transcripts, three letters of recommendation, and a description of a research program that could involve undergraduates to: **Robert Kooser, Director-Knox HHMI Program, K46, Knox College, Galesburg, IL 61401**. Knox College is an Affirmative Action/Equal Opportunity Employer. With its history of commitment to equal rights, Knox especially encourages women and minorities to apply. Application review begins in mid-December and continues until the position is filled.

ASSISTANT PROFESSOR

The Department of Anatomy and Cell Biology invites applications for a 12-month, tenure-track Assistant Professor position. The Ph.D. or M.D. degree is required as well as postdoctoral experience. The applicant will be expected to teach in the gross anatomy medical school course and preference will be given to those with prior teaching experience. The applicant will also be expected to maintain an independent research program with extramural support, and to participate in graduate education. Current research interests in the department include neuroscience, and developmental and molecular biology. Applicants should send curriculum vitae, a statement of research interests, and the names of three references to: Dr. Paulette Bernd, Department of Anatomy and Cell Biology, State University of New York Health Science Center at Brooklyn, 450 Clarkson Avenue, Box 5, Brooklyn, NY 11203. Equal Opportunity/Affirmative Action Employer. DMC #C0370.

BIOLOGIST

Hampden-Sydney College seeks to fill a tenure-track position at the **ASSISTANT PROFESSOR** level, to start in August 1992. Applicants must hold a Ph.D. in a biological science, should enjoy teaching a wide range of undergraduate biology courses, should have a commitment to liberal arts education, must be able to maintain a research program appropriate to a 4-year college, and will be expected to teach at least half of their hours at the introductory level. Hampden-Sydney College, located in rural south central Virginia, is the nation's tenth oldest institution of higher education. It is a selective liberal arts college for men with an enrollment of 970. The Department of Biology has five faculty members with specialties in: biochemistry and genetics; cell biology and development; invertebrate and evolutionary biology; microbiology and plant biology; and ecology and marine biology. The department graduates about 20 majors each year. Applicants should send curriculum vitae and three letters of recommendation to: Dr. Anne C. Lund, Chair of the Search Committee, Box 3, Department of Biology, Hampden-Sydney College, Hampden-Sydney, VA 23943. The application deadline is 16 December 1991. Hampden-Sydney is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION DEPARTMENT OF MOLECULAR BIOLOGY UNIVERSITY OF WYOMING

Applications are invited for a tenure-track faculty position in the department of molecular biology at the level of **ASSISTANT PROFESSOR**. We seek an individual with a strong experimental background in molecular biology whose research interests may include molecular aspects of microbial pathogenesis or virology. A number of other areas of research interests, however, could complement existing programs and aid the department's continuing development. The successful candidate will be expected to develop or transfer an active research program, be committed to excellence in teaching at the undergraduate and graduate levels, and to interact with other faculty in a vigorous research environment. Only applicants with a strong research record and the ability to develop extramurally supported research programs will be considered. The department has excellent facilities and is planning to add a number of new faculty during the next several years. Start-up funds are available and salary will be competitive. Laramie is located in the Rocky Mountains and affords easy access to a number of outdoor activities.

Screening of candidates will begin 2 January 1992. Applicants should submit curriculum vitae, bibliography, statement of research and teaching interests and plans, as well as have three letters of reference sent to: **Chairman, Department of Molecular Biology, University of Wyoming, Laramie, WY 82071-3944**. *The University of Wyoming is an Affirmative Action/Equal Opportunity Employer.*

PLANT PHYSIOLOGY THE OHIO STATE UNIVERSITY

This is a 9-month, tenure-track position at the **ASSISTANT PROFESSOR** level. Postdoctoral experience is expected. The successful applicant shall develop a modern, externally funded research program, direct graduate students, and teach at the advanced and introductory levels. Send curriculum vitae, reprints, statements of research interests and teaching philosophy, and names, addresses, telephone and/or FAX numbers of three references by 6 January 1992 to: **Dr. Roger P. Hangarter, Search Committee, Department of Plant Biology, The Ohio State University, 1735 Neil Avenue, Columbus, OH 43210**. *The Ohio State University is an Equal Opportunity/Affirmative Action Employer; applications from women and minorities are especially encouraged.*

ECOLOGIST

The Department of Ecology, Evolution and Behavior invites applicants for a tenure-track **ASSISTANT PROFESSORSHIP**. We seek applicants who have demonstrated outstanding research ability in any ecological discipline, and are especially interested in community/ecosystem ecology or behavioral/evolutionary ecology. Duties include teaching an undergraduate and a specialty course, and establishment of an active program of research and graduate training. Applicants should submit curriculum vitae, reprints, and have three letters of recommendation sent, by 31 December 1991, to: **Search Committee, Department of Ecology, Evolution and Behavior, 318 Church Street S.E., University of Minnesota, Minneapolis, MN 55455**. *The University of Minnesota is an Equal Opportunity Employer and Educator.*

MOLECULAR EVOLUTION

The Department of Biological Sciences, University of Denver is seeking applicants for a tenure-track position at the **ASSISTANT PROFESSOR** level beginning 1 September 1992. The successful applicant will be expected to demonstrate research productivity, actively pursue extramural support, and direct graduate students at the M.S. and Ph.D. levels. Teaching responsibilities will include an undergraduate course in evolutionary biology and other courses dependent on research interests but consistent with conducting a strong research program. Postdoctoral experience required. Applicants should send curriculum vitae, statements of research and teaching plans, and three letters of reference to: **Dr. James Fogleman, Chair, Molecular Evolution Search Committee, Department of Biological Sciences, University of Denver, Denver, CO 80208**. Deadline: 15 January 1992. *The University of Denver is committed to enhancing the diversity of its faculty and staff and encourages applications particularly from women, minorities and the disabled.*

8 NOVEMBER 1991

Your Contributions Really Count

At Alpha Therapeutic Corporation, we're proud of the high standards we maintain as the world's largest collector of human plasma. These standards and quality pharmaceuticals are made possible by concerned healthcare professionals—like you—ready and willing to contribute their skills and energies to make Alpha the high-quality plasma fractionator that it is today.

Clinical Project Manager Ph.D. Immunological Products

The clinical project manager is primarily responsible for, designing and writing clinical protocols, managing clinical trials, establishing rapport and interacting with clinical and pre-clinical investigators, analyzing data and preparing reports for submission to the Food and Drug Administration.

Position requires a Ph.D. in Biological or Physical Sciences. A background in protein chemistry is an advantage. Excellent writing, interpersonal and communication skills essential. Familiarity with PC's and word processing also necessary. Approximately 25% travel required.

We offer competitive salaries and benefits. For immediate consideration, please send resume and salary history to: **Nan Maaskamp, Manager of Human Resources, at: Alpha Therapeutic Corporation, 5555 Valley Blvd., Los Angeles, CA 90032. AA/EOE**

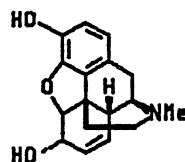
Sr. Principal Scientist Immunologist

Responsibilities will include developing/executing problem solving strategies related to existing immunoglobulin products. Developing and performing immunological, biochemical, toxicological or other special assays, and preparing pre-clinical protocols will also be part of your responsibilities.

Qualified candidate will possess a Ph.D. in Immunology, Biochemistry, Pharmacology or related field. 4-8 years experience with a record of accomplishments in the biological or pharmaceutical field required. The ability to perform biochemical, immunological and inflammatory mediators determining assays is essential.

alpha™
THERAPEUTIC CORPORATION

POTENTIAL DRUGS OF ABUSE STANDARDS



AMPHETAMINES	BENZODIAZEPINES	CANNABINOIDS
ERGOLINES	PHENETHYLAMINES	OPIOIDS
PIPERIDINES	TRYPTAMINES	NEW STRUCTURES

Pharmatech Int. is seeking contracts for the identification, synthesis and neuropharmacology screening of potential new drugs of abuse. We invite Forensic Laboratories, Federal/State Agencies and Private Organizations in helping us to establish a new Data/Sample Base to meet the future challenges of identification/characterization/toxicology/emergency treatment of new drugs of abuse. Customized research program inquiries are welcome. Please call or write: **M. Trampota, Eng Medicinal Chemistry Section, Pharmatech International, Inc. 56 Old Indian Rd., West Orange, NJ 07052**
(201) 669-8337
(201) 672-5548
Fax: (201) 736-3893

POSITIONS OPEN

ASSISTANT PROFESSOR, BIOINORGANIC CHEMISTRY. University of California, Santa Cruz (UCSC). The Department of Chemistry and Biochemistry invites applications for a junior faculty position beginning fall 1992, contingent on availability of funding. Salary range: \$35,900 to \$38,800 (9-month basis). Candidates must have a Ph.D. or equivalent in chemistry or related field, demonstrated record of excellence and outstanding potential for independent research in bioinorganic chemistry, and a commitment to and a talent for teaching at both the undergraduate and graduate level. Curriculum vitae, brief summary of research interests and three confidential letters of recommendation should be sent to: **Professor Pradip Mascharak, Chair, Bioinorganic Search Committee, Department of Chemistry and Biochemistry, University of California, Santa Cruz, CA 95064.** Refer to: **Provision #234-912** all correspondence. *UCSC is an Equal Opportunity/Affirmative Action/IRCA Employer. We especially welcome applications from qualified women and minority candidates.* Closing date for the receipt of completed applications is 15 December 1991.

FACULTY POSITIONS DEPARTMENT OF PHARMACOLOGY

The Department of Pharmacology at Stanford University School of Medicine invites applications for several tenure-track positions at the **ASSISTANT PROFESSOR** level. Candidates must have a Ph.D. or M.D. degree and postdoctoral research experience. Candidates should be interested in developing independent research experience. Candidates should be interested in developing independent research programs that utilize biochemical, genetic, and molecular biological approaches to analyze problems of pharmacological interest, particularly in the areas of cancer biology or neuroscience. Appointees will interact with other faculty members with strong research programs in signal transduction, hormone action, gene regulation, and cell growth and differentiation. Appointees will also participate in teaching medical pharmacology and in graduate (Ph.D.) training in a stimulating medical environment.

Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates. Candidate should send curriculum vitae, a description of future research plans, and at least three letters of reference to: **James P. Whitlock, Jr., M.D., Department of Pharmacology, Stanford University School of Medicine, Stanford, CA 94305-5332.**

ASSISTANT PROFESSOR DEPARTMENT OF MEDICINE THE UNIVERSITY OF CALIFORNIA SAN FRANCISCO

The Department of Medicine at the University of California, San Francisco is seeking a junior faculty member at the Assistant Professor in Residence level II or III. The successful candidate will be expected to take responsibility for organizing a teaching and research program devoted to the autoimmune diseases. It is expected that the successful candidate will generate his/her own salary from outside grant support. Research space is available in the Hormone Research Institute. The successful candidate should have a strong national and international reputation in the field of autoimmune disease, particularly with relevance to insulin-dependent diabetes. Preference will be given to candidates who already have independent research support. Please send curriculum vitae to the attention of the **Search Committee, Hormone Research Institute, University of California, San Francisco, CA 94143-0534.** Deadline for applications is 15 December 1991. *The University of California at San Francisco is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

MARINE GEOLOGIST. ASSISTANT PROFESSOR, tenure-track Ph.D., start fall 1992. Research interest in aspect of coastal processes, geophysics or paleontology, to involve advanced undergraduates. Teach marine geology and advanced courses in specialty, in rapidly expanding preprofessional undergraduate marine science program. Participate periodically in interdisciplinary general education program. Send résumé, undergraduate and graduate transcripts, and three recommendation letters by 30 January 1992 to: **Dr. John Ferguson, Eckerd College, P.O. Box 12560, St. Petersburg, FL 33733.** *Equal Opportunity Employer.*

POSITIONS OPEN

BARNARD COLLEGE ASSISTANT PROFESSOR BIOSTATISTICS/EPIDEMIOLOGY

The Department of Biological Science at Barnard College seeks an assistant professor for September 1992 to participate in undergraduate teaching and maintain an active research program in an undergraduate college that is affiliated with a large research institution, Columbia University.

Specialty may include environmental, occupational, or genetic epidemiology or other area of public health. Candidates should be broadly trained and able to teach undergraduate courses in biostatistics and epidemiology as well as other courses with quantitative and/or biological content.

Ph.D. required; postdoctoral research and prior teaching experience desirable. Submit curriculum vitae, list of publications, brief statements of research and teaching interests, up to three representative publications, and three letters of recommendation to: **Ms. Lorin Johnson, Department of Biological Sciences, Barnard College, 3009 Broadway, New York, NY 10027** by 6 January 1992. *Women and minorities are encouraged to apply.*

GENETICS

The Department of Biological Sciences anticipates a tenure-track faculty appointment at the **ASSISTANT PROFESSOR** level open in the area of genetics. Applicants using yeast or another microbial genetic system as a model to approach basic cellular or molecular problems are especially encouraged to apply. The successful candidate will be expected to establish an extramurally funded research program, train graduate students, and participate in undergraduate education. Applicants should send curriculum vitae, a summary of research interests and goals, and arrange to have at least three letters of reference sent to:

**Genetics Search Committee
Department of Biological Sciences
University of Pittsburgh
Pittsburgh, PA 15260**

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

DEPARTMENT OF MICROBIOLOGY AND THE COMPREHENSIVE CANCER CENTER

Applications are invited for a vacant faculty position in molecular immunology jointly supported by the Department of Microbiology and the Ohio State University Comprehensive Cancer Center. Preference will be given to established investigators applying for a position at the **ASSOCIATE PROFESSOR OR PROFESSOR** level. The successful applicant will be expected to maintain an internationally recognized, molecular-oriented research program in cancer immunology and to participate in graduate and undergraduate teaching. This is one of several new cancer-related positions that will be filled in the near future to expand the research program of the Ohio State University Comprehensive Cancer Center coincident with the establishment of the Arthur G. James Cancer Hospital and Research Institute.

Applicants should submit curriculum vitae, statement of current research interests and future plans, and the names of three references to: **Professor John N. Reeve, Chair, Department of Microbiology, The Ohio State University, Columbus, OH 43210; telephone: 614-292-2301 or FAX: 614-292-1538.** Review of applications will begin immediately and continue until the position is filled. *Women and minority candidates are very strongly encouraged to apply. The University is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT PROFESSOR

Requirements: Ph.D. in physiology with additional courses in pharmacology, toxicology and programming. Three years research experience including 2 years of autopsy or human anatomic pathology dissection. *The University of Maryland at Baltimore is an Equal Opportunity Employer.*

Please send résumé to:

**Kim Nemecek
University of Maryland
Room 700, MSTF
10 South Pine Street
Baltimore, MD 21201**

POSITIONS OPEN

FACULTY POSITION MOLECULAR VIROLOGIST

The Department of Medical Microbiology and Immunology, The Ohio State University Medical Center, is seeking applications for a tenure-track position at the level of **ASSOCIATE PROFESSOR** in the area of molecular virology. Preference will be given to candidates whose research involves molecular studies on retroviruses, although strong candidates in other areas of molecular virology will be considered. The successful candidate is expected to develop a strong independent research program in her/his area of expertise, be involved with the training of graduate students and postdoctoral fellows, and to assist in the teaching of graduate and medical students. There is ample opportunity for this person to interact with several virologists, including retrovirologists and herpes virologists. Applications for this position should include curriculum vitae, a statement of research interest, reprints of selected publications, and the names and addresses of three individuals who can provide letters of recommendation. *Women and minorities are encouraged to apply.* Materials should be sent to: **Dr. Ronald Glaser, Chairperson, Department of Medical Microbiology and Immunology, 5072 Graves Hall, 333 West 10th Avenue, The Ohio State University Medical Center, Columbus, OH 43210.** *The Ohio State University is an Equal Opportunity/Affirmative Action Employer.*

YALE UNIVERSITY SCHOOL OF MEDICINE DEPARTMENT OF CELLULAR AND MOLECULAR PHYSIOLOGY TWO JUNIOR FACULTY POSITIONS

Applicants are solicited for two tenure-track positions at the rank of **ASSISTANT OR ASSOCIATE PROFESSOR** (term appointments) in the Department of Cellular and Molecular Physiology, Yale University School of Medicine. Candidates must hold an M.D., Ph.D. or equivalent degree and have experience and interest in physiology at the cellular and/or molecular levels. We are especially interested in candidates with experience in the areas of membrane biology, neuroscience, and signal transduction. Opportunities are available for both collaborative and independent research as well as for graduate and medical student teaching.

Qualified women and minority group members are encouraged to apply. Complete curriculum vitae, a statement of research interests and goals and three letters of reference should be sent by 15 December 1991 to:

**Dr. Walter F. Boron, Chairman
Department of Cellular and Molecular Physiology
333 Cedar Street
P.O. Box 3333
New Haven, CT 06510**

Yale University is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS STATE UNIVERSITY OF NEW YORK AT STONY BROOK (SUNY)

Applications are invited for tenure- and non-tenure-track positions at the rank of **ASSISTANT OR ASSOCIATE PROFESSOR** in the Department of Pharmacological Sciences. A Ph.D. and/or M.D. degree is required. Candidates must have a strong commitment to basic research. The department is essentially non-classical in nature and is oriented towards biological research at the cellular and molecular level. Ongoing research programs including molecular genetics, nuclear architecture, chemical carcinogenesis, molecular endocrinology, lipoprotein molecular biology, gene regulation, DNA repair, cell differentiation and transmembrane signaling. There are special centers for transgenic experimentation, DNA synthesis, monoclonal antibody production and state-of-the-art facilities for mass spectrometry and NMR spectroscopy. The successful applicant is expected to develop an extramurally funded research program and participate in the teaching activities of the department. Applications, comprising curriculum vitae, synopsis of current research interest, list of publications, and names of three references, should be sent to: **David Williams, Ph.D., Chair, Search Committee, Department of Pharmacological Sciences, School of Medicine, SUNY at Stony Brook, Stony Brook, NY 11794-8651.**

SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.



Our Winning Season Came "Just-in-Time"

The field of ophthalmic pharmaceutical research and development is a competitive one. To meet this challenge, IOLAB of Johnson & Johnson is building a world class team. Team openings include:

Director, Ophthalmic Pharmacology &

Toxicology: Responsible for the discovery, characterization, and selection of ophthalmic pharmaceutical agents for further development. The preferred candidate will have a Ph.D. in pharmacology or biochemistry, 5 plus years in ophthalmic pharmacology, and 3 plus years of scientific management.

Director of Pharmaceutical Development: Responsible for all activities and processes needed to optimally develop pharmaceutical forms needed for treatment of ophthalmic disorders and/or to improve vision care. Will plan, direct, and coordinate the product development group for optimal scale-up. The preferred candidate will have a Ph.D., 7 years minimum pharmaceutical development experience, and 2 plus years scientific management.

