

## Micro pH Electrode

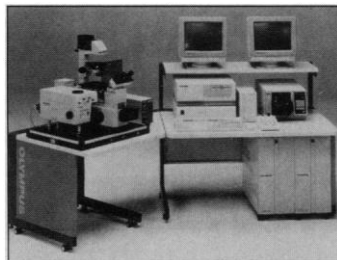
The MPH-1 Micro pH Electrode can measure samples as small as 10  $\mu$ l. It is suited for containers such as microtiter plates, culture tubes, cuvettes, micro test tubes, serum cups, and nuclear magnetic resonance tubes. The pH sensor contains no glass and offers high stability, rapid response time, and extended shelf life. The flat sensor tip makes it usable for surface measurements on filter paper and electrophoretic agar surface gels. Beverly Hills Scientific. Circle 84.

## RNA Isolation Reagent

TRISOLV, a single reagent method for total RNA isolation, finds application in studies of gene expression, oncogenes, growth factors, and hormonal regulation in human, animal, plant, and bacterial systems. The method, based on a liquid phase separation, involves sample homogenization, liquid phase separation, RNA precipitation, and wash with ethanol. It allows simultaneous processing of a large number of samples and performs well with small and large quantities of tissues and cultured cells. It requires less than an hour. Biotecx Laboratories. Circle 85.

## Scanner System

SeptraScan 2001 is a streamlined software and scanner system for gathering data from gels, blots, photos, and autoradiographs. The IBM-compatible software takes full advantage of the versatility of Microsoft Windows mouse control. Pull-down menus and on-screen "help" functions make the entire densitometric process, including molecular weight calibration,  $R_f$  calculation, and peak area determination, convenient and simple. Gel images can be stored on floppy disks and reproduced for papers and presentations. Integrated Separation Systems. Circle 86.



## Laser Scanning Biological Microscope

The LSM-GB200 Confocal Laser Scanning Microscope is a radical departure from traditional optical microscope design. Confocal laser scanning microscopy yields images with significantly improved resolution, better contrast, and a minimum of flare. The LSM-GB200 is capable of optically sectioning a specimen and obtaining spherical optical sections of exceptional quality and clarity. The stage platform is piezoelectric-controlled for stable high-speed scanning in the axial direction with flawless repeatability. Advanced three-dimensional image processing features and an interactive window software system facilitate operation. Olympus Corp. Circle 87.

## Monoclonal Antibodies

A new monoclonal antibody (MAb) (CLB 81) to thyroxine is designed for use in immunoassays. Cymbus Bioscience. Circle 88.

CLB 68 is an MAb to testosterone that shows limited cross-reactivity with other closely related steroids. Cymbus Bioscience. Circle 89.

MAbs to IGF-I (CBL 61) and IGF II (CBL 82) have application in radioimmunoassay, enzyme-linked immunosorbent assay, and immunohistochemistry. Cymbus Bioscience. Circle 90.

MAbs to the selectins ELAM-1 and PADGEM are available. Cymbus Bioscience. Circle 91.

The MAb CBL 303 can be used in establishing assays to detect deficiencies in mannan binding protein. Cymbus Bioscience. Circle 92.

## Technical Plotting and Data Processing Software

TechPlot is a technical plotting and data processing package with a Windows look and DOS speed. It features a graphical user interface with drop-down menus, multiple windows, mouse support, page layout with what-you-see-is-what-you-get graphics display, dialog boxes, and comprehensive help system. Techplot performs statistical analysis ( $t$  test,  $f$  test, regression), data transformation, digital signal processing, nonlinear parameter fitting, and model development. Data can be imported and exported from most popular spreadsheet file formats. Plot types include two-dimensional and three-dimensional scatter plots, curve (line) graphs, surface (mesh) graphs, bar charts, histograms, box plots, hi-lo plots, step plots, quality control charts, and more. TechPlot requires an IBM-compatible computer with 640K of memory, MS-DOS or PC-DOS 3.0 or higher, and a graphics display and adapter. Polysoft. Circle 93.