Additional R&D Team members needed: (Ph.D.'s preferred)

- **Pharmacology/Toxicology Scientist**
- **Pharmaceutical Product Development Chemist**
- **Physical Pharmacist or Preformulation Chemist**

IOLAB is committed to being an equal opportunity employer and encourages women and minorities to apply. For consideration, submit your C.V. and salary history to: **Paul Krueger, Ph.D., Human Resources, IOLAB of Johnson & Johnson, 500 IOLAB Drive, Claremont, CA 91711.**

**Winning...Because We Set
Our Sights Higher.**



a Johnson & Johnson company

SENIOR RESEARCH ASSOCIATE

Leading biotech company in La Jolla is in search of key personnel to expand our scientific team for the development of therapeutic and research antibodies. To do so we will exploit and augment our revolutionary molecular biology based technology for the identification of monoclonal antibodies. Compensation includes excellent salary and benefits, extensive lab space with an excellent view and an exciting and congenial work environment. Lab experience in recombinant DNA technology required. Basic immunology knowledge and/or animal handling highly desirable. B.S. or M.S. degree and 3-5 years professional experience is required. Please forward resume to:



Attn: Human Resources
11099 N.Torrey Pines Road
La Jolla, CA 92037

Equal Opportunity Affirmative Action Employer

Meeting Announcement

The Department of Nutrition, University of North Carolina at Chapel Hill is sponsoring a conference on:

Choline Phospholipids: Molecular Mechanisms for Human Diseases

April 3rd and 4th, 1992

Hotel del Coronado, San Diego, CA

Cardiovascular Disease and Platelet Activating Factor

Richard W. Gross, M.D., Ph.D.; Washington University School of Medicine
Stephen M. Prescott, M.D.; University of Utah
John M. Johnston, Ph.D.; University of Texas Southwestern Medical School
Eugene P. Kennedy, Ph.D.; Harvard Medical School

Signal Transduction and Carcinogenesis

Steven Zeisel, M.D., Ph.D.; University of North Carolina at Chapel Hill
I. Bernard Weinstein, M.D.; Columbia University College of Physicians and Surgeons
Alfred H. Merrill, Jr., Ph.D.; Emory University School of Medicine
John H. Exton, M.D., Ph.D.; Vanderbilt University
Robert M. Bell, Ph.D.; Duke University Medical Center

Strategies for Influencing Phospholipid-mediated Processes

Richard J. Wurtman, M.D.; Massachusetts Institute of Technology
Dennis E. Vance, Ph.D.; University of Alberta School of Medicine
Rosalind A. Coleman, M.D.; University of North Carolina at Chapel Hill
Claudia Kent, Ph.D.; University of Michigan
Jan K. Blusztajn, Ph.D.; Boston University School of Medicine

An approved satellite meeting of the American Institute of Nutrition, a constituent society of FASEB

Attendance will be by invitation only. Meeting will be limited to 100 attendees. Some travel grants will be available.

Support for this conference has been provided by Central Soya. Send an NIH-style curriculum vitae (or, for doctoral students, a letter from your advisor) to:

Steven H. Zeisel, M.D., Ph.D.

Department of Nutrition

University of North Carolina at Chapel Hill

CB#7400, Chapel Hill, NC 27599-7400

FAX # 919 966-7216

DRUG DISCOVERY CONFERENCE & EXHIBITION

December 4, 5 and 6, 1991

East Brunswick (Princeton area), New Jersey, U.S.A.



TMG announces a conference on screening, rational drug design, new sources, and manufacturing, patent and regulatory issues. Speakers include key individuals from:

Alpha-Beta Technology	Glaxo	Synthecell
Amoco Technology	ImmunoPharmaceutics	Terrapin
BioCryst	Martek	Tripos
Cambridge NeuroScience	Pharmagenesis	Upjohn
Cray Research	PMA (Japan)	U.S. NCI
Custom Research	Schering-Plough	Xenova
Escagenetics	Shaman	
Genentech	Strathclyde	

Half-price for non-profit registrants

International Journal of Drug Discovery

In the first quarter of 1992, TMG will begin publishing a journal on drug discovery. For a sample issue, advertising, or author submission information, mail or fax your request on your letterhead to TMG.

Related TMG Market Reports-Published 10/91

Molecular Modeling of Pharmaceuticals II	\$3,595
Molecular Modeling of Chemicals II	\$2,395
Carbohydrate-based Drugs	\$2,495

For information, contact:

Technology Management Group, Dept. NSA91
25 Science Park, New Haven, CT 06511-1968 U.S.A.
Tel: (203) 786-5445 Fax: (203) 786-5449

We're California Biotechnology, an emerging leader engaged in the discovery, development and commercialization of human therapeutics.

SR. SCIENTIST

-Protein Biochemistry-

Playing a key role in our Tissue Repair Group, you'll work on the isolation and structural analysis of natural and recombinant versions of proteins involved in growth control. You'll also develop schemes for the purification of these proteins in sufficient amounts and purity for animal studies. We require a PhD in Biochemistry or a related area and 2+ years' post-doctorate or industry experience. Knowledge of protein purification and structural analysis techniques is necessary. Additional opportunities not requiring PhDs are also available. Job Code JA/AJ

POST-DOCTORAL SCIENTIST

We currently have openings in the areas of molecular biology, protein chemistry and cell biology. Successful candidates will carry out research regarding cardiopulmonary disease, tissue repair, and/or metabolic disorders. These positions require a PhD in a relevant discipline. Job Code BB/AJ

Please send your resume or C.V., indicating appropriate Job Code, to: California Biotechnology Inc., Human Resources, 2450 Bayshore Pkwy., Mountain View, CA 94043. Or FAX to: (415) 968-2438. Equal Opportunity Employer

CAL BIO

SCHOOL OF MEDICINE

The School of Medicine is physically part of the Flinders Medical Centre. Together they form an integrated medical school and teaching hospital of 500 beds serving the southern area of Adelaide. A close relationship is maintained between clinical care, teaching and research. The Centre is adjacent to the University, 15km south of Adelaide's city centre.

CHAIR OF ANATOMY AND HISTOLOGY

The new Professor who will head the Department of Anatomy and Histology, will be a recognised leader in an area of research relevant to anatomy, and be active in both research and teaching. All academic staff of the department are involved in teaching and research, and many of the research interests cross traditional discipline boundaries, being carried out in conjunction with others both within and beyond the School of Medicine.

Salary currently A\$73 800 pa (A\$77 900 pa from July 1992). A medically qualified appointee will also receive a clinical loading of up to A\$13 155 pa and have limited right to private practice.

Enquiries to the Dean, Professor J Chalmers (tel (618) 204 5511, ext 4160). Selection criteria and conditions of appointment available from Human Resources Division (tel (618) 201 2300, facsimile (618) 201 3131).

Applications, quoting Ref No 91315X together with curriculum vitae and details of three referees should be lodged in duplicate with the Manager, Human Resources, The Flinders University of South Australia, GPO Box 2100, Adelaide SA 5001, Australia, by 3 January 1992.

The University reserves the right not to make an appointment, or to appoint by invitation.

Equal Employment Opportunity is University Policy.

**FLINDERS
UNIVERSITY**
ADELAIDE • AUSTRALIA

AK 88796



ENVIRONMENTAL SPECIALIST

Our Environmental Affairs Division has a position available wherein an experienced environmental specialist can continue professional growth through a diversity of assignments.

The successful applicant will have an understanding of EPA regulations and a demonstrated expertise in at least one area of environmental specialty. Experience in air quality data analysis or in hazardous waste management desired. Excellent oral and written communication skills necessary as position involves dealing with regulatory agencies, contractors, public officials and other professionals on a regular basis. Bachelor's degree in science, engineering or a related field required.

We offer an excellent benefits package in addition to a competitive salary commensurate with qualifications. For consideration, please forward your confidential resume including recent salary history to:

Diana L. McCoy
The Cincinnati Gas & Electric Co.
P.O. Box 960
Cincinnati, Ohio 45201

CG&E ■ The Energy
Service
Company

An Equal Opportunity Employer

Alkermes, Inc. is a neuropharmaceutical company developing products for the treatment of diseases of the central nervous system. With a talented team of top-tier scientists and collaborators, Alkermes is making significant advances in neuropharmaceutical research.

Molecular Biologists

We are building state-of-the-art molecular biology capabilities and seeking highly motivated, hardworking individuals with a track record of accomplishments. Experience in many aspects of modern molecular biology is required, and familiarity with receptor cDNA cloning, mammalian cell gene expression and analysis is a plus. We are seeking individuals with a Ph.D. and 0-4 years' postdoctoral experience, as well as candidates with a B.S./M.S. and one or more years of laboratory experience. **Box P.**

Biochemists/Cell Biologists

• **Research Scientist or Associate Research Scientist**—signal transduction. We seek an individual with a Ph.D. in a biological field and 0-3 years' postdoctoral experience to conduct signal transduction studies in cultured cells. Previous experience in measuring intracellular mediators, particularly utilizing fluorescent probes, would be an asset, as would experience in mammalian cell culture. **Box S.**

• **Senior Research Associate**—protein purification/characterization. We seek an individual with a B.S. or M.S. in a biological field and 5-8 years' experience in protein purification and characterization. Experience in mammalian cell culture and in working with growth factors would be an asset. **Box L.**

Organic Chemists, Bio-Organic Chemists

The successful individual will be responsible for managing a group in drug design and discovery. A Ph.D. with 0-5 years' experience and a record of accomplishments is required. The ideal candidate should be proficient in state-of-the-art organic synthesis and related analytical techniques. Experience in peptide/peptidomimetic synthesis, structure-activity relationships, and/or computer modeling is highly desired. Positions are also available for B.S./M.S. chemists with appropriate backgrounds in bio-organic chemistry. **Box G.**

Process Development Chemists

A challenging position awaits the qualified individual who can execute the transition of laboratory scale synthesis into a pilot plant reaction process. A Ph.D. in Chemistry/Chemical Engineering and 1-5 years' experience with a detailed knowledge of the physical principles of process scale-up and production is required. Responsibilities will include the development and optimization of pilot scale pharmaceutical processes and the production of support documentation for GMP manufacturing. A position is also available for a B.S./M.S. candidate who possesses experience in process optimization, process scale-up and documentation to support GMP manufacturing. **Box G.**

These are rare opportunities to become part of an exciting new field with a dynamic young company. Each position offers an excellent salary and benefits package in a stimulating environment with an opportunity to make a major contribution to our organization. For consideration, please send your CV, including references, in confidence to: **Alkermes, Inc., Box _____, 26 Landsdowne Street, Cambridge, MA 02139-4234.** An Equal Opportunity Employer.



Alkermes, Inc.

POSITIONS OPEN

THREE POSITIONS IN BIOLOGICAL SCIENCES FOR ACADEMIC YEAR 1992-93

ASSISTANT PROFESSOR, structural and metabolic biochemistry. Tenure-track. Teaching introductory biology, introductory biochemistry and molecular biology, macromolecular chemistry, intermediate metabolism and associated laboratories and seminars. Supporting expertise in neurobiology is desirable. **ASSISTANT PROFESSOR**, molecular genetics and microbiology. Tenure-track. Teaching introductory biology, introductory biochemistry and molecular biology, molecular genetics, microbial genetics and associated laboratories and seminars. Supporting expertise in plant biology is desirable. **SABBATICAL REPLACEMENT**, plant biology and ecology. Teaching introductory biology, botany, ecology, and special topics courses in field biology consistent with the candidate's expertise.

For tenure-track positions, the Ph.D. degree is required. Credential reviews begin 30 January 1992. Candidates are asked to send letter of application, curriculum vitae, transcripts and at least three letters of recommendation to: **Dr. John Ward, Dean, Centre College, 600 West Walnut, Danville, KY 40422.** Centre College is an Equal Opportunity Employer. Applications from women and minority groups are encouraged.

VASCULAR BIOLOGISTS/PHYSIOLOGISTS ASSISTANT PROFESSORS

The Department of Physiology at Jefferson Medical College, Philadelphia, Pennsylvania, has two full-time, 12-month faculty positions for vascular biologists/physiologists at the assistant professor level starting 1 July 1992. Excellent space and working conditions are available. Candidates should have a Ph.D. or M.D. degree and 2 to 3 years of relevant postdoctoral experience. Investigators in the area of cell signalling, endothelial cells, adhesive molecules, leukocyte trafficking, neutrophil mediators, or growth factors and cytokine research are preferred. A strong program in endothelial, neutrophil and vascular smooth muscle physiology and pathophysiology already exists. Evidence of independent research and ability to develop grant applications is important. Applicants should send their curriculum vitae, including a statement of their research interests and experience, and arrange to have three letters of recommendation sent to: **Dr. Allan M. Lefer, Chairman, Department of Physiology, Jefferson Medical College, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107-6799.** An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS IN EUKARYOTIC MOLECULAR BIOLOGY

The Department of Biochemistry, University of Rochester Medical Center, is seeking applications for the positions of **ASSISTANT AND ASSOCIATE PROFESSOR**. Applicants should be prepared to conduct active independent research, using molecular techniques to study cellular mechanisms and human disease. Appropriate prior research experience is required. The university provides wide opportunities for collaboration with investigators in clinical and basic science departments, and in the Cancer Center. *This university is an Equal Opportunity Employer.* Send curriculum vitae and letters of recommendation to: **Dr. Fred Sherman, Chairman, Department of Biochemistry, University of Rochester, 601 Elmwood Avenue, Rochester, NY 14642.**

MOLECULAR BIOLOGY—CANCER

The Division of Human Genetics and Molecular Biology, Hahnemann University in Philadelphia, is seeking qualified investigators for positions at the level of **POST-DOCTORATE, ASSISTANT PROFESSOR, AND ASSOCIATE PROFESSOR**, with expertise in molecular biology. Research includes identification and characterization of oncogene rearrangement and DNA binding proteins in the pathogenesis of leukemia and non-Hodgkin's lymphoma. Work also includes quantification of residual disease in hematologic malignancies. Candidates should have a Ph.D. and/or M.D. Positions and salary are competitive and commensurate with experience. Forward curriculum vitae, summary of professional interest and names of three references to: **Jorge Yunis, M.D., Vice Chairman, Department of Neoplastic Diseases, Hahnemann University, Mail Stop #412, Philadelphia, PA 19102.** Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITIONS IN PHARMACOLOGY

The Department of Pharmacology of The University of Texas Southwestern Medical Center seeks applications for tenure-track positions at the level of **ASSISTANT PROFESSOR**. Applicants must have a relevant Ph.D. or M.D. degree, postdoctoral training, and show evidence of firm commitment to a career in independent research. We are particularly interested in considering individuals with an appropriate background who wish to apply techniques of molecular or cellular biology or biochemistry to fundamental problems of pharmacological interest. Responsibilities will also include teaching of medical and/or graduate students after the first year of employment. Send curriculum vitae and a brief description of proposed research to: **Ms. Wendy Deaner, c/o Alfred G. Gilman, Chairman, Department of Pharmacology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235.** An Equal Opportunity/Affirmative Action Employer.

NEUROSCIENTIST CORNELL UNIVERSITY MEDICAL COLLEGE

The Departments of Cell Biology and Anatomy, and Neurology and Neuroscience invite applicants for a joint, tenure-track faculty position at the level of **ASSISTANT, ASSOCIATE OR FULL PROFESSOR** commensurate with qualifications of the candidate. Preference will be given to investigators using cellular and/or molecular approaches to studies of the nervous system. Newly designed laboratories and generous start-up funds are available. The appointee may join graduate Programs in neuroscience and/or cell biology and genetics. An interest in teaching human neuroanatomy is required for appointment. Send curriculum vitae, a research statement and two letters of reference prior to 31 December 1991, to: **Dr. Donald A. Fischman, Department of Cell Biology and Anatomy, Cornell University Medical College, 1300 York Avenue, New York, NY 10021.** Equal Employment Opportunity/Affirmative Action, M/F/H/V.

ACADEMIC SURGICAL PATHOLOGIST. The Department of Pathology of Harbor-UCLA Medical Center is seeking an academic surgical pathologist at the **ASSISTANT/ASSOCIATE PROFESSOR** level. The hospital is a 553-bed facility affiliated with the UCLA School of Medicine and is located in a suburb of metropolitan Los Angeles, close to the ocean with an exceptional climate. Applicants should be Board eligible/certified in anatomical pathology and must be qualified for California licensure. Experience and/or training in a subspecialty field is desirable. A commitment to research, and teaching medical students and residents, is essential. Academic appointment in the UCLA School of Medicine and salary commensurate with qualifications and experience. Send curriculum vitae to: **Shi-Kaung Peng, M.D., Ph.D., Head, Surgical Pathology, Harbor-UCLA Medical Center, 1000 West Carson Street, Torrance, CA 90509.** Harbor-UCLA Medical Center is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT OR ASSOCIATE PROFESSOR, MOLECULAR VIROLOGY/VIRAL IMMUNOLOGY/VIRAL PATHOGENESIS. Medical School Microbiology Department with Ph.D. graduate education program and NIH training grant seeks virologist as tenure-track assistant or associate professor starting on/about July 1992. Responsibilities include independent research plus team teaching in courses for medical and graduate students. Research facilities and start-up support are excellent. Doctoral degree and postdoctoral research experience in virology or a related field are required. Candidates for associate professorship must have demonstrated research productivity and current research funding. *Foreign nationals will be considered only if qualified United States citizens are not available.* Review of applications will begin on 15 November 1991, and applications will be accepted until the position is filled. Salary is commensurate with training and experience. Submit curriculum vitae and bibliography, description of research interests, major publications, and names of three professional references to: **Randall K. Holmes, M.D., Ph.D., Professor and Chairman, Department of Microbiology, c/o Civilian Personnel Office, Uniformed Services University of Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799.** Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR. The Division of Pharmacology/Toxicology at The University of Texas at Austin invites applications for a tenure-track position in toxicology. Applicants should have a minimum of 6 years of experience in research and teaching and evidence of existing extramural funding. Candidates with research interests in the area of glutathione and nephrotoxicity are preferred. Deadline: 15 December 1991. Send curriculum vitae and the names of three references to: **James P. Kehrer, Ph.D., College of Pharmacy, University of Texas, Austin, TX 78712-1074.** An Equal Opportunity/Affirmative Action Employer.

HARVARD MEDICAL SCHOOL DEPARTMENT OF GENETICS

The Department of Genetics at Harvard Medical School invites qualified Ph.D. or M.D. scientists to submit applications for an appointment at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. This appointment offers significant scholarly and scientific resources in addition to the opportunity to instruct graduate and medical students with strong interests in research. Candidates with the demonstrated ability to develop imaginative approaches to important biologic questions are encouraged to apply. Applicants should submit (prior to 15 December 1991) curriculum vitae, reprints, a statement of research interests (less than 500 words), and the names of three references to: **Dr. Philip Leder, Department of Genetics, Harvard Medical School, 25 Shattuck Street, Boston, MA 02115.** Harvard University is an Equal Opportunity/Affirmative Action Employer. Qualified women and minority group members are very much encouraged to apply.

FACULTY POSITIONS NEUROSCIENCE AND ANATOMY

The Department of Neuroscience and Anatomy of The Pennsylvania State University College of Medicine. The Hershey Medical Center, has tenure-track **ASSISTANT PROFESSOR** positions available for the current and forthcoming academic years. Qualified individuals should have a Ph.D. or M.D. degree, postdoctoral training, and research interests in areas of cellular or molecular neurobiology. More experienced individuals may also be considered for **ASSOCIATE PROFESSOR** positions. Appointed faculty are expected to maintain an active research program and participate in departmental teaching. Interested persons should send curriculum vitae, a statement of research interests, and names of three references to: **Robert J. Milner, Ph.D., Department of Neuroscience and Anatomy, The Milton S. Hershey Medical Center, P.O. Box 850, Hershey, PA 17033.** Deadline for applications is 1 February 1992.

NEUROSCIENCES

Search reopened. **ASSISTANT/ASSOCIATE/PROFESSOR OF PHARMACOLOGY.** A tenured or tenure-track, university-supported position is available for an individual whose interests are within the neurosciences, including neurological and behavioral disorders and neuroregulatory aspects of any organ system. He/she will complement a growing group interested in: experimental epilepsy, neurotoxicology, CNS receptors, CSF flow dynamics, with resources including: GEPR colony, microdialysis, PET/MRI scanning, tissue culture, evoked potentials, scanning/transmission electron microscopy, and a regional referral center of 150 neuro beds with 14 neurosurgeons and neurologist.

Requirements: Assistant professor candidates should have a period of productive postdoctoral training and show promise of developing a strong, independent, fundable research program. Associate/professor candidates should be established independent investigators with peer-reviewed grants and research publications as well as experience in teaching and participation in national scientific affairs. Position is available as early as January 1992; the search will continue until the position is filled. Salary and rank commensurate with qualifications. Limited clinical practice is possible. Recently constructed space and start-up funds are available. *The University of Illinois is an Equal Opportunity/Affirmative Action Employer.*

Send curriculum vitae and names of three references to: **Brian A. Curtis, Ph.D., Chair, Search Committee, Department of Basic Sciences, University of Illinois College of Medicine at Peoria, P.O. Box 1649, Peoria, IL 61656.** For informal discussion, telephone: 309-671-8537.



Cancer Research Campaign

- We are the largest funder of cancer research in British universities and medical schools and will be spending over £44m in 1992.
- We have developed a strong interface between research and clinical therapy, facilitating the effective development and implementation of cancer treatments.
- We are committed to the career progression of scientists through a co-ordinated programme of basic and applied medical research fellowships.

CRC RETURN FELLOWSHIPS

The Cancer Research Campaign announces its 1992/93 Return Fellowship Programme to encourage the return to the UK of outstanding young research scientists currently working abroad.

Candidates should have a PhD, normally be aged less than 40 years and have completed at least one three year period working in an overseas laboratory. A CRC Return Fellowship

may be held in any CRC-funded Research Institute, Laboratory or Research Group, or alternatively in an appropriate UK university department, subject to the usual CRC funding restrictions.

A CRC Return Fellowship, which will provide both personal and research support, will normally be awarded for six years.

For further details and application forms please contact Dr Trevor Hince, Cancer Research Campaign, 2 Carlton House Terrace, London SW1Y 5AR. Tel: 071 930 8972. Fax: 071 930 8848.
Closing date for applications is 28 February 1992.

Fighting cancer on all fronts.

KIMMELMAN CHAIR IN FUNDAMENTAL IMMUNOBIOLOGY DEPARTMENT OF LABORATORY MEDICINE AND PATHOLOGY UNIVERSITY OF MINNESOTA MEDICAL SCHOOL

The University of Minnesota Medical School invites nominations and applications for the Kimmelman Chair in Fundamental Immunobiology. We are seeking an individual with an international reputation in Immunobiology, a record of distinguished accomplishment and continuing commitment to the education of predoctoral and postdoctoral students, and the development of junior faculty. This position will be a tenured full Professor (M.D. and/or Ph.D.) in the Department of Laboratory Medicine and Pathology. The successful applicant will be expected to play a leadership role in Immunobiology programs at the University of Minnesota with particular attention toward graduate training and research. Multiple opportunities exist for interaction with the organ and bone marrow transplant programs, Cancer Center, and the Institute of Human Genetics. Substantial financial and space commitments will be dedicated to this position, including junior faculty positions. Position to begin approximately July 1, 1992.

Interested applicants should send a curriculum vitae, description of research interests, and the name of three references to:

Dr. Tucker W. LeBien
Chair, Kimmelman Search Committee
Department of Laboratory Medicine and Pathology
Box 609 UMHC
University of Minnesota Medical School
Minneapolis, MN 55455

The last date for receipt of applications is: December 31, 1991.

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

Group Leader – Cardiovascular Diseases

Bristol-Myers Squibb is a worldwide leader in the development and marketing of sophisticated pharmaceutical, medical care, consumer and nutritional products. We currently have a position available for a Group Leader at our Princeton, New Jersey headquarters.

This key position will work closely with biochemists and pharmacologists to establish scientific expertise in Cardiovascular Research involving molecular biology techniques for the support of ongoing programs and recommendations for new programs. The successful candidate will hire new Ph.D.s to form a molecular biology group in Cardiovascular Research and will manage this group of 6-10 scientists.

We seek individuals with a Ph.D. involving molecular biology techniques in cardiovascular-related work and 5-10 years of industry or related experience. Requirements include demonstrable competence in cardiovascular molecular biology, some management experience and scientific leadership qualities.

Please forward your resume and salary history to:
Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources Dept. 257-AR, P.O. Box 4000, Princeton, NJ 08543-4000. Equal Opportunity Employer, M/F/D/V.



Bristol-Myers Squibb Company

POSITIONS OPEN

CHEMISTRY FACULTY POSITIONS, ASSISTANT/ASSOCIATE PROFESSOR RANKS, tenure-track, beginning fall 1992: (1) toxicologist (position F9247) with strong chemistry or biochemistry background; (2) biochemist (position F9245); (3) polymer chemist (position F9246) with strength in area of physical polymer chemistry. Minimum Master's degree plus 18 hours in appropriate area of specialization for assistant professor rank; however, Ph.D. strongly preferred. Ph.D. required for associate professor rank. Evidence of excellence in both teaching and research necessary. Responsibilities include teaching chemistry courses at introductory level as well as undergraduate/graduate courses (M.S. level) in area of specialization, and research programs involving undergraduate and graduate students. Send résumé, undergraduate and graduate transcripts, statement of teaching and research interests, three letters of recommendation by 15 January 1991 to: **Position #** (see above), Academic Affairs Box 8, 204 King Hall, Eastern Michigan University (EMU), Ypsilanti, MI 48197. *Women and minority groups encouraged to apply and to identify themselves. EMU is an Affirmative Action/Equal Opportunity Employer.*

The Biochemistry and Molecular Biology Division has an immediate opening for a **NEUROCHEMIST/NEUROBIOLOGIST** to establish a high quality basic research program using cell and/or molecular biological approaches. Position is at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. The candidate should have an active independent research program relevant to understanding mental retardation and related to one of the following neuroscience areas: biochemical basis of cell interaction during development, genetic mechanisms of brain development, signal transduction, myelination, molecular biology of glycoconjugates, chemical pathology of neurological disorders. The Shriver Center offers an interactive environment with many opportunities for collaborative research within the greater Boston biomedical community. Candidates should have potential for independent funding. Interested persons should submit curriculum vitae, a short summary of research plans and names of three references to: **Dr. Marjorie Lees, Director, Biochemistry and Molecular Biology Division, Eunice Kennedy Shriver Center, 200 Trapelo Road, Waltham, MA 02254.**

An Equal Opportunity Employer.

BIOCHEMISTRY/MOLECULAR BIOLOGY MEHARRY MEDICAL COLLEGE

Faculty positions will be available in 1992/93 in the Department of Biochemistry, at the level of **ASSISTANT OR ASSOCIATE PROFESSOR**. Applicants must have a Ph.D. or M.D. degree, or both, and appropriate formal postdoctoral research experience. Joint appointments in clinical science departments are possible. We are seeking individuals who have potential or demonstrated competence in the use of molecular biological approaches to conduct research in molecular medicine, or on fundamental biochemical/cell biological problems. Selected individuals must also be capable of, and committed to, making significant contributions to the teaching and administrative functions of the Department of Biochemistry. Successful applicants will be expected to develop/maintain a funded research program of high quality and to participate in the graduate and professional (medical, dental and allied health) school teaching programs of the department. Applicants should send curriculum vitae, names of four individuals who may be contacted for reference, and a summary (not exceeding three pages) of potential research project(s) to: **Ifeanyi J. Arinze, Ph.D., Chairman, Department of Biochemistry, Meharry Medical College, Nashville, TN 37208.** *Meharry Medical College is an Equal Opportunity/Affirmative Action Employer.*

ANATOMY FACULTY POSITION. Applications are invited for a tenure-track position at the level of **ASSISTANT OR ASSOCIATE PROFESSOR**. Individuals who have an earned doctorate in human anatomy from a department associated with a medical school should apply. Teaching responsibilities will be in histology, neuroanatomy and gross anatomy. Research opportunities are available. Send curriculum vitae and names of three references to: **Gerald D. Meetz, Ph.D., Chairman, Department of Anatomy, University of Osteopathic Medicine and Health Sciences, 3200 Grand Avenue, Des Moines, IA 50312.** *The university is an Equal Opportunity Employer.*

POSITIONS OPEN

PLANT ECOLOGIST. We are seeking a plant ecologist with quantitative skills whose research interests are in population and/or community ecology. This is a tenure-track position at the **ASSISTANT PROFESSOR** level. A Ph.D. is required and postdoctoral experience desirable. The successful candidate will be expected to initiate an independent research program in population and/or community ecology, seek extramural funding, develop courses in ecology, and teach in the introductory botany program. Nine-month salary: from \$28,000 depending on experience. Send curriculum vitae, college transcripts, copies of reprints, a synopsis of research goals and at least three letters of recommendation to: **Dr. Ivan K. Smith, Chair, Department of Botany, Ohio University, Athens, OH 45701** by 1 January 1992. *Ohio University is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS NEW JERSEY MEDICAL SCHOOL: UMDNJ

The Department of Anatomy, Cell Biology and Injury Sciences of the New Jersey Medical School-UMDNJ seeks distinguished candidates: **ASSISTANT/ASSOCIATE OR FULL PROFESSOR** for faculty appointment in the division of injury sciences. Candidates should have a doctoral degree and demonstrated academic productivity in areas of cell biology, biochemistry, physiology, or immunology as related to studies of the host defense response to injury sepsis or shock. *The UMDNJ is an Affirmative Action/Equal Opportunity Employer, M/F/H/V.* Résumés and additional information may be sent to: **Dr. John H. Siegel, Chairman, Anatomy, Cell Biology and Injury Sciences, 185 South Orange Avenue, Newark, NJ 07103; telephone: 201-456-4414 or FAX: 201-504-7489.**

CHAIR DEPARTMENT OF BIOLOGICAL SCIENCES EASTERN KENTUCKY UNIVERSITY

Applications are invited for the position of chairperson of the Department of Biological Sciences, Eastern Kentucky University, beginning July 1992. The department has 19 faculty members, approximately 300 undergraduate majors, 30 graduate students, and offers both the bachelor's and master's degrees. Candidates must have a Ph.D. degree, have a commitment to teaching and research, and a willingness to exercise innovative and resourceful leadership. The areas of expertise, rank, and salary are open. Applicants should send, by 15 January 1992, curriculum vitae, transcripts, three letters of recommendation, and a statement of educational and administrative philosophies to: **Dr. John P. Harley, Chair of Search Committee, Moore 235, Eastern Kentucky University, Richmond, KY 40475. Telephone: 606-622-1542; FAX: 606-622-1020.** *Eastern Kentucky University is an Equal Employment Opportunity/Affirmative Action Employer. Employment eligibility verification required, Immigration Reform and Control Act of 1986.*

DEPUTY HEAD OF BIOLOGICALS

Experienced candidates (M.S., Ph.D. or equivalent) with demonstrated practical expertise in immunology and cell biology are invited to apply for the position as deputy head of our biologicals. Department located in Gaithersburg, Maryland. Sound experience of all aspects of monoclonal antibodies, immunoassay systems and serology are required and some experience in virology is desirable. This position offers a good starting salary and excellent prospects for promotion. Please send letter of application, curriculum vitae and the names and addresses of three referees to: **Box 12, SCIENCE Classified Advertising, 1333 H Street, NW, Room 940, Washington, DC 20005.**

Science

can publish YOUR LOGO with your one-column line classified ad. No extra fee is assessed: you will be billed at our regular line rate for the number of lines the logo occupies. For details, call Classified Advertising: 202-326-6555.

POSITIONS OPEN

ASSISTANT OR ASSOCIATE PROFESSOR POSITIONS IN IMMUNOLOGY DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY LOYOLA UNIVERSITY CHICAGO

Applications are invited for tenure and tenure-track faculty positions in the Department of Microbiology and Immunology at Loyola University Chicago, Stritch School of Medicine. We are seeking talented investigators whose research interests are in molecular aspects of the immune system to join a growing interactive group of investigators. Candidates are expected to develop independent, externally funded, high quality research programs. Excellent new facilities and attractive start-up funds are available.

Submit curriculum vitae, statement of research interest and a list of three references to: **Dr. Katherine L. Knight, Chairperson, Department of Microbiology and Immunology, Loyola University Chicago, Stritch School of Medicine, 2160 South First Avenue, Maywood, IL 60153.**

Loyola University Chicago is an Equal Opportunity/Affirmative Action Employer.

DISTINGUISHED PROFESSORSHIP CHAIRPERSON OF MICROBIOLOGY

The University of Kansas and Department of Microbiology invite nominations and applications for the Murphy Distinguished Professorship of Molecular Biology and Chairperson of the Department. The Department of Microbiology prefers that both positions be filled by the same individual; however, it is not a condition of appointment to the Murphy Professorship that the candidate serve as chairperson. The individual should be an internationally recognized leader in his or her specific area of molecular biology with an established record of scholarship and competitive grant support from extramural agencies. The individual's specific area of research should lie within those disciplines commonly associated with the field of microbiology. The applicant will be expected to provide leadership, to teach at the undergraduate and graduate levels, and to interact with other faculty with research interests in different areas of molecular biology and related fields.

To obtain a full description of this position and application procedure, contact: **Dr. Donald C. Robertson, Chair, Search Committee, Department of Microbiology, University of Kansas, Lawrence, KS 66045; telephone: 913-864-4317.** Screening of candidates will begin on 15 February 1992, and will continue until the position is filled. *The University of Kansas is an Equal Opportunity/Affirmative Action Employer.*

PROFESSOR AND HEAD, SCHOOL OF LIFE SCIENCE

Queensland University of Technology (QUT) is one of Australia's largest universities with more than 22,000 students on four campuses. The eight faculties of the university are arts, built environment and engineering, business, education, health, information technology, law and science.

The Professor and Head, School of Life Science will be responsible to the Dean, Faculty of Science and will provide leadership, academic and administrative expertise to the school and faculty.

Permanent appointment is available at the level of Professor \$AUD73,800 (\$US58,300) per annum. Appointment as Head of School will be for a 5-year renewable term and will carry a loading of \$AUD6,000 (\$US4,740) per annum. Conditions include subsidized superannuation, relocation assistance, professional experience leave and study assistance.

An information package on the university is available from QUT's Personnel Department, telephone 61 7 864 3745, facsimile 61 7 864 3996 or email k.fox@qut.edu.au. For further information on the position contact Professor Tony Webber on 61 7 864 2203, facsimile 61 7 864 1508 or Dr. David Allen on 61 7 864 2182, facsimile 61 7 864 1534.

Applications should quote 20/91 and include the names, addresses, telephone and facsimile numbers of five professional referees. Applications should address the selection criteria and reach the **Personnel Director, QUT Locked Bag No. 2, Red Hill 4059 Australia** by 29 November 1991. *Smoking is not permitted in QUT buildings.*

An Equal Opportunity Employer.

**STAFF SCIENTIST
#050**

Stratagene currently has an opening for a research chemist with experience in the synthesis of nucleosides and oligonucleotides. Preference will be given to candidates at the PhD level with at least 3 years experience in oligonucleotide synthesis.

**POSTDOCTORAL POSITIONS
MOLECULAR BIOLOGY/GENE
EXPRESSION #057**

Stratagene is looking for exceptional postdoctoral candidates with the potential to innovate systems for gene cloning, mapping, sequencing, and prokaryotic and eukaryotic expression. Successful postdoctoral research programs may lead to full Staff Scientist positions at Stratagene, Salary \$28K - \$32K.

**MARKETING MANAGERS
#060**

Stratagene has an immediate opening for a molecular biology and a cell biology marketing manager. Individuals will be responsible for facilitating the process of moving newly developed products from the laboratory to the market place and for developing marketing plans to continue to promote existing products. Responsibilities will also include, competitive market analysis, technical writing, training, and interfacing with the company and customers. Successful candidates will have strong understanding of the respective markets, sales or marketing experience and strong written and verbal communication skills.

Stratagene offers a beautiful work environment, competitive salaries, and excellent benefits. All qualified candidates forward resume of qualifications to:



STRATAGENE®

Attn: Human Resources
11099 N. Torrey Pines Rd.
La Jolla, CA 92037

Stratagene is an Equal
Opportunity/Affirmative Action Employer.

Postdoctoral Positions

**BOEHRINGER
INGELHEIM
PHARMACEUTICALS, INC.**

TOGETHER, the people
of Boehringer Ingelheim
Pharmaceuticals, Inc.
have achieved a

respected position for the Company in the United States health care environment. We have made a beginning. Now we dedicate ourselves to pushing back the boundaries of science in the search for pharmaceutical products to treat cardiovascular, pulmonary, viral, immune-mediated and other selected diseases.

We are currently seeking candidates for the following postdoctoral positions in our drug discovery group.

Cell Adhesion

The successful candidate will join the laboratories of Takashi Kei Kishimoto and Robert Rothlein in a multidisciplinary approach in studying leukocyte-endothelial cell interactions. Applicants should have a strong graduate research background in Immunology or Cell Biology. Additional experience in receptor biology and biochemistry would be helpful.

Gene Expression

We are seeking a highly motivated and innovative candidate to join an ongoing research program in gene expression regulation of cellular adhesion molecules. Candidates should have a background in eukaryotic molecular biology. Knowledge of transcriptional regulation and cell biology is desirable.

Signal Transduction and Immune Function

This is an opportunity to conduct basic research on the mechanisms of cell activation in an environment dedicated to the identification of new intracellular targets for drug discovery including the investigation of mechanisms of signal transduction in human lymphocytes and neutrophils. Candidates should have a Ph.D. in Biochemistry or Cell Biology; experience studying protein kinases and phosphatases as they relate to cell activation would be a plus.

Our EXPANDING facilities are located on a campus like setting in a beautiful area of western Connecticut. We have a strong commitment to research and a dynamic, people oriented organization. We offer a highly competitive compensation and benefits package and relocation assistance to those that qualify.

For consideration, please forward curriculum vitae, indicating position of interest, to: Dept. JC-PD-IS, Boehringer Ingelheim Pharmaceuticals, Inc., 900 Ridgebury Road, P.O. Box 368, Ridgefield, CT 06877. As a progressive health care company, we have a nonsmoking environment. We are an equal opportunity employer m/f/h/v.



**Boehringer
Ingelheim**

STAFF SCIENTIST

Division Of Nephrology

The Hospital For Sick Children Research Institute is seeking to appoint a Staff Scientist in the Division of Nephrology. The qualified individual will be expected to establish an independent research program in one of the following areas

- 1) Molecular immunology
- 2) Molecular biology of transmembrane signal transduction with an emphasis on growth factors and phospholipases
- 3) Regulation of renal cell growth, development and differentiation
- 4) Endothelial cell biology.

Individuals with either a Ph.D., M.D. or both will be considered. Those with an M.D. will be expected to have completed at least four years of post-clinical bench research training in cell biology and/or molecular biology. Candidates with a Ph.D. are also expected to have completed a two to three year post doctoral fellowship.

The successful candidate will be appointed both as a Scientist at The Hospital For Sick Children Research Institute and as an Assistant or Associate Professor in the Department of Paediatrics (Division of Nephrology) at the University of Toronto (The Hospital For Sick Children). The Institute will assist in seeking appointment to an appropriate Basic Sciences Department at the University of Toronto. Start-up support and laboratory facilities will be made available for the successful candidate to develop his/her independent research program. The candidate will also have the opportunity to interact with other investigators in the Division of Nephrology and the Division of Cell Biology at The Hospital For Sick Children. The candidate will be expected to compete successfully for extramural grant support.

Send curriculum vitae and a list of three referees, by January 1, 1992, to: **Dr. K. Skorecki, Director, Division of Nephrology, Dept. of Medicine and Paediatrics, The Hospital For Sick Children, 555 University Ave., Room 5109, Toronto, Ontario M5G 1X8.**



THE HOSPITAL
FOR SICK CHILDREN

Research Psychologist

Systems Research Laboratories, Inc. has an immediate opening for a research psychologist to assist in the study of thermal sensation thresholds from exposure to electromagnetic fields.

Primary tasks include taking physiologic and thermoregulation measurements across a wide range of frequencies utilizing various sensing and recording devices.

A Ph.D. degree with a background in experimental psychology techniques and the capability to perform independent psychophysical research is preferred. A BS/BA degree is required. This program also requires a relocation to **New Haven, CT** for the first year, then back to **San Antonio, TX** for the duration of the project.

SRL offers a competitive salary, relocation assistance, and a comprehensive fringe benefit program. Submit resume in confidence to SRL, Dept. 23, 2800 Indian Ripple Road, Dayton, OH 45440-3696.



SYSTEMS RESEARCH
LABORATORIES, INC.