## Tissue Fixative

HistoChoice Tissue Fixative contains no formaldehyde, mercury, picric acid, or any other toxic materials. It is not alcohol-based or a modification of conventional toxic fixatives. It is odorless and can be safely and legally poured down drains. It is suitable for all tissue types and compatible with all manual and automated tissue processing equipment and procedures.

HistoChoice is osmotically balanced to eliminate cellular and tissue distortions. AMRESKO. Circle 94.

## Literature

1992 *Biotecx Catalog* in molecular biology, immunology, and cellular biology includes isolation kits for RNA, mRNA, genomic DNA, and simultaneous isolation of RNA and DNA; hybridization reagents; T cell and B cell separation kits; a mouse embryo isolation kit; and extracellular matrix solutions. Biotecx Laboratories. Circle 95.

*Low-Temperature Scanning Electron Microscopy: Advantages and Applications* is a reprint of a paper that discusses how cryopreparation stabilizes low melting point materials, minimizes volume changes, and reveals internal structure by freeze-fracture. Unlike other biopreparation procedures, cryo specimens remain fully hydrated, chemical fixation is avoided, specimens are not immersed in solvents, and elements are not lost or substantially moved prior to x-ray analysis. Carl Zeiss Inc. Circle 96.

*PC-IEEE 488.2 Instrument Control* is a 12-page brochure outlining a diverse array of IEEE 488.2 software drivers. IOtech. Circle 97.

1992 *HPLC Pump Replacement Parts Catalog* includes most major brands at a cost savings of 20 to 30% over the manufacturer's replacement parts. The Nest Group. Circle 98.

*ATCC Catalogue of Bacteria & Bacteriophages*, 1992 is a 694-page reference listing more than 13,000 strains. It provides information on each culture's origin, handling of cultures, media formulations, special uses for specific strains, and more. American Type Culture Collection. Circle 99.

*Glycohemoglobin Analysis* is a special publication that highlights many aspects of glycohemoglobin monitoring, including assays, analyzers, and automated systems. Isolab. Circle 100.

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.

# Earn extra cash while working with beautiful models.

The most beautiful models these days are found right on your benchtop — with HyperChem™, the world's first full-featured molecular modeling software for PCs and desktop workstations.

Your colleagues in hundreds of businesses and universities are already using HyperChem, and thousands more are expressing interest in designing, modeling, calculating and performing what-if scenarios with this serious science tool.

You can help them tap the potential of this exciting new product while tapping into some extra earnings for yourself.

Do you have bench chemistry experience? Application programming expertise? A computational chemistry background? Would you enjoy showing other industry professionals how to take advantage of this revolutionary new research tool? If so, you could find rich rewards in providing



HyperChem-related consulting services.

The potential for consulting services in chemistry-related fields is big and getting bigger. Currently, for every dollar spent on software, another two to four dollars is spent on support and services. For an expert in chemistry applications, this represents a substantial opportunity. And with a software industry leader as your calling card, you'll be at the forefront of the bench revolution.

As with all such opportunities, the sooner you start, the sooner you can benefit. Why not call today for more information or to request an application packet? Who knows, a career in modeling could be in your future. **1-800-424-9737.**

 **AUTODESK**

©1992 Autodesk, Inc. HyperChem is a trademark of Autodesk, Inc.

Circle No. 26 on Readers' Service Card

# 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. Call for holiday deadlines. 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. Available categories: Positions Open, Meetings, Announcements, Courses and Training.

• **Mail or FAX materials to:**  
Science Classified Advertising  
1333 H Street, N.W., Room 814  
Washington, DC 20005  
Telephone: 202-326-6555  
FAX: 202-682-0816

• **Rates:** Ads are \$42 per line; \$420 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 1/8 page and larger) and all Marketplace listings, contact:

Science Classified Advertising  
Deborah Cummings  
Telephone: 202-326-6541

Janis Crowley, Recruitment  
Advertising Manager  
Telephone: 212-496-7704  
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