2800 Indian Ripple Rd.
Dayton, OH 45440-3696

EOEMFHV

Massachusetts Institute of Technology

Graduate Study
Division of Toxicology

Molecular, Chemical, & Genetic
Research Related to
Cancer & other Diseases

Research Areas:

Molecular & Cellular Toxicology
Environmental Health Sciences
Molecular Epidemiology
Human Pathophysiology
Molecular & Cellular Biology of
Cancer and Genetic Change
Molecular Analysis of the Pathology
of Chemical & Infectious Agents

Faculty:

Peter C. Dedon, John M. Essigmann,
James G. Fox, Steven R. Tannenbaum,
William G. Thilly, Gerald N. Wogan,
Helmut Zarbl

Full tuition & stipend offered to all accepted applicants.
For information & application contact Debra A. Luchanin
MIT Rm. 16-330, Cambridge, MA 02139 (617) 253-1712

MIT is an Equal Opportunity Employer

Carolina Workshops
University of North Carolina
at Chapel Hill

YEAST MOLECULAR GENETICS

March 2-17, 1992

Students will be introduced to the genetics and molecular biology of the yeast *Saccharomyces cerevisiae*. Specific techniques that will be used include: yeast transformation, rescue of plasmids from yeast, yeast crosses, tetrad analysis, complementation of yeast mutations, isolation of DNA from yeast, OFAGE analysis of yeast chromosomes, and the use of PCR to diagnose genomic alterations. Among other experiments, we will attempt to identify and isolate the yeast genes that are functional homologues of genes from other organisms (including humans). Tuition is \$1,950. Deadline—January 15, 1992.

Instructors:

Thomas Petes, Ph.D.; Kerry Bloom, Ph.D.; Elaine Yeh, Ph.D., UNC-CH

APPROACHES TO GENE EXPRESSION

May 17–June 1, 1992

Students will be introduced to the design and implementation of strategies for expressing cloned genes in *E. coli*, mammalian and insect cells, and insect larvae. Specific techniques include: construction of recombinant molecules using plasmid and baculovirus vectors, methods of transfection, and analysis and purification of recombinant proteins. The unique features of each system and their usefulness in studying different types of biological problems will be emphasized. Tuition is \$2,150. Deadline—March 20, 1992.

Instructors:

Stephen Hunt III, Ph.D. UNC-CH; Judith Lesnaw, Ph.D. University of Kentucky

MOUSE GENETICS

July 19–August 1, 1992

Students will be introduced to the mouse as a developmental system, and will learn molecular genetic manipulations of this mammal. Specific techniques include embryo isolation and microinjection, embryo culture and transfer, embryonic stem cell culture and manipulation, oviduct and uterine transfer operations, vasectomies, and expression analysis. These tools are the basis for generation and analysis of transgenic mice via microinjection and embryonic stem cell manipulation and transfer. We will discuss the uses of these technologies in studies of mammalian development and in generating animal models of disease. Tuition is \$2,500. Deadline—May 22, 1992.

Instructors:

Victoria Bautch, Ph.D.; Brian Popko, Ph.D., UNC-CH

CAROLINA WORKSHOPS are a series of intensive hands-on laboratory courses designed to teach cutting edge methods in molecular biology. The techniques include basic manipulations such as isolation of insert and vector DNA, ligations, electrophoretic analysis and elution from gels, blotting techniques, preparation and labeling of probes, identification of cloned DNA, and protein purification. Each course provides in addition to training on a specialized topic, experience in the basic techniques which serve as a solid background in molecular biology.

Many applicants to the Carolina Workshops already hold the M.D. or Ph.D. degree. Our courses are heavy on hands-on contact with the protocols, light on lectures concerning the basics. Applicants unfamiliar with the theoretical basis of molecular biology may profit from reading a text such as *Principles of Gene Manipulation* by R.W. Old & S.B. Primrose. Blackwell Scientific Publications, 1989. Experience with running these courses for nine years now indicates that both students with and without any prior hands-on experience with molecular techniques find these courses useful. Experienced students benefit from in-depth interaction with the instructors: novices learn the realities behind the innocent looking protocols.

To apply, send a curriculum vitae and a brief letter describing your research interests and their relevance to the Workshop for which you apply. Applicants should contact the program office as soon as possible. Please indicate your complete mailing address and telephone/fax number. Full consideration will be given to applications received by the indicated deadlines.

For further information or to apply, contact:

Dr. Wayne Litaker, Facility Director

University of North Carolina at Chapel Hill
Program in Molecular Biology & Biotechnology

402 Taylor Hall CB 7100 S

Chapel Hill, North Carolina 27599–7100

TELEPHONE (919) 966-1730, FAX (919) 966-6821

Faculty Positions In

**MOLECULAR
NEUROBIOLOGY**

Applications are invited for tenure track faculty positions at the **Assistant or Associate Professor** level. Successful candidates will hold an academic appointment in an appropriate department in the Colleges of Medicine or Biological Sciences and join five current faculty in new laboratories on the neurobiology floor of the Ohio State Biotechnology Center. Applicants should demonstrate exceptional potential to develop strong research programs that apply molecular biological approaches to address significant problems in neurobiology such as signaling and cognition, nerve regeneration and repair, and neural development. The Center includes a transgenic mouse facility supervised by a full-time staff member, and candidates skilled in utilization of transgenic mice in neurobiologic research are encouraged to apply. The Ohio State University has made a major commitment to establish an outstanding interdisciplinary program in molecular neurobiology that is reflected by the quality research facilities and highly competitive start-up funds and salary that accompany these faculty positions.

Applicants should submit a curriculum vitae, statement of research plans, and arrange to have three letters of reference sent to: **Dr. Anthony Young, Chairperson, Molecular Neuro-**

biology Search Committee,
Ohio State Biotechnology
Center, Rightmire Hall, 1060
Carmack Rd., Columbus, OH
43210. Screening of candidates
will begin on December 15,
1991. The Ohio State University
is an Equal Opportunity/Affirm-
ative Action Employer.

**THE
OHIO
STATE
UNIVERSITY**

Kennedy Research Institute

**Postdoctoral Fellowships
in
Brain Injury Research**

Kennedy Research Institute in Baltimore is recruiting applicants for a new training program in basic and clinical neuroscience related to brain injury in children and adolescents. The research training program offers physicians and Ph.D. scientists the opportunity to do research in developmental neuroscience, neurobiology, cognitive and behavioral disorders, epidemiology and health services research. The clinical and basic scientists at the Institute are on the faculty of the Johns Hopkins Medical Institutions in the Departments of Neurology, Pediatrics, Psychiatry, Rehabilitation Medicine and Public Health. This program is supported in part by the NIH, National Center for Medical Rehabilitation Research.

Please forward curriculum vita and a brief description of your interests to:

Michael V. Johnston, M.D.
Director, Neuroscience Laboratory
Kennedy Research Institute
707 North Broadway
Baltimore, MD 21205

POSITIONS OPEN

PROFESSOR AND CHAIR DEPARTMENT OF MATERIALS SCIENCES AND ENGINEERING THE JOHNS HOPKINS UNIVERSITY

Applications and nominations are invited for the position of professor and chair of the Department of Materials Science and Engineering in the Whiting School of Engineering. The department consists of seven tenured and tenure-track faculty, three research professors, and six faculty with adjunct or joint appointments. About 25 undergraduate students are enrolled in an ABET-accredited program, and more than 120 students are enrolled in masters and doctoral programs. The faculty currently direct sponsored research programs funded in excess of \$1 million per year. Many faculty in the department are active in the Center for Nondestructive Evaluation.

Candidates for the position should have an earned doctorate in materials sciences, materials engineering, or related field and have a record of outstanding teaching and scholarship. Preference will be given to candidates specializing in physical properties of advanced materials including composites, ceramics, and electronic materials. Candidates must have demonstrated leadership qualities and must be qualified to serve as chair of the department.

Applications should include a résumé describing current research and three references. *Nominations of qualified women and minorities are especially encouraged.* Please respond to:

Dr. Charles R. Westgate
Chair of MS&E Search Committee
Electrical and Computer Engineering
Barton 105

Johns Hopkins University
Baltimore, MD 21218

Telephone: 301-338-7014; FAX: 301-338-5566

The Johns Hopkins University is an Equal Opportunity, Affirmative Action Employer.

PROJECT COORDINATOR

The National AIDS Exhibit Consortium is seeking a full-time Project Coordinator to administer its day-to-day operations. The Project Coordinator reports to the Consortium Director and will work at the Museum of Science and Industry in Chicago.

The Consortium is an association of eight leading U.S. science museums working together to develop innovative exhibits and programs about HIV and AIDS. The consortium is supported by public and private funds and has a projected annual operating budget of between \$1.5 million and \$3 million.

The Project Coordinator will be chiefly responsible for monitoring and coordinating projects; ensuring active communications among member institutions and between the Consortium and the general public as well as the museum, scientific and medical communities; coordinating Consortium fundraising initiatives and member institutions' development officers; devising and administering effective financial controls and project planning mechanisms; and assisting the Consortium Director and the Consortium's Coordinating Committee in strategic planning activities. The Project Coordinator must have strong management skills and excellent oral and written communication skills.

The post is available immediately and will be filled as soon as possible. Send your letter of application and résumé (with salary history) to:

Dr. Barry Aprison
Director
National AIDS Exhibit Consortium
Department of Science
Museum of Science Industry
57th Street and Lake Shore Drive
Chicago, IL 60637

Equal Opportunity Employer.

More than
150,000 people
paid to see your ad
in **SCIENCE**.

Classified Advertising Department
Telephone: 202-326-6555
FAX: 202-682-0816

POSITIONS OPEN

FERRIS STATE UNIVERSITY COLLEGE OF ARTS AND SCIENCES HEAD, DEPARTMENT OF BIOLOGICAL SCIENCES

The College of Arts and Sciences, Ferris State University, invites nominations and applications for the administrative position of Head of the Department of Biological Sciences. The position begins 1 July 1992. The department of 16 faculty and 4 support staff offers professional and career-oriented programs. The department offers undergraduate degrees in applied biology, biotechnology, and ornamental horticulture.

The qualifications for this position include an earned doctorate in one of the biological sciences; scholarship and teaching experience appropriate to senior faculty rank; experience and familiarity with a broad spectrum of biology ranging from freshman general education course work to upper-level specialty courses; ability to work with faculty in a broad array of disciplines including both liberal arts and technical fields; experience with curriculum evaluation and development; ability to evaluate and manage financial, capital, and human resources; high degree of organizational, leadership, and interpersonal skills; and demonstrated personal qualities of integrity and industriousness.

Ferris State University is Michigan's premier applied polytechnic university, providing career-oriented education to over 12,400 students. More than 120 undergraduate programs, three master's degrees and two doctorates are offered at FSU's 600-acre campus in Big Rapids, Michigan; a number of programs are also offered at off-campus locations. Ferris serves the technology and work-force demands of business and industry, the health care professions, and society in general through applied research and practical education.

Applications should consist of a cover letter, current curriculum vitae, names and telephone numbers of three references, and graduate and undergraduate transcripts, which should be forwarded as soon as possible. Screening of applications will begin 1 December 1991, and continue until the position is filled.

Send inquiries and applications to: **Thomas E. Oldfield, Ph.D., Biology Search Committee Chair, c/o Sue K. Hammersmith, Dean, College of Arts and Sciences, Ferris State University, Starr 120, Big Rapids, MI 49307-2295.** *Ferris State University is an Equal Opportunity, Affirmative Action Employer.*

UNIT DIRECTOR, RETROVIROLOGY RUSH MEDICAL COLLEGE DEPARTMENT OF IMMUNOLOGY/ MICROBIOLOGY OFFICE OF CONSOLIDATED LABORATORY SERVICES

The Office of Consolidated Laboratory Services (OCLS) at Rush-Presbyterian-St. Luke's Medical Center is seeking a proven professional to assume a key position of unit director of the Retrovirology laboratory at Rush. The laboratory serves Rush's 1,265-bed medical center facility as well as a large outpatient population and referral client base. The medical center has national recognition as one of the leaders for integrated patient care/education research. This laboratory offers services in the areas of serology, retroviral cultures and molecular diagnostics. It also participates in educational programs for pathology residents, medical technologists, medical, doctoral and postdoctoral students. This laboratory is part of the Division of Immunology which includes molecular biology, general immunology, flow cytometry, genetics, endocrinology and HLA and tissue typing.

The successful candidate should have a strong commitment to service, research and education; will be expected to develop an independent researcher R&D program and to teach in the university. Professional experience in a diagnostic laboratory, familiarity with techniques of retrovirology and documented investigational productivity are sought. The salary depends upon training and experience. Applicants must possess an M.D. and/or Ph.D. or equivalent degree. Applicants should submit curriculum vitae statement of research and the names of three references to:

Robert De Cresce, M.D., Director
Office of Consolidated Laboratory Services
Rush-Presbyterian-St. Luke's Medical Center
653 West Congress Parkway
Chicago, IL 60612

An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DIRECTOR OFFICE OF OCEAN AND EARTH SCIENCES

National Ocean Service, National Oceanic and Atmospheric Administration, Department of Commerce, Rockville, Maryland, Key Senior Executive Service position. Directs scientific studies in physical oceanography; responsible for development of a global ocean observation system, management of a national tide- and water-level observation network; and development of a wide range of ocean and earth science products and services. Salary \$87,000 to \$108,300 based on qualifications. Apply by 17 December 1991. For application procedures contact **Debbie Schell or Tito Santiago on 301-427-2531.** *Equal Opportunity Employer.*

LABORATORY DIRECTOR ENVIRONMENTAL MONITORING SYSTEMS LABORATORY OFFICE OF MODELING, MONITORING SYSTEMS AND QUALITY ASSURANCE LAS VEGAS, NEVADA

ES 401/1301

\$87,000 TO \$95,300

The U.S. Environmental Protection Agency (EPA) is seeking highly qualified candidates for the position of Laboratory Director, Environmental Monitoring Systems Laboratory, Las Vegas, Nevada (EMSL-LV), Office of Modeling, Monitoring Systems and Quality Assurance (OMMSQA). The EMSL-LV is a component of the Office of Research and Development (ORD) and is responsible for research and development supporting a major segment of the Agency's programs relating to human and ecosystem exposure to environmental pollutants. The Laboratory conducts research and development in the areas of analytical chemistry, immunochemistry, field monitoring methods and design, ecological status and trends, terrestrial ecology, integrated human exposure assessment, human biomarkers of exposure, remote sensing, geohydrology, and environmental radiation assessment.

Applicants for this Senior Executive Service (SES) position must have a bachelor's or higher degree in the biological or physical sciences, or a field relating to the work of the laboratory, and professional experience demonstrating leadership and technical competence in one of those fields. Applicants must also meet the technical and executive qualifications described in the vacancy announcement. For a copy of the vacancy announcement, call or write:

Chaunta Gladney
Environmental Protection Agency
Executive Resources and
Special Programs Division
Room M3910 (Mail Code: PM-224)
401 M Street, S.W. (Waterside Mall)
Washington, DC 20460
Telephone: 202-260-3328

Applications must be postmarked by 1 December 1991. *EPA is an Equal Opportunity Employer.*

NORTHWESTERN UNIVERSITY MOLECULAR/CELLULAR NEUROBIOLOGIST

The Department of Neurobiology and Physiology invites applications for one or more **TENURE-TRACK POSITIONS** starting September 1992. Priority will be given to exceptional junior-level research neurobiologists. However, applications from more senior candidates will also be considered. Outstanding applicants working in any area of neuroscience will be considered, although candidates working in molecular or cellular neurobiology are particularly encouraged to apply. Applicants should have a Ph.D., or M.D., and postdoctoral experience. Curriculum vitae, list of publications, a description of current and future research, and three letters of recommendation should be sent to: **Dr. Lawrence Pinto, Search Committee Chairman, Department of Neurobiology and Physiology, Northwestern University, 2153 Sheridan Road, Evanston, IL 60208.** *The department encourages applications from women and minority candidates. Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States.*

**National Institutes of Health
NATIONAL INSTITUTE OF DENTAL RESEARCH
EXTRAMURAL PROGRAM**

The Extramural Program, the organizational unit of the National Institute of Dental Research (NIDR) responsible for promoting and managing all dental research training and manpower development awards and research contracts for the NIDR, invites applications for three Health Scientist Administrator positions.

1) Assistant Director for Program Development

GM-0601-15

Salary Range \$61,643 pa - \$80,138 pa
(Supervisory Position)

2) Director, Periodontal Diseases Program

GS-0601-12, 13, or 14

Salary Range \$37,924 pa - \$68,129 pa

3) Director, Craniofacial Development and Disorders

GS-0601-12, 13, or 14

Salary Range \$37,924 pa - \$68,129 pa

Activities include planning and implementing research initiatives through grants, contracts and/or cooperative agreements and providing administrative and scientific oversight of proposals and awards.

Applicants must have a Ph.D. degree (or possess equivalent combination of experience and training) in a science related to health, dentistry and/or medicine; accomplishments in a research area of interest to the Program, and demonstrated ability in health science administration.

Appointment to these positions will be in the Civil Service at the grade levels indicated above. Alternatively, appointment in the Commissioned Corps of the U.S. Public Health Service may be appropriate. U.S. citizenship is required. Salary is commensurate with qualifications and experience.

Applicants must submit a SF-171, (available in any Federal Personnel Office), curriculum vitae and bibliography. Applicants must have or obtain a Civil Service Notice of Rating as a Health Scientist Administrator prior to appointment.

Application and documents must be submitted by November 30, 1991 to:

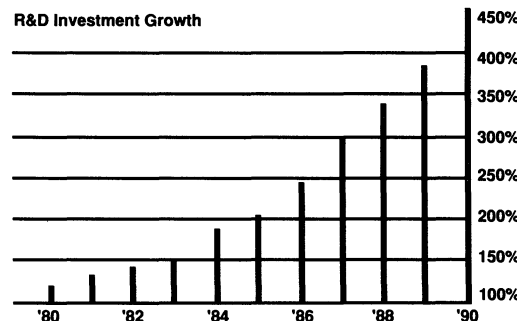
**Ms. Faye M. Harbrant
Personnel Management Specialist
National Institute of Dental Research
National Institutes of Health
9000 Rockville Pike
Building 31, Room 2C23
Bethesda, MD 20892
(301) 496-6971**



NIH is an Equal Opportunity Employer

Drug Delivery Scientists

The reasons to join Pfizer keep growing.



The Pharmaceutical Research and Development Department of Pfizer Central Research is undergoing expansion, and seeks scientists to extend and complement its large multidisciplinary staff. These positions offer excellent opportunities for professional growth and recognition, competitive salaries/benefits, and a generous relocation allowance. Central Research is a growing state-of-the-art facility on the coast of eastern Connecticut, serving almost 2,000 researchers.

Pharmaceuticals R&D— You will design and develop clinical and commercial formulations for newly discovered drug candidates. A PhD in pharmaceuticals, chemistry, industrial pharmacy or the equivalent, plus a strong background in physical chemistry and/or analytical chemistry is desired.

Oral Drug Delivery— You will carry out *in vitro* and *in vivo* studies aimed at diagnosing and solving drug absorption problems. A PhD in physiology, pharmaceuticals, biochemistry or biophysics or the equivalent, plus an interest in drug delivery problems, is essential. A background in biopharmaceuticals, gastrointestinal physiology or quantitative biology helpful.

Controlled Release Technology— You will be responsible for the design, manufacture and *in vitro* evaluation of controlled release dosage forms intended for oral administration to humans. A PhD in pharmaceuticals, chemical engineering or the equivalent is required. A background in polymer science, materials processing, pharmacokinetics or applied physical chemistry is desired.

Qualified applicants should submit a letter of interest and resume to: Lorraine C. Corr, Supervisor, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. We are an equal opportunity employer.



Central Research

Bringing science to life.



The Royal Society

ROYAL SOCIETY UNIVERSITY RESEARCH FELLOWSHIPS

Applications are invited for about 20 Royal Society University Research Fellowships tenable in the first instance for five years from 1 October 1992 (or slightly later in the academic year 1992-93), with two possible further renewals for three and then two years. The Fellowships are available in any branch of science, including agriculture, medicine, mathematics, engineering and technology. The primary criterion for selection will be scientific merit based on record so far and on future potential. Some account will also be taken of the facilities and intellectual environment being offered by the prospective host department. Salaries will be on the non-clinical university scale, with London Allowance where appropriate. Annual research expenses (a sum of up to £10,000 may be sought in 1992-93) will be available, together with return travel and a contribution to baggage costs for successful applicants from overseas and their families.

Applicants should be scientists normally with between three and ten years of postdoctoral research experience. They must be British Citizens and propose to hold the fellowships in universities or polytechnics in the United Kingdom. Those who already have substantive posts in these places will not normally be considered. Previously unsuccessful applicants may apply again if still eligible, but should make fresh applications and arrange for updated referees' statements.

Application details are available (on written request only) from Mrs. U.M.A. Tokie, The Royal Society, 6 Carlton House Terrace, London, SW1Y 5AG (FAX: 071-930-2170). Closing date 14 February 1992. Application forms are not available after 31 January and applications arriving after 4 p.m. on 14 February will not be considered.

POSITIONS OPEN

SENIOR VICE PRESIDENT ACADEMIC AFFAIRS UNIVERSITY OF CALIFORNIA

The President and the Regents of the University of California invite nominations and applications for the position of Senior Vice President of Academic Affairs of the University of California.

The University of California is a publicly assisted institution with nine campuses which include five academic medical centers and 14 health sciences schools, a Division of Agriculture and Natural Resources, numerous organized research units and programs abroad. The university is the state's land grant university. It also manages three national laboratories for the U.S. Department of Energy. In 1990-91, the university enrolled 166,547 students and employed nearly 150,000 persons including those at the three DOE national laboratories. Its annual budget for 1990-91 was approximately \$9 billion, inclusive of the DOE laboratories.

The Senior Vice President of Academic Affairs reports directly to the President of the university. The Senior Vice President acts for the President in the absence of the President. Responsibilities include academic planning and programs; liaison with university-wide Academic Senate and student governments; administration and/or coordination of Special Studies, Admissions and Outreach, Library Planning, Student Affirmative Action, Student Affairs, University Extension and Summer Sessions, and the University Press. The Senior Vice President also is responsible for programmatic oversight of the three Department of Energy laboratories managed by the university.

Candidates should have administrative experience in large-scale, substantial, diverse, and complex organizations, preferably research universities, together with a strong record of teaching and scholarship. Preference will be given to individuals with University of California experience. Candidates should have dealt with senior officials and governing boards, governmental executives, and legislative bodies.

Applications and nominations accompanied by current résumés may be addressed to:

The President
University of California
300 Lakeside Drive
22nd Floor
Oakland, CA 94612-3550

and should be received no later than 25 November 1991, to be assured full consideration.

An Equal Opportunity, Affirmative Action Employer.

FACULTY POSITION IN ENVIRONMENTAL MOLECULAR BIOLOGY RENSSELAER POLYTECHNIC INSTITUTE

The Department of Biology is seeking applicants for a tenure-track faculty position at any level in the area of environmental molecular biology. The successful candidate will be expected to establish a strong research program using recombinant DNA technology in environmental research and to interact actively with other faculty involved in Rensselaer's environmental science initiative. This position will begin in August 1992. Applicants should submit a résumé, statement of research interests, and names and addresses of at least three references by 18 December 1991 to: Dr. Dwight E. Wilson, Biology Department, Rensselaer Polytechnic Institute, Troy, NY 12181. Rensselaer is an Affirmative Action/Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.

FACULTY POSITION IN PHARMACOLOGY UNIVERSITY OF CALIFORNIA, IRVINE

Applications are invited for a tenured or tenure-track position in pharmacology. Qualifications include an outstanding record of research accomplishment with experience in molecular biological approaches to problems in pharmacology or related areas, a commitment to teaching, and a Ph.D. (or M.D., or both) in pharmacology or related field. Level of appointment and salary will be commensurate with achievement and experience. Curriculum vitae, references, and a summary of research interests should be sent by 1 December 1991 to: Dr. Larry Stein, Chairman, Department of Pharmacology, College of Medicine, University of California, Irvine, CA 92717. An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

TWO FACULTY POSITIONS are open in the Graduate Department of Nutrition of Case Western Reserve University. The fields are (1) use of stable isotopes (gas chromatography mass spectrometry-liquid chromatography mass spectrometry) for metabolic and nutritional studies, and (2) molecular nutrition. Candidates are expected to develop independent research programs, participate in graduate teaching and in the training of graduate and postdoctoral students. Send curriculum vitae, representative reprints, outline of research program and teaching interests, and three letters of reference by 30 November 1991 to: Dr. Henri Brunengraber, Chairman, Department of Nutrition, Case Western Reserve University, Cleveland, OH 44106. Case Western Reserve University is an Equal Opportunity Employer and encourages applications from minorities and women.

THE UNIVERSITY OF THE WEST INDIES ST. AUGUSTINE

Applications are invited for the following vacancy: Chemistry: LECTURER/ASSISTANT LECTURER IN PHYSICAL CHEMISTRY.

Annual salary range: Lecturer: TT\$60,108 to \$71,988 (B)—\$83,868. Assistant lecturer: TT\$50,484 to \$54,444.

Annual regional allowances: Lecturer above bar: TT\$7,884; below bar: TT\$4,380. Passages, pension, housing allowances, study and travel and book grants. Applications naming three referees and detailing qualifications and experience to the Registrar, U.W.I., St. Augustine as soon as possible. Further particulars sent to all applicants.

COGNITIVE NEUROSCIENCE. The Department of Psychology at Carnegie Mellon University invites applications from cognitive neuroscientists for a FACULTY POSITION preferably at, but not necessarily limited to, the junior level. Cognitive neuroscience at Carnegie Mellon is characterized by attempts to arrive at cognitive theories derived from consideration of the computational properties of neural circuitry, from patterns of damage following brain injury, and from the postnatal development of the brain. A variety of different techniques ranging from connectionist modeling to animal studies are currently utilized. In the near future opportunities for PET scanning will also become available. This hiring is part of a plan to make cognitive neuroscience an independent "track" within the department. Please send curriculum vitae, statement of research interests, representative papers, and three letters of recommendation to: Cognitive Neuroscience Search Committee, Department of Psychology, Carnegie Mellon University, Pittsburgh, PA 15213-3890. Application deadline: 1 February 1992. Affirmative Action/Equal Opportunity Employer.

MOLECULAR BIOPHYSICS AT JOHNS HOPKINS

SEVERAL FACULTY POSITIONS in molecular biophysics are available at The Johns Hopkins University, both in the School of Arts and Sciences, Homewood Campus (A&S) and in the School of Medicine (SOM). Molecular analysis via nuclear magnetic resonance spectroscopy is an area of particular interest although candidates with other areas of interest such as x-ray crystallography and computational biophysics are encouraged to apply. Appointments in the Departments of Biology, Biophysics, and Chemistry (A&S) and the Department of Biophysics and Biophysical Chemistry (SOM) are possible. Potential affiliations with the Institute of Biophysical Research on Macromolecular Assemblies, the Markey Center for Macromolecular Structure and Function, and the Intercampus Program in Molecular Biophysics are possible as well. The successful candidates are expected to develop internationally competitive research programs and augment the teaching curriculum in molecular biophysics. Appointments are expected at the Assistant Professor (tenure-track) level although appointments at higher ranks will be considered for exceptionally qualified applicants. Please send curriculum vitae, a brief statement of research interests, and for junior candidates, arrange for three letters of reference to be sent to: Search Committee, Institute for Biophysical Research on Macromolecular Assemblies, 102 Macaulay Hall, The Johns Hopkins University, 3400 North Charles Street, Baltimore, MD 21218. FAX: 410-516-5199. Applications must be received no later than 30 November 1991. The Johns Hopkins University is an Affirmative Action, Equal Opportunity Employer.

POSITIONS OPEN

CELL AND DEVELOPMENTAL BIOLOGY

The Department of Biological Sciences anticipates a junior or senior tenure-track **FACULTY POSITION** open in the area of cell or developmental biology. Applicants using *Drosophila* as a model system approaching basic cellular or developmental problems are especially encouraged to apply. The successful candidate will be expected to establish an extramurally funded research program, train graduate students, and participate in undergraduate education. For candidates at the senior level an established research program and an interest in directing further faculty recruitment is expected. Applicants should send curriculum vitae, a summary of research interests and goals, and arrange to have at least three letters of reference sent to:

Cell and Developmental Biology
Search Committee
Department of Biological Sciences
University of Pittsburgh
Pittsburgh, PA 15260

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

The University of Alabama at Birmingham, *An Equal Opportunity/Affirmative Action Employer*, invites applications for **FACULTY APPOINTMENTS** in the Department of Pathology. An applicant should have an M.D., M.D.-Ph.D., or Ph.D. degree in one of the basic sciences such as biochemistry, cell biology, etc., and desire to focus his/her efforts on graduate education and research. Applicants will be considered who either have an existing independently funded research program or have a plan to develop such a program.

Academic rank and tenure are dependent upon the qualifications of the applicant.

Current curriculum vitae of interested persons should be forwarded to: Jay M. McDonald, M.D., Professor and Chairman, Department of Pathology, The University of Alabama at Birmingham, University Station, Birmingham, AL 35294.

UNIVERSITY OF DUNDEE LECTURER IN PHARMACOLOGY

Applications are invited for a nonclinical lectureship in the Department of Pharmacology and Clinical Pharmacology whose research has twice been rated highly by the UFC. The successful applicant will be expected to develop an active research group and to participate in the department's undergraduate teaching to medical and science students. Candidates with a research record in any area of biological sciences relating to pharmacology are invited to apply. Salary will be at the appropriate point on the Lecturer scale (£12,690 to £23,427). Informal inquiries should be addressed to the Head of the Department, Professor I. H. Stevenson (telephone: 0382 632161 or FAX: 0382 67120) or to Dr. J. J. Lambert at the November meeting of the Society for Neurosciences in New Orleans.

Applications (seven copies if posted in the U.K., one copy if posted overseas), including detailed curriculum vitae and the names and addresses of three referees, should be sent in writing to the Personnel Office, The University, Dundee, United Kingdom, DD1 4HN by 13 December 1991. Please quote reference EST/48/91.

POSTDOCTORAL POSITIONS. Two positions are available to study protein structure-function relationships. The first position requires experience in multidimensional NMR techniques (*applicants must be U.S. citizens*). The second position requires experience using computational techniques to study protein structure (*no citizenship restrictions*). Send curriculum vitae and the names and telephone numbers of three references to: Dr. Judith G. Shelling, Department of Biochemistry, University of Kentucky, Lexington, KY 40536-0084. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION. Available January 1992 for research on structure/regulation of an ammonium inducible promoter of a nuclear gene encoding two chloroplastic glutamate dehydrogenases and transformation of *Chlorella* cells by foreign genes under control of this promoter. Molecular biology experience required. Contact: Dr. Robert R. Schmidt, Department of Microbiology and Cell Science, 3103 McCarty Hall, University of Florida, Gainesville, FL 32611. Telephone: 904-392-0237.

8 NOVEMBER 1991

POSITIONS OPEN

ANIMAL BEHAVIOR: Interdisciplinary Training at the University of California, Davis. Opportunities for: **POSTDOCTORAL TRAINING, GRADUATE TRAINING, UNDERGRADUATE SUMMER FELLOWSHIP.** A new Research Training Group in animal behavior supported by the Directorate of Biological, Behavioral and Social Sciences of the National Science Foundation invites inquiries from prospective applicants for postdoctoral training, graduate student training, and undergraduate summer fellowships. Inquiries or nominations should include the following: Postdoctoral training: curriculum vitae, statement of interdisciplinary research interests, and three letters of recommendation. Deadline: 15 January 1992. Graduate training: curriculum vitae, transcripts, statement of interdisciplinary interest in animal behavior, names and addresses of three referees. Deadline: 1 December 1991. Undergraduate Summer fellowships: résumé, transcripts, statement of interdisciplinary interest in animal behavior, names and addresses of three referees. Deadline: 15 January 1992. Address correspondence to: Dr. Benjamin Hart, NSF RTG, VM: Physiological Sciences, University of California, Davis, CA 95616-8741.

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

POSTDOCTORAL POSITION MOLECULAR ONCOLOGY PROGRAM

Postdoctoral position available in research laboratory investigating mitogenetic pathways mediated by tyrosine kinases. Interested candidates should forward curriculum vitae and three letters of recommendation to: Gary D. Kruh, M.D., Ph.D., c/o Personnel Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Telephone inquiries can be made by calling Dr. Kruh at 215-728-5317. *Equal Opportunity Employer.*

FOX CHASE CANCER CENTER

POSTDOCTORAL POSITION is available to investigate intracellular signal transduction in platelets. Experiments will examine a cytoskeletal protein which is both a cAMP-dependent protein kinase substrate and a member of the Ras superfamily of GTP binding proteins. Recombinant DNA as well as traditional biochemical methods will be utilized. Send curriculum vitae and two letters of reference to: Nancy Andrews, Center for Thrombosis and Hemostasis, CB #7015, 435 Burnett Womack Building, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599.

POSTDOCTORAL POSITION. Available immediately to study oxygen control of cytochrome gene expression and function in yeast. Research involves recombinant DNA techniques, genetics, protein purification and analysis, fermentation, spectroscopy, and site-directed mutagenesis for structure-function analysis. Send curriculum vitae and names of references to: R. O. Poyton, MCD Biology, Box 347, University of Colorado, Boulder, CO 80309-0347. *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION. Available immediately to study the hormonal regulation of gene expression in plants. Experience in basic molecular techniques including plant transformation skills is required. Send curriculum vitae and names of three references to: Dr. R. N. Arteca, Penn State University, Department of Horticulture, University Park, PA 16802. Telephone: 814-863-2252. *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS IN RECOMBINANT ANTIBODY PRODUCTION AND IMMUNOCHEMISTRY. Two positions are open immediately for participation in multiyear collaborative research projects on the development of immunoassays for human and environmental monitoring. Positions focus on expression systems for recombinant antibodies, and organic synthesis and/or analytical chemistry for immunoassays for small molecules in collaboration with Drs. B. Hammock, S. Maeda and P. Choudary. Positions contingent upon funding. Send curriculum vitae, relevant publications and names of three references to: Kathleen Dooley, Department of Entomology, University of California, Davis, CA 95616. FAX: 916-752-1537 by 29 November 1991. *The University of California is an Equal Opportunity Employer.*

Geisinger Clinic

POSTDOCTORAL POSITION

Applications are invited from candidates with backgrounds in molecular biology, protein biochemistry or cell biology to participate in research focused on low molecular mass GTP-binding proteins involved in vesicular transport and signal transduction in mammalian cells. Specific emphasis is placed on defining the influence of post-translational modifications (e.g., isoprenylation) on the functions of these proteins.

The Weis Center is a well-equipped modern research facility located in an attractive region of central Pennsylvania. We offer competitive stipends, excellent benefits and opportunities for collaborative interactions. For consideration, please send curriculum vitae, brief statement of interests and names of three references to: Dr. William Maltese, Weis Center for Research, Geisinger Clinic, 26-16, Danville, PA 17822. *Equal Opportunity Employer M/F/H/V.*

Geisinger

BIOCRIST, INC.

STRUCTURE BASED DRUG DESIGN

BioCryst is a leading biopharmaceutical company in the field of rational drug design. We are seeking innovative scientists to join our multidisciplinary team in the following areas:

Protein Biochemistry

M.S./B.S. scientists with experience in protein purification and protein crystal growth.

Computational Chemistry

Ph.D. scientists with experience in current drug design methodologies, protein and small molecule modeling, and macromolecular simulations. Scientific programming skills are expected.

BioCryst offers competitive compensation and benefits and excellent living conditions in Birmingham, Alabama, designated as one of America's Most Livable Cities.

For confidential consideration, please send your resume, current salary and the names of references to:

BioCryst, Inc.

Human Resources

1075, 13th Street South
Birmingham, AL 35205

Bitnet:: BABU@UABCMC

POSITIONS OPEN

POSTDOCTORAL POSITION, NEUROSCIENCE. Available immediately to study the role of motor cortex in the acquisition and performance of skilled movement. Areas of research include: representation patterns in primate motor cortex, nerve injury and experience-induced change in motor cortex organization, computer simulations. Experience in electrophysiological techniques, computer programming, and interest in neocortical function preferred. Required: Ph.D. in neuroscience or closely related discipline. Send curriculum vitae with names of three references by 30 November 1991 to: **John P. Donoghue, Ph.D., Center for Neural Science—JA, Box 1953, Brown University, Providence, RI 02912.** Telephone: 401-863-2701. *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION. Aquatic Plant and Ecosystem Modeling. Available immediately. Study and build models of aquatic macrophyte responses to global atmospheric change. Photosynthesis, growth, reproduction and nutrient relations are all pertinent. Opportunities for spatial modeling of changing plant distributions with linkage to spatial data bases (GIS). Possible involvement in growth chamber experimentation. Send curriculum vitae and names of two references to: **M. B. Coughenour, Natural Resource Ecology Laboratory, Colorado State University, Fort Collins, CO 80523.** Closing date: 30 November 1991. *Colorado State University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION IN MOLECULAR CARDIOVASCULAR PHARMACOLOGY. Available for recent Ph.D. in pharmacology, physiology or biochemistry. Project related to molecular pharmacology of purine receptors and the involvement of second messenger systems in vascular and endothelial cells. Salary NIH level. Experience in cardiovascular science preferred. Send curriculum vitae and three letters of recommendation by 1 December 1991 to: **Dr. S. Jarnal Mustafa, Department of Pharmacology, East Carolina University, Greenville, NC 27858.** Federal law requires proper documentation of identity and employability at the time of employment. *Affirmative Action/Equal Employment Opportunity.*

POSITIONS OPEN

TWO POSTDOCTORAL POSITIONS IN THE BIOLOGICAL USE OF ATOMIC FORCE/SCANNING TUNNELING MICROSCOPY

Immediate openings for two positions (Ph.D. and/or M.D.) in well-established laboratory applying AFM/STM and nanotechnology to study the dynamic structures of biomembranes and channels, receptors, and pumps using purified membranes, reconstitution and biochemical manipulations [see *Science* 253, 1405 (1991)]. One position is for a membrane biochemist/structural biologist. Experience in reconstitution is desirable. The second position is for a biophysicist with a background in physical science, molecular modeling, and image analysis. One position on NIH training grant. Send curriculum vitae and names of three references to: **M. F. Arnsdorf, M.D. or R. Lal, Ph.D., University of Chicago, Box 423, 5841 South Maryland Avenue, Chicago, IL 60637 or FAX: 312-702-4427.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately to study the structure and expression of desaturases of sex pheromone biosynthetic pathways of moths using molecular biological techniques. NSF-supported project; excellent facilities and research environment. Ph.D. in molecular biology, genetics, biochemistry or relevant experience in a related discipline required. Submit curriculum vitae and names of three references to: **Dr. Wendell Roelofs, Department of Entomology, Cornell University, New York State Agricultural Experiment Station, Geneva, NY 14456.** *An Equal Opportunity/Affirmative Action Employer.*

TWO RESEARCH ASSOCIATE/POSTDOCTORAL POSITIONS available immediately to study the role of ras oncoprotein membrane association in cellular signaling and oncogenesis. Research is focused on investigating ras farnesyl transferase as a target for anticancer drug development. Salary: \$23,000 to \$25,000 plus benefits. Provide curriculum vitae and references to: **Dr. S. M. Sebt, Department of Pharmacology, University of Pittsburgh, School of Medicine, W1354 Biomedical Science Tower, Pittsburgh, PA 15261.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITION, MOLECULAR ENDOCRINOLOGY. Research in molecular aspects of growth regulation. Experience in molecular biology and/or endocrinology to study avian growth hormone receptor gene structure and regulation of expression. Send curriculum vitae and list of three references to: **Dr. Joan Burnside, Department of Animal Science, University of Delaware, Newark, DE 19717.** FAX: 302-292-3651.