**CORNELL UNIVERSITY.** The Department of Chemistry has a faculty position available at the **ASSISTANT PROFESSOR** level. Outstanding candidates in the areas of biophysical or inorganic chemistry will be considered. A Ph.D. degree is required. Applicants should submit curriculum vitae, publication list, summary of research experience, graduate transcript, and a brief statement of research plans. These materials and three letters of recommendation should be sent to: **Chair, Faculty Search Committee, Department of Chemistry, Baker Laboratory, Cornell University, Ithaca, NY 14853-1301**, and be received no later than November 15, 1992. The successful applicant will be expected to carry out an effective research program and teach standard chemistry courses. *Cornell University is an Affirmative Action/Equal Opportunity Employer and Educator.*

### Harvard University ASSISTANT PROFESSOR CELLULAR AND DEVELOPMENTAL BIOLOGY (CDB)

The Department of Cellular and Developmental Biology intends to make an assistant professor appointment (entry level) available starting either September 1993 or September 1994. Our department covers a broad range of topics in cellular biology, developmental biology and molecular genetics. We are seeking outstanding candidates in any of these fields. We strongly encourage applications from women and minority groups. Applications should include curriculum vitae, reprints of publications, and a statement of present and future research plans (1-3 pages). Complete applications and three letters of recommendation, *solicited by the applicant*, should be received no later than October 15, 1992 by: **CDB Search Committee, Cellular and Developmental Biology, Harvard University, 16 Divinity Avenue, Cambridge, MA 02138; telephone (617) 495-2327.** *Harvard University is an Affirmative Action/Equal Opportunity Employer.*

**FACULTY POSITION, UNIVERSITY OF CONNECTICUT HEALTH CENTER.** Applications are invited for a tenure-track **ASSISTANT PROFESSORSHIP** in the Department of BioStructure and Function. Responsibilities include teaching of dental, medical and graduate students. Applicants must have a research doctorate and a strong research program in which excellence and independence have been demonstrated. The Department's interests include areas within the neurosciences, developmental biology, tissue repair and regeneration, macromolecular structure and function, and cell/matrix interactions. Applications containing curriculum vitae, a list of publications, three representative publications, a description of research interests, and three references should be sent to: **Dr. Marvin L. Tanzer, Head, Department of BioStructure and Function, University of Connecticut Health Center, Farmington, CT 06030-3705.** Closing date for applications is November 30, 1992. *An Affirmative Action/Equal Opportunity Employer, M/W/H.*

### PLANT EVOLUTIONARY BIOLOGIST OBERLIN COLLEGE

The Biology Department at Oberlin College invites applications for a full-time continuing faculty position effective July 1, 1993. The position which has been authorized for an initial term of four years will carry the rank of **ASSISTANT PROFESSOR** or higher.

The incumbent will teach advanced courses and a seminar in the areas of ecological, evolutionary and conservation biology. Teaching responsibilities will also include involvement in a team-taught introductory course. Academic advising and supervision of undergraduate research are required. The incumbent will be expected to maintain an active research program leading to publication. Preference will be given to candidates with teaching and postdoctoral experience.

Among the qualifications required for appointment is the Ph.D. degree in hand or expected by July, 1993. Candidates must demonstrate interest and potential for excellence in undergraduate teaching.

To be assured of consideration, a letter of application, including curriculum vitae, at least three letters of recommendation, academic transcripts, reprints of recent publications, and brief statements of teaching and research goals should be sent to: **Chair, Search Committee, Biology Department, Oberlin College, Oberlin, OH 44074 (FAX 216-995-8960)** by December 4, 1992.

## POSITIONS OPEN

**ASSISTANT PROFESSOR** position available for a receptor biochemist interested in studying the regulation of membrane receptors involved in clinical anesthesia. The candidate should have experience in recombinant receptor expression using baculovirus-insect cell systems. Please submit curriculum vitae, three letters of reference, a description of previous research experience, and future plans to: **J. G. Reves, M.D., Professor and Chairman, Department of Anesthesiology, Box 3094, Duke University Medical Center, Durham, NC 27710.** *Duke University is an Equal Opportunity/Affirmative Action Employer.*