POSTDOCTORAL POSITION. Phagocyte biology and bacterial pathogenesis—emphasis on (1) phagocyte free radical and O₂ chemistry and the iron scavenging protein lactoferrin; (2) antioxidant defenses of *N. gonorrhoeae* and gonococcal vaccine development. Please send curriculum vitae and letters of recommendation to: **M. S. Cohen, M.D., Professor of Medicine and Microbiology, CB# 7030, University of North Carolina, Chapel Hill, NC 27599.**

MOLECULAR NEUROBIOLOGY POSITIONS FOR SENIOR, STAFF AND FOREIGN FELLOWS NATIONAL INSTITUTE FOR DRUG ABUSE (NIDA)

The Laboratory of Molecular Neurobiology, NIDA/Adiction Research Center wishes to enhance efforts in: (1) Cloning drug and neurotransmitter receptors with special emphasis on transporter genes, (2) characterizing expression of these genes in transgenic mice, (3) understanding mechanisms of neurotransmitter gene regulation in cell culture and brain, and (4) RFLP association and linkage studies in human population. Salary and benefits are competitive. Applicants with expertise and interests in molecular biology, molecular genetics, molecular neurobiology, *Xenopus* expression systems, biochemical and genetic characterization in transgenic animals are encouraged to apply to:

George R. Uhl, M.D., Ph.D.
Laboratory of Molecular Neurobiology
Box 5180
Baltimore, MD 21224

The NIDA is an Equal Opportunity/Affirmative Action Employer, M/F/H/V. ADAMHA is smoke-free.

1991

FIRST ANNUAL DISTINGUISHED SCHOLAR AWARD

Sponsor: The Hedgebrook Foundation, a non-profit, charitable trust.

Nominations Invited

An annual Award to recognize and reward innovative scientists employed by the National Institutes of Health or other governmental or academic research laboratories in the Washington, D.C. area for work on outstanding health related projects. The award is also intended to encourage the completion of such projects.

The Award will be presented January, 1992 and carries a cash prize between \$12,500 and \$25,000, to be fixed at the time of the award by the Selection Committee, to be paid in each year of the life of the project up to a maximum of three years. Payment of the award in the second or third years will be contingent upon a showing that the project has not been completed but continues to be actively pursued by the principal researcher whose work served as the basis for the original award.

More than one Distinguished Scholar Award may be made each year.

For additional information, contact: The Hedgebrook Fund, Attention: M. A. Wall, 808 Warren Avenue, Malvern, PA 19355. Deadline for nominations is December 15, 1991.

Ph.D. OPENINGS in Skin Biology Research

Procter & Gamble has two immediate entry-level openings in Cincinnati, Ohio in the skin research department at our Miami Valley Laboratories. Applicants must have the abilities to work in multidisciplinary teams and to communicate effectively.

Biochemistry

Candidates should have a Ph.D. or post-doctoral training in Biochemistry, Cell Biology, Pharmacology, or related discipline.

Research experience in metabolism, extracellular matrix, whole animal experimentation, oxygen radical chemistry, cell culture, and/or drug development are desirable for this opening.

New Drug Discovery

We are looking for a unique individual with broad Ph.D. and/or post-doctoral training in the areas of Biophysical Chemistry and Cell/Molecular

Biology. This candidate must have demonstrated the ability to apply tools and concepts of quantitative physical sciences to complex biological problems.

Procter & Gamble is a world leader in the research, development, and manufacture of consumer products. We offer a competitive salary, a fringe benefit package in the top 5% of U.S. firms, and excellent opportunity for personal and career growth.

Applicants must be presently authorized to work in the U.S. on a full-time basis and should send their resume and publication list to:

Dr. N. G. Howell
Ph.D. Recruiting, Dept. DB
The Procter & Gamble Company
P.O. Box 398707
Cincinnati, Ohio 45239-8707

An Equal Opportunity Employer

Procter & Gamble



GLAXO INSTITUTE FOR MOLECULAR BIOLOGY

Research at the Glaxo Institute in Geneva is focused on discovering the molecular mechanisms of diseases of the CNS, allergies and Inflammatory conditions. We have an outstanding opportunity for a

BIOCHEMIST to study signal transduction mechanisms

The ideal candidate will have significant research experience in the modulation of receptors and signalling events by kinases and phosphatases as well as a broad knowledge of cellular regulatory mechanisms. The successful applicant will have a key role in a multidisciplinary research team investigating the mechanisms of action of CNS neurotransmitters and growth factors.

Several years of relevant post doctoral experience is required as well as a proven track record of research on signal transduction mechanisms.

The Institute provides a dynamic international research environment and actively encourages collaborative projects with academic groups as well as the publication and presentation of results at scientific meetings. GIMB is part of the Glaxo group, one of the world's most successful healthcare companies which has an outstanding reputation for the quality of both its research and products.

We offer an excellent compensation and benefits package and significant opportunities for career development. Geneva, situated in a very attractive part of Europe, has many advantages as a place to live.

If you are interested in this position, please send your curriculum vitae with a list of publications and the names of three referees to: Rita Gloor, Personnel Manager, Glaxo IMB, 14 chemin des Aulx, Case postale 674, 1228 Plan-les-Ouates, Geneva, Switzerland.

MIT

DEPARTMENT OF BRAIN AND COGNITIVE SCIENCES

Candidates are sought for a tenure-track position in molecular, cellular, and/or developmental neurobiology. The position will require a strong research program and academic participation including teaching. There is opportunity for a joint appointment in the Department of Biology.

Applicants should submit a curriculum vitae and a summary of current and proposed research work, and should arrange to have three letters of recommendation sent to: Chair, Neurobiology Search Committee, Dept. of Brain and Cognitive Sciences, E25-406, MIT, Cambridge, MA 02139-4307. Applications will be considered as soon as they are complete (including letters). Qualified women and minority candidates are encouraged to apply. MIT is an Affirmative Action/Equal Opportunity Employer.

Massachusetts
Institute of Technology

Postdoctoral Fellow

NOVA PHARMACEUTICAL CORPORATION, a leading research & development company in Baltimore, MD, seeks a PhD to evaluate the effects of leumedins on neutrophil function.

Qualified candidates will possess a PhD in biochemistry, pharmacology or immunology and have particular expertise in evaluation of neutrophil function.

NOVA PHARMACEUTICAL CORPORATION offers a competitive salary and benefits package which includes company paid health, life and dental insurance; prescription plan; profit-sharing plan; and 401(k) savings plan.

For immediate consideration, please send your resume with salary history to:

**NOVA PHARMACEUTICAL
CORPORATION**
Personnel-91-026
6200 Freeport Centre
Baltimore, MD 21224-6522

Nova is an equal opportunity employer offering a smoke-free work environment.



**RUTGERS, THE STATE UNIVERSITY OF
NEW JERSEY**

AND

**THE UNIVERSITY OF MEDICINE AND
DENTISTRY OF NEW JERSEY
ROBERT WOOD JOHNSON MEDICAL SCHOOL**

Announce

a Shared Interdisciplinary Core Curriculum in

MOLECULAR AND CELL BIOLOGY

The Graduate Programs of Rutgers University and UMDNJ-Robert Wood Johnson Medical School are seeking outstanding applicants for this interdisciplinary curriculum. Successful applicants will be awarded a fellowship providing an annual stipend of \$12,000 plus tuition. Students will take a program of interdisciplinary courses, seminars, and research laboratory rotations. Research opportunities in Molecular and Cell Biology exist in all participating graduate programs of both universities, including the New Jersey Center for Advanced Biotechnology and Medicine, Waksman Institute, and Center for Agricultural Molecular Biology. Students will obtain the Ph.D. degree from the program in which they do their research project.

Students interested in applying or receiving further information should write to:

Michael J. Leibowitz, M.D., Ph.D.
Director, Core Curriculum in Molecular and
Cell Biology
Department of Molecular Genetics and Microbiology
UMDNJ-Robert Wood Johnson Medical School
675 Hoes Lane
Piscataway, New Jersey 08854-5635

*An Equal Opportunity/
Affirmative Action Employer/M/F/H/V*

POSITIONS OPEN

POSTDOCTORAL POSITIONS are available in laboratories associated with the Arizona State University Center for the Study of Early Events in Photosynthesis. Research emphases include mutational analysis of photosynthetic reaction centers from algae, cyanobacteria, and green and purple bacteria, design and synthesis of biomimetic systems, and photosystem analysis by optical, x-ray, and EPR spectroscopy. Depending on the research project and mentor selected, the work may involve biochemistry, biophysics, molecular biology, organic chemistry, and/or physiology. To apply, submit curriculum vitae and an application letter detailing research interests to: **Larry Orr, Program Coordinator, Center for the Study of Early Events in Photosynthesis, Arizona State University, Tempe, AZ 85287-1604; telephone: 602-965-1963; FAX: 602-965-2747; Bitnet PHOTOSYN@ASUCPS; Internet PHOTOSYN@ASUCP1.LA.ASU.EDU.**

HIMS RESEARCH FELLOW IN OCEAN SCIENCES

The Hancock Institute of Marine Studies (HIMS) administers the Graduate Program in Ocean Sciences at the University of Southern California (USC), which is a new multidisciplinary program of research and education involving 40 faculty and 50 graduate students. HIMS is soliciting applications for an appointment as HIMS Research Fellow. The successful candidate should have a Ph.D. and experience in one of the major fields of oceanography (physical, chemical, biological, optical, and geological). It is expected that the candidate will collaborate with one or more USC ocean scientists. The appointment will be effective 1 January 1992 and will remain open until a qualified individual is appointed. The position is for one year and the second year is renewable based on performance. Salary is \$30,000 per year plus an attractive fringe benefit package, and a research stipend is available. Candidates should send curriculum vitae including the names and addresses of three references, a short description of research interests and potential collaborative efforts with USC oceanographers. Applications should be sent to: **Professor Cornelius W. Sullivan, Director, Hancock Institute of Marine Studies, University of Southern California, University Park AHF 254, Los Angeles, CA 90089-0373. University of Southern California is an Equal Opportunity Employer.**

HUMAN GENOME POSTDOCTORAL FELLOWSHIPS provide opportunities to conduct research related to the U.S. Department of Energy's Human Genome Program. This program's goal is to develop the tools, technologies, and resources required to efficiently decipher the molecular nature of the human genome. Stipend is \$35,000. Fellowships are tenable at approved DOE and university laboratories. A doctoral degree received after 1 May 1989 is required as is U.S. citizenship or *PRA status*. Deadline is 1 February 1992. Contact: **Human Genome Postdoctoral Fellowships, Science/Engineering Education Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117. Telephone: 615-576-4805.**

POSTDOCTORAL FELLOWSHIP POSITIONS BIOMEDICAL ENGINEERING

Postdoctoral positions are available in the Biomedical Engineering Center at The Ohio State University. Faculty include J. Frederick Cornhill, D.Phil. (image processing, artherosclerosis); Morton H. Friedman, Ph.D. (cardiovascular fluid mechanics, image analysis); Alan S. Litsky, M.D., Sc.D. (orthopaedic biomaterials); Cynthia J. Roberts, R.N., Ph.D. (laser-tissue interactions, MRI); and Manjula B. Waldron, Ph.D. (neural networks, sensory deficits). Interested persons are invited to send a résumé, a statement of research interests and experience, and the names, addresses and telephone numbers of three references to: **Biomedical Engineering Center, 270 Bevis Hall, 1080 Carmack Road, Columbus, OH 43210. The Ohio State University is an Equal Opportunity, Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE

Position available immediately in NMR analysis of the conformation and dynamics of RNA oligonucleotides. Candidates with experience in DNA or RNA synthesis and purification are preferred. Opportunity to work with state-of-the-art NMR and data processing methods. Send curriculum vitae along with names and telephone numbers of three references to: **Professor P. Borer, Chemistry Department, Syracuse University, Syracuse, NY 13244-4100. Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP

Temple University Fels Research Institute is seeking a full-time Ph.D. experienced in molecular biology to join an established laboratory studying molecular biology of human brain tumor. Areas of interest include: (1) restriction fragment length polymorphism analysis of genomic DNA derived from normal human brain and human brain tumor; (2) viral transformation of normal human glial cells grown in primary culture; subtraction library analysis of transformant clones; and (3) human brain tumor somatic cell hybridization. Please send curriculum vitae and names of three references to: **David W. Andrews, M.D., Assistant Professor, Department of Neurosurgery, 3401 North Broad Street, Philadelphia, PA 19140. Temple University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE

Position immediately open in following project areas: (1) structure and promoter regions of the human DNA polymerase δ gene, and (2) cloning, expression and structure-function relationships of human DNA polymerases δ and ϵ . Recent graduate in molecular biology/biochemistry, with experience in prokaryotic and baculovirus expression, systems, genomic cloning, and site-directed mutagenesis preferred. Send curriculum vitae and three references to: **Dr. Marietta Lee, Department of Medicine (R57), University of Miami, P.O. Box 016960, Miami, FL 33101.**

POSTDOCTORAL RESEARCH POSITION available for Ph.D. with background in immunochemistry. Requirements include protein purification, protein conjugation, and analytical procedures including Western Blot, ELISA, RIP, etc. Experience in retrovirology and flow cytometry desirable. Send curriculum vitae with the names, addresses, and telephone numbers of three references to: **Dr. Donald E. Campbell, Children's Hospital of Philadelphia, Division of Infectious Diseases and Immunology, 34th and Civic Center Boulevard, Philadelphia, PA 19104.**

UNIVERSITY OF MICHIGAN GENOME CENTER GENOMIC TECHNOLOGY AND GENETIC DISEASE

MOLECULAR CYTOGENETICS-RESEARCH ASSOCIATE OR POSTDOCTORAL position available immediately to join an active team of investigators in gene mapping efforts with emphasis on human genetic diseases. Candidates with experience in human cytogenetics, fluorescence in situ hybridization and molecular genetics are encouraged to apply. Please send curriculum vitae and names of three references to: **Dr. Thomas Glover, Human Genome Center, The University of Michigan, Medical School, 3570C MSRB II, Ann Arbor, MI 48109-0652.**

A Nondiscriminatory, Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Position available January 1992 to study the biochemical and molecular genetic regulation of chlorophyll and heme formation in higher plants. Prior training in molecular biology required. Experience with site-directed mutagenesis and bacterial expression systems desirable. Send curriculum vitae, brief statement of prior research training, and three letters of recommendation to: **Michael P. Timko, Department of Biology, University of Virginia, Charlottesville, VA 22901. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL SCIENTIST RESEARCH ASSOCIATE to conduct research on the genetics of plant interactions with beneficial microorganisms. The research approach will be fundamental with the practical goals of understanding and improving plant defense responses and successful biological control systems. Ph.D. in molecular biology with experience in plant genetics, plant breeding, and/or plant pathology.

Apply by 15 December 1991 for full consideration. Send a letter describing your experience and interests, together with a résumé and the names, addresses, and telephone numbers of three confidential references to: **Professor Robert M. Goodman, Department of Plant Pathology, Russell Laboratory, University of Wisconsin, 1630 Linden Drive, Madison, WI 53706. University of Wisconsin-Madison provides Equal Opportunities for Admission and Employment.**

POSITIONS OPEN

MOLECULAR/CELLULAR PHYSIOLOGIST RESEARCH ASSOCIATE

A position is available immediately for someone with training in molecular biology with an interest in the regulation of muscle gene expression in response to chronic stimulation. A strong background in cloning, Northern and Southern analysis, "footprinting", and production and assay of chimeric genes essential. Salary: \$27,000 per annum; limited benefits. Send curriculum vitae, telephone numbers and addresses of three references to: **Norman Briggs, Department of Physiology, Box 551, Richmond, VA 23298. Medical College of Virginia/Virginia Commonwealth University is an Equal Opportunity Employer.**

RESEARCH ASSOCIATE. To conduct research in the area of retinoids, hormone secretion and diabetes. This involves Northern, nuclease protection assays and transfection studies. Will supervise technicians, write research reports and grant proposals. Salary: \$30,000 per year. Requires Ph.D. and experience in molecular biology. Send curriculum vitae with names and telephone numbers of references and three letters of recommendation to: **Dr. Bruce S. Chertow, Marshall University School of Medicine, Department of Medicine, Huntington, WV 25701. Equal Opportunity Employer.**

RESEARCH ASSOCIATE

Position available immediately for an MSc. or Ph.D. trained in molecular biology. Candidate must have extensive experience in recombinant DNA technology including library construction, Northern and Southern analysis, PCR analysis, DNA sequencing, DNase footprinting and gel retardation assays. The major responsibility of this position will be the day-to-day supervision of a newly established molecular genetics core facility. This is a fully funded research position at the Morehouse School of Medicine and offers competitive salary, benefits, excellent research facilities and an ideal environment for career development. Please forward curriculum vitae and names of three references before 1 December 1991 to:

**Dr. Kelwyn Thomas
Department of Anatomy
Morehouse School of Medicine
Atlanta, GA 30310
FAX: 404-755-7318**

Women and minorities are encouraged to apply.

RESEARCH ASSOCIATE. Position available for Ph.D. to join and aid in the direction of an active hematopoiesis program. Laboratory studies include assessment of the effects of growth factors and antibodies to growth factor receptors in the murine system. Laboratory space and support available in the new West Pennsylvania Research Foundation Building. Direct inquiries to:

**Richard K. Shaddock, M.D.
Director, Western Pennsylvania Cancer Institute
4800 Friendship Avenue
Pittsburgh, PA 15224**

RESEARCH ASSOCIATE to perform basic research in atomic and molecular physics; design, draw and test original experimental equipment; collect data and analyze experimental results; program and utilize computer in controlled experiments; three to four times per year travel to and perform experiments with synchrotron radiation sources located at one of three national laboratories (Stoughton, Wisconsin; Brookhaven, New York; Washington, DC). Ph.D. in atomic and molecular physics plus coursework or in-the-lab, hands-on experience with vacuum ultraviolet radiation and synchrotron radiation. Publication in field of atomic and molecular physics. Salary: \$23,000 per year; 40 hours per week. Send résumé to: **Mr. Bernie Childerston, P.O. Box 94600, Lincoln, NE 68509. Refer to: Job Order #520290.**

CARDIOVASCULAR RESEARCH EPIDEMIOLOGIST. For clinical trials/cardiovascular epidemiology, including studies on minority groups. Requirements: MPH in epidemiology plus 1 year in job or as research assistant, epidemiology. Special requirements: (1) from period of experience, must have gained 1 year of experience in epidemiologic studies based on cardiovascular clinical trials; (2) must be fluent in Spanish. Salary: \$32,200 per year. Résumés to: **Lawrence Cheetham, #1-246, MDJT Room 124, 390 North Robert Street, St. Paul, MN 55101.**

GRADUATE TRAINING IN VIRAL ONCOLOGY AND IMMUNOLOGY

Stipends are available for students pursuing a Ph.D. in molecular oncology or immunology beginning September 1992. The principal interests of participating faculty are viral and cellular oncogenes, growth control, and molecular, cellular, and tumor immunology.

Students will be supported chiefly by an NIH programmatic training grant, requiring US citizenship, or resident status. We strongly encourage applications from minority students. Limited funding is also available outside of this source. Information and application forms are available from: **Dr. R.B. Carroll, Graduate Student Advisor, Department of Pathology, New York University Medical School, 550 First Avenue, New York, NY 10016.**

NYU is an Equal Opportunity Employer.

THE INTERNATIONAL LABORATORY FOR RESEARCH ON ANIMAL DISEASES

Vacancy Announcement: **POST DOCTORAL SCIENTIST—PD/91/7
CELLULAR IMMUNOLOGY**

The International Laboratory for Research on Animal Diseases, based in Nairobi, Kenya, is a member of the Consultative Group on International Agricultural Research with the mandate of developing economically improved methods for control of livestock diseases. Current research focuses on immunological and genetic means of controlling African trypanosomiasis and immunological control of the theilerial disease, East Coast fever. Livestock disease research is supported by a programme of socio-economic research and both programmes are integrated with a programme of collaborative research, information dissemination and training.

ILRAD is seeking a cellular immunologist to join a group of Scientists investigating mechanisms of resistance to bovine trypanosomiasis. The successful candidate will analyse the contribution made by T-cells to the resistance of trypanotolerant cattle to infection with *Trypanosoma congolense*. This will involve further characterisation of T-cell populations involved in the induction of humoral immunity and investigation of cognate interactions between T-cells and B-cells. A doctoral degree in cellular immunology and experience with cell-culture, T-helper cell assays, T-cell lines and clones is essential. In addition experience in cytokine assays will be an advantage.

The salary and benefit package are comparable to those offered by similar international organisations, and includes allowances for first arrival, housing, education, commutation and home leave as well as provisions for pension and insurances.

Applications with CV and the names and addresses of three referees should be sent to: The Chief Personnel Officer, ILRAD, P.O. Box 30709, NAIROBI. (Telex: 22040; Fax: 631499; Email: BT TYMNET OG1017) not later than November 30, 1991 or until a suitable candidate has been identified.

ILRAD is an equal opportunity employer.

KUWAIT UNIVERSITY COLLEGE OF SCIENCE

Department of Mathematics

Applications are invited for appointment to the posts of Professor, Associate Professor and Assistant Professor for the Spring Semester starting February 1, 1992 or the academic year 1992–1993. The Department would welcome well qualified Ph.D. holders in the fields of Mathematics, Applied Mathematics and Computer Science to support both teaching and research. The successful applicants for professorship will be expected to exercise a special responsibility in providing leadership and fostering excellence in research, teaching, professional activities and policy development in the Department of Mathematics, the University and the community.

Application forms together with conditions of service may be obtained from:

**Kuwait University Office
3500 International Drive NW
Washington, DC 20008**

Completed application forms must be sent directly to:

**Chairman
Department of Mathematics
College of Science
Kuwait University
P.O. Box 5969
KUWAIT 13060**

The Royal Botanic Gardens, Kew has made a major commitment to the use of molecular techniques in Biosystematics. A well-equipped molecular biology laboratory has been established, and a new purpose-built molecular biology complex is under construction in a large extension to Kew's world famous Jodrell Laboratory.

Head of Molecular Biosystematics

A unique opportunity exists for a molecular biologist with broad plant systematic interests and a strong interdisciplinary inclination. The successful candidate will head the molecular biosystematics section (founded in 1989) in the Jodrell Laboratory at the Royal Botanic Gardens, Kew. Applicants should have a proven record in angiosperm genome research, wide experience of molecular techniques, and experience of supervising research. A successful track record of winning competitive grants would be advantageous.

The scientist is required to lead and coordinate molecular research on a range of plant taxonomic, biosystematic, and conservation topics; to do independent biosystematic research on flowering plants; and, to supervise staff, Ph.D. students and long term visitors using molecular techniques.

The appointee will be responsible to the Keeper of the Jodrell Laboratory, Prof. M.D. Bennett, and will be expected to compete for additional funding, and to collaborate widely with other scientists working at Kew.

The post, which will be filled at either the SSO or PSO level (depending on age and experience), combines a rare opportunity to work in a delightful setting and to direct an important research programme using the world's richest plant collections.

For further information contact Prof. M. D. Bennett, Keeper of the Jodrell Laboratory, Royal Botanic Gardens, Kew, Richmond TW9 3DS, UK (Tel: 081-940 1171 Extn 4311; Fax 081-948 1197).

For further details and an application form (to be returned by 13th December 1991) write to Recruitment & Assessment Services, Alencon Link, Basingstoke, Hants RG21 1JB or telephone Basingstoke (0256) 468551, Fax (0256) 846660. Please quote reference B/1265.

The Royal Botanic Gardens, Kew is an equal opportunity employer.



PHARMACEUTICAL DISCOVERY

Corvas International, Inc., a biopharmaceutical company with research centers in La Jolla, California, and Ghent, Belgium, is expanding to address product opportunities in the thrombosis and vascular disease fields. Our primary focus is the development of small molecule pharmaceutical products targeted at enzymes and receptors involved in the processes of thrombosis and inflammation. The team is growing and we have the following exciting career opportunities available at our San Diego headquarters:

Synthetic Organic Chemist

We are looking for an outstanding Synthetic Organic Chemist to focus on peptidyl mimetic chemistry, constrained amino acid analogs, and non-peptidyl drug candidates. In addition, this individual will design and synthesize enzyme inhibitors and receptor ligands while collaborating with a strong molecular modeling group in drug design. Qualified candidates will possess a strong background in synthetic techniques and spectroscopic analysis, a PhD, postdoctoral and industry experience.

Cell Biologists/Biochemists

We are seeking Scientists to participate in the development and characterization of new anti-thrombotic and anti-inflammatory drug candidates. Qualifications: a PhD and proven experience in cell biology, protein biochemistry or enzymology. Industrial experience preferred, but not required.

We also seek Associate Scientists who will develop and perform cell-based and/or enzymatic assays to screen, identify and characterize new drug candidates. A BS or MS plus at least 2 years' laboratory experience are required. Corvas offers attractive compensation packages, equity participation, and a highly interactive and stimulating scientific environment. For consideration, please send a letter of interest and CV to: Corvas International, Inc., Human Resources, 3030 Science Park Road, San Diego, CA 92121. EOE.

CORVAS
INTERNATIONAL



THE SCIENCE RECRUITMENT "FOUR-DAY CLOSE"

**Now you can see your ad
in SCIENCE four days after submission**

Scientific recruiters can now advertise positions almost as soon as the need arises. Instead of reserving space a month or more in advance, you can now place your ad four days before the magazine mailing date. SCIENCE is mailed on the cover date.

Film (right-reading, emulsion face down) or full camera-ready art and insertion order must reach: SCIENCE, Short Close Desk, 1515 Broadway, New York, NY 10036 by NOON Mondays (except for legal holidays when material must reach New York by NOON Fridays). Because space is limited, the four-day close page will be reserved on a first-come, first-served basis, at a 15% premium. 1/4, 1/2 or full only.

Now you don't have to wait to find the researchers you need immediately, nor must you advertise in a Sunday paper that pans a lot of sand but not much gold. Scientific employers know that SCIENCE ads fill the job better. Now they fill it faster too.

You can call it "INSTANT RECRUITMENT."

For further information, telephone Daniel Moran, Advertising Traffic Manager at SCIENCE: 202-326-6541, or write to:

SCIENCE, 1333 H Street, N.W., Washington, DC 20005

CURRENT DISTRIBUTION 160,000

EcoScience is developing a unique group of microbial products for the control of insects, weeds and plant diseases. As we enter an exciting period of growth, we are seeking individuals interested in applying their research and professional abilities in a variety of areas. These are challenging positions requiring a significant level of commitment with rewards that are commensurate. EcoScience offers an excellent benefits package and equity participation. Candidates will have a B.S. or M.S. degree and experience indicating their ability to handle responsibility. Positions are open in the following areas:

Microbiology including Quality Control, Process Development and Fermentation...

Plant Pathology including Disease Control, Mycoherbicides and Postharvest Physiology...

Insect Pathology including bacterial, fungal and viral insect pathogens...

Product Development including laboratory and field testing of our products under development.

Interested candidates should contact:



**Personnel Director
EcoScience Corporation
1 Innovation Drive
Worcester, MA 01605**

HIV Research Group

Genentech, a leader in the biotechnology industry, has the following exceptional opportunities to join an expanding HIV Research Group located at our South San Francisco headquarters.

Virologist

Qualified candidates will possess a related BS, MS or PhD degree and broad virology experience. Familiarity with HIV is preferred, but not necessary.

Molecular Biologist

Requirements for this position include a BS, MS or PhD degree and extensive experience in molecular biology. Cell culture experience also desired. This position does not involve work with live HIV.

For immediate consideration, please send your resume to Genentech, Inc., Human Resources Dept. YS/JN, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal employment opportunity.

Genentech, Inc.

BIOTECHNOLOGY OPPORTUNITIES (COLORADO)

Somatogen, a rapidly growing biopharmaceutical company and leader in the development of recombinant hemoglobin has opportunities available in our R&D and Process Development Groups:

Molecular Biology Scientist

Requires a Ph.D. and 2-3 years post doctoral experience in the molecular biology and genetics of *Escherichia coli*.

Formulation Scientist

Requires a Ph.D. and 3-5 years post degree protein biochemistry experience. Experience with the physical/chemical changes in protein solutions occurring during lyophilization is desired.

Purification Scientist

Requires a Ph.D. in Biochemistry, Biochemical Engineering or related area, and 5 years post degree protein biochemistry experience. Large-scale experience is required.

Staff Scientist

Requires a Ph.D. with no postdoctoral experience required. Experience in *Escherichia coli* molecular biology and gene expression highly desirable.

Research Associate III

Requires a B.S. or M.S. and 5+ years experience with quantitative immunoassay development. Techniques should include ELISA, ILA, western blot, RIA, affinity purification of antibodies, SDS-PAGE and protein iodination. Experience with monoclonal antibody production is highly desirable.

Research Associate III

Requires a B.S. or M.S. and 3-5 years experience with protein chemistry techniques including HPLC and protein purification.

Research Associate II

Requires a B.S. and 3-5 years experience in Molecular Biology, including sequencing and *in vitro* mutagenesis.

Successful candidates will be self-motivated individuals with a desire to be part of a team involved in cutting edge technology. A competitive salary and benefits package complement these exciting opportunities. For consideration, please send your resume and salary history in confidence to:

Tonja Loendorf, HR Representative.

SOMATOGEN

5797 Central Avenue
Boulder, Colorado 80301
An Equal Opportunity Employer

DIRECTOR

Bedford Division of the Boston Geriatric Research and Education Clinical Center (GRECC)

We are seeking a Physician Director with a strong research background in geriatrics. The program focuses on neuroscience and relevant diseases of aging, particularly Alzheimer's disease and dementia. Since the principal mission of this 750-bed veterans hospital is geriatrics and extended care, the GRECC Director's influence on patient care should be significant.

The Bedford VAMC also has a HSR&D Field Program focused on issues of care of the aging veteran and close ties with the geriatric training and research programs of other Boston University affiliates. Proven leadership and management skills will be useful to sustain and expand the strong academic and service liaisons developed by GRECC during the past 15 years of its existence. Board certification in medicine, neurology or psychiatry is desirable.

Letter of intent with CV should be sent to: **Edgar S. Cathcart, M.D., D.Sc., Chief of Staff, ENRM Veterans Hospital, Bedford, MA 01730; (617) 275-7500, Ext. 203. An equal opportunity employer.**



Department of Veterans Affairs

Upholding the American ideal.

POSITIONS OPEN



**Agricultural Research Service
United States Department of Agriculture**

RESEARCH ASSOCIATE, BIOCHEMISTRY/MICROBIOLOGY. The Oil Chemical Research Unit of the National Center for Agricultural Utilization Research (NCAUR), USDA-ARS, Peoria, Illinois, is seeking a research associate to study bioconversion of alkyl phenyl compounds on an ongoing project supported by Biotechnology Research and Development Corporation. Candidates should have knowledge of biochemistry, microbiology, and natural product chemistry. Ph.D. in related field required. Salary commensurate with experience (\$31,116 to \$37,294 per year). The appointment will not exceed 2 years. Send résumé to: **Dr. C. T. Hou, USDA-ARS-NCAUR, 1815 North University Street, Peoria, IL 61604; or telephone: 309-685-4011, ext. 263.** Applications must be marked 2N004 and must be received by 20 December 1991. *The USDA is an Equal Opportunity Employer.*

UNIVERSITY OF CALIFORNIA LOS ANGELES (UCLA) SCHOOL OF MEDICINE MOLECULAR BIOLOGIST/ SENIOR RESEARCH ASSOCIATE

Position available for Ph.D. interested in studying molecular mechanisms of cytokine regulation, gene transduction and cancer immunotherapy.

UCLA and its affiliated institutions are Equal Opportunity and Affirmative Action Employers. For consideration please submit curriculum vitae and two letters of reference to:

**Arie Belldegrun, M.D.
UCLA School of Medicine
Center for the Health Sciences
66-118 CHS
10833 LeConte Avenue
Los Angeles, CA 90024-1738
Telephone: 213-206-1434**

MOLECULAR BIOLOGY OF TUMORS

The Division of Molecular Biology and Surgical Oncology Research, Henry Ford Hospital will provide a career opportunity for a molecular biologist, M.D. or Ph.D. with an expertise in molecular biological approaches to tumor biology. The successful candidate will be expected to expand the existing program and develop his/her own program. The appointment will be to **SENIOR RESEARCH ASSOCIATE** level. Experience with cloning and retroviral constructs is essential. Salary is commensurate with experience. Send curriculum vitae and names, addresses and telephone numbers of three references to:

**S. David Nathanson, M.D.
Surgical Oncology Research Laboratories
Henry Ford Hospital
2799 West Grand Boulevard, E&R 4044
Detroit, MI 48202-2689**

RESEARCH POSITION IN MASS SPECTROMETRY available 1 September 1992 to oversee the use of two shared mass spectrometers, a VG 70-S and a new, state-of-the-art, multi-sector tandem instrument. Position will entail management of both routine and nonroutine uses and maintenance, supervision of two graduate assistants, and generation of collaborative research projects with users in chemistry, other departments, and the medical school. Ph.D. chemist with experience in tandem mass spectrometry, electrospray ionization, and the inorganic or organic chemistry of biomolecules preferred. Send résumé and three letters of recommendation to: **Dr. Jeanette Adams, Department of Chemistry, Emory University, Atlanta, GA 30322.** *Emory is an Affirmative Action/Equal Opportunity Employer.*

ENVIRONMENTAL PATHOLOGY/TOXICOLOGY. NRSA-supported postdoctoral positions available in 15 research laboratories. Emphasis on cellular and molecular effects (mutagenesis, neurotoxicity, biotransformation) of toxic chemicals (especially trace metals, aromatic hydrocarbons, ozone respiratory epithelial injury), and behavioral teratology. Inquiries: **Dr. N. K. Mottet, Program Director, Department of Pathology, SM-30, University of Washington, Seattle, WA 98195.** *NRSA Requires U.S. citizen/permanent resident. An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

BIOLOGY. AQUATIC BIOLOGIST, MARINE OR FRESHWATER. Tenure-track appointment in a four-person department with excellent academic reputation, rank commensurate with experience, beginning fall 1992. Primary teaching in the areas of invertebrate zoology, environmental science, and introductory biology. Major involvement with expanding an established environmental science program and undergraduate student research. Ability to teach in environmental education, aquatic ecology, or toxicology a plus. Qualifications: Ph.D. and evidence of successful classroom teaching. Apply to: **Dr. David P. Kreps, Chair Department of Biology, Manchester College, North Manchester, IN 46962** by 1 February 1992. *Manchester College is an Equal Opportunity Employer.*

GRADUATE ASSISTANTSHIPS/TUITION WAIVERS for 1991 to 1992 to support Ph.D. and M.S. students. Faculty research interests include biochemical endocrinology, bioenergetics, optical spectroscopy of biomolecules, molecular biology, nucleic acids, neurochemistry, carcinogenesis, enzyme structure and function. Apply to: **Chairman, Department of Biochemistry and Biophysics, University of Hawaii, 1960 East West Road, Honolulu, HI 96822.** *An Equal Opportunity/Affirmative Action Employer.*

HORTICULTURIST—VEGETABLE CROPS

Academic career-track, 11-month Assistant Extension Vegetable Specialist and Assistant Plant Physiologist or Geneticist (75% Extension—25% Agricultural Experiment Station research) located in the Department of Botany and Plant Sciences, University of California, Riverside. Requires a Ph.D. degree in plant science discipline, knowledge of crop production principles and practices, and a basic knowledge of biotechnology. Experience in one or more of the following is desired: pest and disease management, irrigation, plant nutrition, and desert crops. Responsibilities include strong leadership and support in cooperative extension research and education activities related to vegetable production, particularly in desert systems, and disseminating information about possible benefits of biotechnology to the vegetable industry. Send letter of application, curriculum vitae, statement of research interest, transcripts, and arrange to have at least three confidential letters of reference sent to: **Dr. Robert T. Leonard, Chairman, Department of Botany and Plant Sciences, University of California, Riverside, CA 92521-0124 (Telephone: 714-787-4413; FAX: 714-787-4437).** Application deadline: 22 January 1992. *The University of California is an Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.*

SCIENTIST/CELL BIOLOGY. Positions are available for doctoral scientists with backgrounds in biochemistry, molecular biology or cell biology to study receptor pathways mediating cell adhesion and activation in blood platelets, megakaryocytes, monocytes and epithelial cells. Initially these positions will be grant funded but the potential exists for advancement to scientific independence contingent upon obtaining independent funding. Interested applicants should submit curriculum vitae and three references to: **Graham Jameison, Ph.D., American Red Cross, Cell Biology Laboratory, 15601 Crabbs Branch Way, Rockville, MD 20855.** *Equal Opportunity Employer, M/V/F/H.*

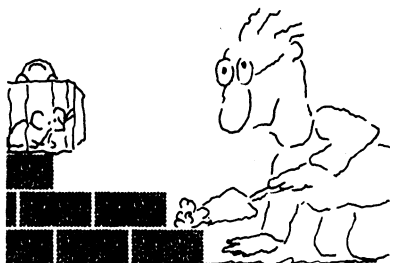
SIGNAL TRANSDUCTION UNIVERSITY OF PITTSBURGH

Applications are invited to fill a new tenure-track position available 1 July 1992. The appointee will be expected to develop and maintain a funded research program focusing on a biochemical analysis of signal transduction mechanisms and their relevance to neuronal function. Applicants should have a Ph.D. or M.D. degree and postdoctoral experience. Resources are available to provide salary, space, seed money, and faculty rank appropriate to the individual's experience. Applicants should send curriculum vitae, a one-page statement of research goals, and three representative publications to:

**Michael J. Zigmond
Department of Behavioral Neuroscience
University of Pittsburgh
Pittsburgh, PA 15260**

Three letters of recommendation also should be sent to Dr. Zigmond. All materials must be received by 1 February 1992. *The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.*

We'll Help You Build A New Lab



Let the free Science product information service put you in touch with the vendors whose products you will need.

Simply write us a letter stating the specifics about your proposed lab and the instruments and supplies you need. We will do the rest. Write to:

**SCIENCE Magazine
New Lab Service Department
1333 H Street, N.W.,
Washington, DC 20005**

The Global Weekly of Research
SCIENCE

**FACULTY POSITION
MOLECULAR TOXICOLOGY/
PHARMACOLOGY
PURDUE UNIVERSITY**

The Department of Pharmacology and Toxicology at Purdue University invites applications for a tenure-track faculty position at the ASSISTANT PROFESSOR level. We are seeking applicants with training and expertise in cell and molecular biology to develop a research program focused on the mechanisms of action of xenobiotics on the regulation of growth and/or development. Desired areas of interest include receptors for growth regulatory molecules, regulation of gene expression, signal transduction, and transgenic cell and animal models. This program would complement current research activities in molecular neurotoxicology, biochemical toxicology, receptor biology and eukaryotic gene regulation. The department is expanding its molecular biology facility and has established a mammalian cell culture laboratory. Candidates should have a Ph.D. or M.D. degree, or equivalent, and at least two years of postdoctoral experience. The successful candidate will be expected to develop an independent externally-funded research program and will have teaching and training responsibilities in our graduate and professional programs. Applicants should submit a curriculum vitae, a description of research goals (not to exceed two pages) and the names of three references to Dr. William F. Greenlee, Head, Department of Pharmacology and Toxicology, School of Pharmacy and Pharmacal Sciences, Purdue University, 1334-Robert E. Heine Pharmacy Building, West Lafayette, IN 47907-1334. Review of applications will commence November 1 and continue until the position is filled. Purdue University is an Equal Opportunity/Affirmative Action Employer.