### THE UNIVERSITY OF CHICAGO THE DEPARTMENT OF ECOLOGY AND EVOLUTION

**ECOLOGIST.** The Department of Ecology and Evolution at the University of Chicago seeks to hire an ecologist with interests in plant, animal or microbial species for a faculty position at the **ASSISTANT PROFESSOR** level. To apply please send curriculum vitae, reprints, and a statement of research interests, and have three letters of recommendation sent by 1 November 1992 to: **Chair, Ecology Search Committee, Department of Ecology and Evolution, The University of Chicago, 1101 East 57th Street, Chicago, IL 60637.** *Affirmative Action/Equal Opportunity Employer.*

### ASSISTANT PROFESSOR MOLECULAR VIROLOGY/CELL BIOLOGY

The **Children's Hospital of Boston** and the **Harvard Medical School** have reinstated a search for a tenure-track Assistant Professor with research interests in molecular virology and/or related areas of cell biology. The appointed candidate will join a group of investigators in the Laboratory of Molecular Medicine at Children's Hospital that includes Professors Stephen Harrison, Don Wiley, and Fred Alt, and will interact with members of the Division of Infectious Diseases. Applicants will be selected on the basis of their potential for establishing an important and creative independent research program. Women and Minorities are especially encouraged to apply. Send curriculum vitae, a short summary of research interests, and three letters of recommendation to: **Stephen C. Harrison, Ph.D., Howard Hughes Medical Institute and Laboratory of Molecular Medicine, The Children's Hospital, 300 Longwood Avenue, Boston, MA 02115.**

The Department of Psychology at the University of Wisconsin-Madison anticipates making one or more faculty appointments beginning August 1993. Among the areas are: **Animal Behavior. ASSISTANT PROFESSOR** with research interests in any area of animal behavior. **Behavioral Neuroscience. ASSISTANT PROFESSOR** with research interests in the areas of neural plasticity (including learning), neuropharmacology of behavior, and/or primate neurobiology. Candidates should submit a letter of application, curriculum vitae, and arrange to have three letters of evaluation sent to: **Search Committee (specify Animal Behavior or Behavioral Neuroscience), Department of Psychology, University of Wisconsin-Madison, 1202 West Johnson Street, Madison, WI 53706.** *The University of Wisconsin-Madison is an Equal Opportunity/Affirmative Action Employer and especially encourages women and minorities to apply.* To ensure consideration, applications should be received by November 1, 1992.

### ASSISTANT PROFESSORS, CELL BIOLOGY.

The Cell Biology and Anatomy Department of the Mount Sinai School of Medicine resumes recruiting tenure-track faculty in Cell Biology. Appointments may be made at whatever rank is appropriate. We are primarily interested in investigators studying intracellular protein translocation, vesicular transport, and membrane and organelle assembly, approached with molecular and genetic techniques. Freshly renovated laboratories and extensive research support facilities are presently available. Ph.D.'s with demonstrated research prowess should send curriculum vitae, one-page summary of research plans, recent publications, and the names, addresses and telephone numbers of three references to: **Dr. Paul B. Lazarow, Chairman, Cell Biology and Anatomy, Box 1007, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.** *An Equal Opportunity Employer; women and minorities are encouraged to apply.*

# Training And Research Opportunities.

Listed below are a few of the excellent opportunities for conducting research that are now available with leading scientists at the National Institutes of Health.

## **Clinical Neuroendocrinology** **Philip W. Gold, MD**

**Two Senior Staff Fellow (assistant professor equivalent) positions** are available to board-certified or board-eligible psychiatrists licensed to practice medicine in the US for research in clinical and/or molecular endocrinology. Clinical neuroendocrine studies focus on patients with stress-related psychiatric disorders, and opportunities exist to design and conduct molecular neuroendocrinology research projects to complement and inform on-going clinical studies. Neuroendocrinology Branch (OE-19), NIMH, Building 10, Room 3S231.

## **Cytogenetics** **Mirian C. Poirier, PhD**

The interaction of DNA with carcinogenic and chemotherapeutic chemicals is being studied. Previous experience is required in DNA biochemistry, DNA adduct quantitation by immunoassay, chemical-DNA localization (in cells, tissues and chromosomes) by immuno/histochemistry, analysis of chromosomal abnormalities, and cell culture. Laboratory of Cellular Carcinogenesis and Tumor Promotion (OE-19), NCI, Building 37, Room 3B12.