**PROTEIN CRYSTALLOGRAPHY
FACULTY POSITIONS AT
THE OHIO STATE UNIVERSITY**

Applications are invited for tenure track faculty positions at the Assistant Professor level. Outstanding applicants at a higher level will also be considered. Demonstrated excellence and strong commitment to research and teaching are essential. Successful candidates will occupy new laboratories on the macromolecular crystallography floor of the Biotechnology Center and hold a joint appointment in the Department of Biochemistry, or other appropriate departments. The University is located in Columbus, the state capital, a growing and affordable city of about one million people that has been cited by Newsweek magazine as one of the top ten cities. Candidates should submit a curriculum vitae, a statement of research interests and three letters of recommendation to: Dr. M. Sundaralingam, The Ohio State Biotechnology Center, 1060 Carmack Rd., Columbus, OH 43210. Review of applications will begin on December 15, 1991. The Ohio State University is an equal opportunity employer which specifically invites and encourages applications from women and minorities.

ROCHE

**MAMMALIAN
MOLECULAR GENETICS
SENIOR SCIENTIST**

Hoffmann-La Roche, an international leader in the pharmaceutical industry with a firm commitment to basic and applied biomedical research, is seeking a Senior Scientist to establish a new laboratory dedicated to the development of models of human disease utilizing **transgenic animal technologies**.

This laboratory will conduct independent research projects as well as collaborate with other Roche Scientists. We currently have well-developed research programs in many fields, including the molecular biology of cell adhesion, cytokines, oncogenes, and cell surface receptors. In addition, we strongly encourage academic interactions and publication of results.

Qualifications include a PhD or MD augmented by at least two years of post-doctoral research experience in molecular aspects of development, immunology or pathology. Knowledge of transgenic animal technologies including gene targeting is preferred.

Conveniently located ten miles west of New York City, we provide a dynamic research environment, expertise and support in all areas of molecular biology, a competitive salary, a generous bonus and benefits package, and the resources for a creative scientist to have significant impact. Please send your c.v. and three letters of reference to: **Mrs. Eleanor Malone, Staffing and Employee Services, Department EM331ML, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.** We are an equal opportunity employer.

ROCHE

Hoffmann-La Roche

**SENIOR SCIENTIST
MOLECULAR BIOLOGY**

Unigene Laboratories, Inc., a multidisciplinary biotechnology research corporation, is seeking a qualified senior scientist for the molecular biology group.

The successful candidate should possess a Ph.D degree in cell biology or molecular biology and expertise in the expression of heterologous proteins in eukaryotic hosts. In addition, relevant post-doctoral research experience either in the field of cytokine or peptide hormone receptors or in the area of cellular adhesion molecules is required.

Unigene offers excellent compensation, a comprehensive benefits package including equity participation, and an opportunity to make a significant contribution to a small yet well established company which encourages professional development. Please send a C.V. in confidence to:

**UNIGENE LABORATORIES, INC
Personnel Department
110 Little Falls Road
Fairfield, NJ 07004**

unigene

An equal opportunity employer



UCAR

The University Corporation for Atmospheric Research (UCAR) is pleased to announce the continuation of its Visiting Scientist Research Program which provides research opportunities at the National Meteorological Center (NMC) at Camp Springs, Maryland.

The program offers visiting research appointments in the atmospheric and related sciences at one of the premier R&D centers devoted to operational weather prediction in the United States. Openings in the UCAR program include positions for senior and postdoctoral scientists. Remuneration will be commensurate with the experience of the scientists and local living costs, and will be competitive with analogous university and government appointments.

There is no application form. Appointments will be for up to two years. Qualified scientists are encouraged to apply to this program by sending a resume along with a statement of how their research interests and experience relate to the areas of scientific interest at the host institution. All applications should include the names and addresses of four professional references. Appointments are made twice per year from applications submitted by January 15 and August 1. Send the required information to Meg Austin, UCAR Projects Office, P.O. Box 3000, Boulder, CO 80307. For a flyer describing the program in more detail, please contact her at (303) 497-8630 or via e-mail at m.austin@omnet.

UCAR is an Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

MATHEMATICAL STATISTICAL CONSULTANT. Renders statistical consultation in biomedical research projects; selects methods of data collection, tabulation and analysis using statistical survival, life table, variance and nonparametric statistical methods for various drugs tested in clinical trials. Analyzes results of statistical data, uses VAX computers (8550, 785, 750, MICOR VAX III), and SAS software. Minimum requirements: Master's degree in mathematics or statistics and 2 years of work experience as a mathematical statistician. Hours of employment: 9:00 a.m. to 5:00 p.m., 40 hours per week. Salary: \$788.47 per week. Northern Illinois location. *Must have proof of legal authority to work permanently in the United States.* Send résumés to: **Illinois Department of Employment Security, 401 South State Street, Three-South, Chicago, IL 60605; Reference: V-IL 2269-K.** No calls. *An employer-paid ad.*



RESEARCH LEADER POSITION SEED BIOSYNTHESIS RESEARCH UNIT

The USDA/ARS is seeking a Research Leader (GM-13/14/15) for the Seed Biosynthesis Research Unit, National Center for Agricultural Utilization Research (NAUR) in Peoria, Illinois. The center employs 300 scientists, technicians, and support personnel who develop and facilitate commercialization of products and uses from agricultural commodities. The facilities include state-of-the-art instrumentation, a library, and computer center.

The Seed Biosynthesis Research Unit focuses on the biochemistry, physiology, and molecular biology of maize and soybeans. Projects include characterization of carbon and nitrogen metabolism, disease resistance, amylose biosynthesis, starch granule hydrolysis, and protein targeting and transport in maize seeds and related tissue cultures, and characterization of raffinose oligosaccharide synthesis and lipid metabolism in soybeans. The incumbent will supervise a staff of 19, including 9 scientists, and develop a new research project on a topic within the scope of the research unit.

Ph.D. in related field is desirable. Knowledge of plant physiology, biochemistry, and molecular biology are required. *U.S. citizenship required.* Salary commensurate with experience in the range \$44,348 to \$61,643 per annum. For further information contact **Dr. Richard L. Dunkle, Director, USDA/ARS/NCAUR, 1815 North University Street, Peoria, IL 61604 (telephone: 309-685-4011).** For application procedures and forms, telephone 309-685-4011, ext. 633. Applications must be postmarked by 31 December 1991. Incomplete applications will not receive consideration. *USDA/ARS is an Equal Opportunity Employer.*

RESEARCH SCIENTIST THORACIC AND CARDIOVASCULAR SURGERY

The Division of Thoracic and Cardiovascular Surgery at The Ohio State University is searching for a research scientist for its research laboratory. Applicants should have a Ph.D. in biomedical engineering with a strong background in cardiac physiology. The primary interests of the laboratory are heart and lung preservation for transplantation, basic cardiac physiology, and development, evaluation, and implementation of ventricular assist devices and artificial hearts. Useful skills for the successful applicant include computer technology, electrical engineering and physics, cardiovascular physiology, statistics and data analysis and biochemistry. The candidate should be capable of participation in routine laboratory measurements and the instrumentation necessary to accomplish them. It is anticipated that extramural funding would be obtained within 2 to 3 years. Salary and level of appointment will be commensurate with the candidate's experience and background. *The Ohio State University is an Equal Opportunity/Affirmative Action Employer.*

Please respond with curriculum vitae and references to:

P. David Myerowitz, M.D.
Chief, Thoracic and Cardiovascular Surgery
The Ohio State University Hospitals
N-825 Doan Hall
1410 West Tenth Avenue
Columbus, OH 43210

POSITIONS OPEN

SENIOR ASSOCIATE, TOXICOLOGIST. Position available immediately for a Ph.D. with 0 to 3 years of experience in toxicology or related biological science and an interest in risk assessment. The ILSI Risk Science Institute (RSI) a public, nonprofit research foundation within the International Life Sciences Institute, was established in 1985 to improve risk assessment by strengthening the scientific principles on which assessments are based. Applicant will work with scientists from diverse disciplines and will be responsible for evaluating and analyzing technical data, drafting and editing technical manuscripts and coordinating and staffing technical working groups. Send curriculum vitae to: **Dr. Carol J. Henry, Executive Director, ILSI Risk Science Institute, 1126 Sixteenth Street, N.W., Suite 110, Washington, DC 20036.**



DynaGen, Inc.

THREE SENIOR SCIENTIST POSITIONS OPEN AT DYNAGEN. DynaGen, Inc., a Cambridge-based public pharmaceutical development company, is expanding its biomaterials/medical polymers group and is seeking Ph.D.-level scientists with experience in biomedical polymers (synthesis and drug delivery systems formulations), polymer-based orthopedic products, and vaccine formulation. Successful candidates will join ongoing product development programs with responsibility for specific development projects in controlled release of therapeutics and vaccine immunogens and in polymer-based wound care and orthopedic products. Experience in industrial product development, patent filing and project management are important.

Competitive salaries and equity participation are offered. Send résumé and names of at least three references to: **Ms. Cindy Kiley, DynaGen, Inc., 99 Erie Street, Cambridge, MA 02139.**

SCIENTIST

Immediate opening for scientist to participate in research program investigating mechanisms of wound healing. M.D. or Ph.D. with experience in biochemistry, wound healing and working knowledge of growth factor isolation and function preferred. We offer a competitive salary and an excellent employee benefits package. Submit curriculum vitae with three references to: **Hunan Nunez, Ph.D., American Red Cross, Plasma Derivatives Laboratory, 15601 Crabbs Branch Way, Rockville, MD 20855.** *Equal Opportunity Employer, F/M/V/H.*

SENIOR RESEARCH INVESTIGATOR to characterize smooth muscle function of the GI tract in vitro and in vivo in relation to neurotransmitter and drug activities; establish new in vitro models of smooth muscle function by isolating single smooth muscle cells utilizing videomicroscopic image analysis and isolated myenteric ganglia; design a computerized system to measure the single smooth muscle cell length (contraction/relaxation); perform measurement of single transduction HPLC analysis of inositol polyphosphates, measurement of intracellular levels of cyclic nucleotides, and the measurement of intracellular calcium; recording of in vitro smooth muscle strips changes in tension; conduct quantitative fluorescence image analysis which enables viewing and monitoring calcium levels of single viable gastric smooth muscle cells; design and conduct studies to investigate mechanisms of smooth muscle function to increase understanding of drug action; and establish and conduct smooth muscle screening assays to discover new compounds for the treatment of gastrointestinal diseases. Applicants must possess Ph.D. in pharmaceutical sciences or biopharmaceutics plus 2 years of experience in job offered or 2 years as research associate. Experience or academic research must have involved the investigation of the effect of gastrointestinal hormones, gastrin and cholecystokinin on the contraction and relaxation of functionally isolated smooth muscle cells through interaction with specific receptors and VIP-induced relaxation through receptors coupled to adenylate cyclase. Forty hours per week, Monday to Friday, 8 a.m. to 4:30 p.m.; \$49,200 per annum. *Must have proof of permanent legal authority to work in the United States.* Send résumé to: **Illinois Department of Employment Security, 401 South State Street, Three South, Chicago, IL 60605, Attention: L. Donegan, Ref. #V-IL-3314D.** No calls. *An employer-paid ad.*

POSITIONS OPEN

SCIENTIST, IMMUNOCHEMISTRY/MOLECULAR BIOLOGY. American Red Cross seeks an experienced Ph.D.-level scientist with background in immunochrometry and/or molecular biology of infectious disease. The appointee will be expected to develop novel approaches for the detection of transfusion-transmitted agents in human blood, with particular focus on agents of emerging, rather than established concern. Significant, hands-on experience in the development of diagnostics for viral, parasitic or bacterial pathogens is required. Send curriculum vitae and three references to: **Roger Y. Dodd, Ph.D., Transmissible Diseases Laboratory, American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855.** *Equal Opportunity Employer, M/F/H/V.*

MEETINGS

HEALTH EFFECTS OF AIR POLLUTION CONFERENCE

A two-day conference to explore recent air pollution health effect findings from a medical and regulatory viewpoint. Sponsored by California Air Resources Board and South Coast Air Quality Management District 20 and 21 November 1991
Davidson Conference Center
University of Southern California, Los Angeles
\$65.00 registration fee includes breakfasts and lunches
For more information call:
Karen Weir-Brown 714-396-3078

MEASURING, UNDERSTANDING, AND PREDICTING EXPOSURES In THE 21st CENTURY ATLANTA, GEORGIA 18 to 21 NOVEMBER 1991

Announcing a conference on the emerging science of exposure analysis, including training courses, technical sessions, poster sessions, and exhibits. Sponsored by the Agency for Toxic Substances and Disease Registry (ATSDR), the Centers for Disease Control (CDC), and the U.S. Environmental Protection Agency (EPA). For information, please contact:

Julia Traub, Conference Coordinator
ASCI Corporation
1365 Beverly Road, McLean, VA 22101
Telephone: 703-847-0001

MARKETPLACE

DNA SEQUENCING

- Fast. Accurate. Affordable.
 - Definitive Nucleotide Sequence
 - Subcloning, Mapping, *in vitro* Mutagenesis, Library Construction
 - Complete Molecular Biology Services
- Ambion** 1-800-888-8804
1-512-445-7139 FAX

Circle No. 105 on Readers' Service Card

PETER R. BAHN, Ph.D. PATENT ATTORNEY

Specializing in Biotechnology

RR1 Box 261
Woodlawn, IL 62898
Tel. (618) 735-2897

For information circle readers' service number 148

Custom DNA

Purified and Delivered in 48 hours.

\$7.50 per base • Purified
Guaranteed minimum 100 µg DNA

Research Genetics
1-800-533-4363

Circle No. 39 on Readers' Service Card



PAVLOV NOTICED THAT
IMMUNOLOGISTS ARE
CONDITIONED TO USE
ANTIBODY PRODUCTION
PRODUCTS BY PIERCE.

The psychology is simple. Smart immunologists associate Pierce with Ab production products that get their research off to hassle-free starts. Study The Pierce ImmunoTechnology Catalog and Handbook and you'll see hundreds of easy-to-use conjugation products and time-saving kits, each complete with a wealth of reaction



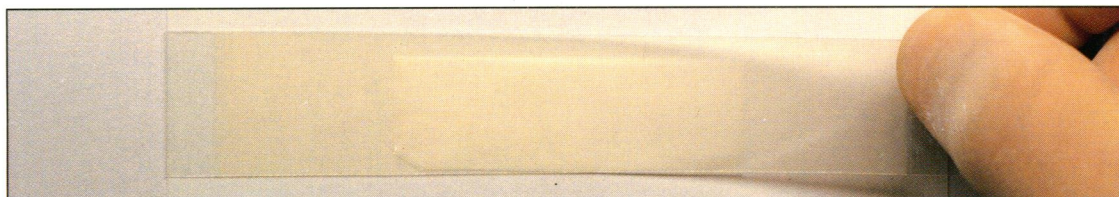
schemes and other detailed, valuable data. We offer adjuvants, activated carrier proteins, our own SuperCarrier® systems, cross-linkers, conjugation kits and many more products for guaranteed antibody production. The Pierce Catalog. Using it is becoming a conditioned reflex.



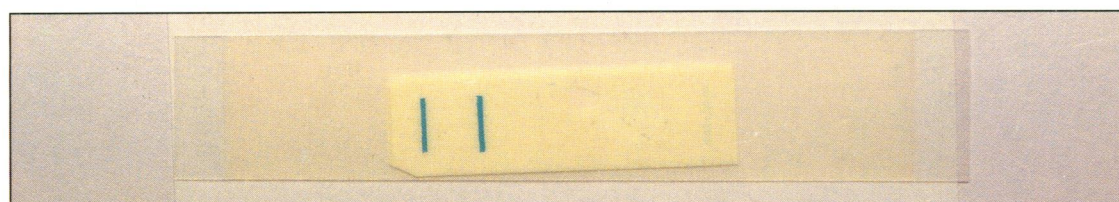
250 NEW PRODUCTS FOR IMMUNOASSAYS, ANTIBODY PRODUCTION & PURIFICATION!
FOR PRODUCTS, A CATALOG OR TECHNICAL ASSISTANCE CALL: 1.815.968.0747. IN EUROPE: 31-1860-19277.

Circle No. 38 on Readers' Service Card

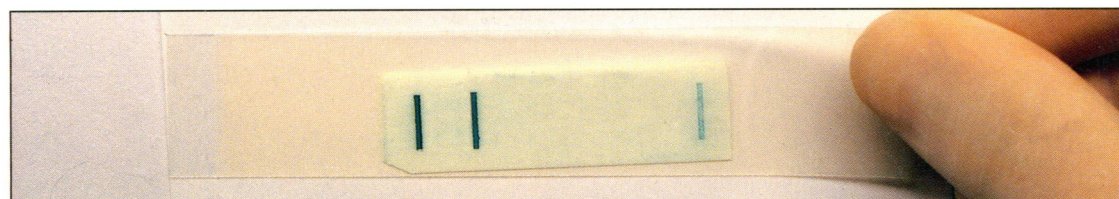
Watch A One Minute Western.



Simply overlay the Enzygraphic Web on your prepared Western.



Within seconds your target bands start to appear.



Bang...your target bands appear detected and amplified, in under 60 seconds!

IBI's Enzygraphic Web™ Delivers All The Action In Under A Minute.

Quick and ultra-sensitive Western Blot detection. With IBI's Enzygraphic Web you've got the fastest results in the business.

With the Web you can forget about messing with substrate chemicals or fumbling around in the dark. It performs flawlessly under room light, using a patented dry chemistry process that keeps you free and clear of radioactive probes.

Dead-On Accuracy And A Quick Draw. The Best Western Every Time.

Our High Sensitivity version of the Enzygraphic Web is more sensitive than any other colorimetric system for visualiz-

ing HRP conjugated proteins and antibodies. In less than a minute it out-draws anything in the Western territory. And even at that incredible speed, the High Sensitivity Web provides detection sensitivity that is at least 10 times more revealing than radioactive methods using ¹²⁵I labeled probes and autoradiography detection.



The Rapid Screening Enzygraphic Web is your hired gun when cost-effective speed is your target.

Designed for researchers who screen a high volume of samples, the Rapid Screening Web provides an economical way to obtain one minute results with detection sensitivity that is comparable or

better than conventional colorimetric systems.

IBI's Enzygraphic Web is available in High Sensitivity (Catalog No. IB833 0532) or Rapid Screening (Catalog No. IB821 7051) versions in 15-count boxes of 4"x 5" sheets.

Call On The Cavalry.

In the U.S., place a quick order with your local **VWR** Sales Office or contact IBI Technical Resources (800) 243-2555 for more information. Outside of the U.S., contact the IBI International Sales Department at (203) 786-5600 for the name of the distributor nearest you.



INTERNATIONAL BIOTECHNOLOGIES, INC.
Subsidiary of Eastman Kodak Company
P.O. Box 9558, New Haven, CT 06535

See us at ASCB, Booth No.'s
1607-1612 (VWR booths)
and
1603 & 1605 (IBI only)

Distributed in the U.S. by

VWR Scientific

A **VWR** COMPANY

* Australia Integrated Sciences (02) 436 2611, Canada Terochem Scientific (416) 940-1831, Denmark KEBO A/S 44 681800, Finland KEBO OY 90 437 5640, France Amilabo 78 905688, APELEX 1-69306970, India Biotech India (542) 311473, Israel TAMAR 02 520279, Italy M-Medical 055 676 441, Japan DRG International Japan 03 3358 1822, Korea LRS Laboratories 02 924 8697, Norway KEBO AS 02 301120, Portugal Quimigranel 8581564, Spain Quimigranel 91 5561614, Sweden KEBO AB 08-621 3400, Switzerland Tecnomara (01) 830 2277, Taiwan Janson Technology Co. 02 363 9113, United Kingdom IBI Ltd. 0223 242813, USA VWR Scientific, West Germany Tecnomara (06404) 8090.

Circle No. 93 on Readers' Service Card