## **Homologous Recombination** **R. Daniel Camerini-Otero, MD, PhD**

The molecular biology and biochemistry of homologous recombination is being studied in prokaryotes and eukaryotes. Studies include characterization of a novel triplex DNA, an intermediate in the homologous search process, and other triplex DNAs and the proteins that bind to them. New methods for gene mapping/cloning (e.g., RARE) and gene targeting in mammalian cells are also being developed. Genetics and Biochemistry Branch (OE-19), NIDDK, Building 10, Room 9D15.

## **Molecular Biology of Lysosomes** **Richard L. Proia, PhD**

Gene targeting by homologous recombination is being used to generate mouse models of lysosomal storage diseases. The investigation of lysosomal structure and function, genetic regulation of lysosomal enzymes, and the effect of mutations in Tay-Sachs disease on mRNA processing and transport is also being

studied. A background in biochemistry or molecular biology is preferred. Genetics and Biochemistry Branch (OE-19), NIDDK, Building 10, Room 9D15.

## **Protein-Nucleic Acid Interactions** **Peggy Hsieh, PhD**

The role of DNA structure in homologous recombination and recombinational repair, and the proteins essential for these processes, are being investigated. Additional studies are investigating the role of recombination proteins in promoting branch migration through sequence heterology. A background in protein and/or nucleic acid biochemistry is preferred. Genetics and Biochemistry Branch (OE-19), NIDDK, Building 10, Room 9D15.

## **Protein Sorting/Molecular Recognition** **Harris Bernstein, PhD**

The mechanisms whereby proteins are selectively targeted to the secretory pathway are being investigated. Projects focus on signal sequence recognition as a model for molecular recognition systems that display broad substrate specificity, the regulation of protein targeting by a new family of GTPases, and the function of recently discovered prokaryotic homologs of components of the eukaryotic sorting machinery. Genetics and Biochemistry Branch (OE-19), NIDDK, Building 10, Room 9D15.

## **Additional Postdoctoral Fellowship Opportunities**

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference via modem (1,3014922221 or 1,8003582221). The settings for modem access are "7,Even,1". When connected to NIH, type in "vt100" at the connect message, "F5E" at initial, and "AJL1" at account.

Those interested in receiving information on other postdoctoral opportunities in NIH research laboratories, as well as information on clinical training opportunities, may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

## **To Apply**

If you hold a PhD, MD, or equivalent degree and would like to be considered for one of these positions, please send a cover letter, curriculum vitae, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



# National Institutes Of Health

9000 Rockville Pike, Bethesda, MD 20892

Equal Opportunity Employer

## CHEMISTRY FACULTY POSITIONS AT THE OHIO STATE UNIVERSITY

The Department of Chemistry seeks to fill tenure-track faculty positions at the Assistant Professor level to begin September 1993. Particular areas of interest are analytical chemistry, biological chemistry, organic chemistry, and theoretical chemistry. Demonstrated excellence and strong commitments to innovative research and to teaching at both undergraduate and graduate levels are essential. Candidates should submit a curriculum vitae (including undergraduate transcripts, graduate transcripts and a list of publications), a statement of research and teaching interests, and three letters of recommendation to

**Dr. John S. Swenton, Chair  
Faculty Search Committee**

Review of applications will begin October 15, 1992. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era Veterans, disabled veterans and the disabled are encouraged to apply.



Department of Chemistry  
120 W. 18th Avenue  
Columbus, OH 43210-1173

## MOGAM Biotechnology Research Institute KOREA

### SENIOR RESEARCH SCIENTIST POSITIONS

are available immediately for Korean Scientists with a few years of postdoctoral experience in the fields of Molecular and Cellular Immunology, Protein Chemistry and/or Organic Synthesis, Molecular Virology and Molecular Biology. It is expected that applicants will be able to work independently and be able to lead a research team. The salary will be in the range of \$28,000-\$40,000 per annum depending on age and experience. MOGAM Biotechnology Research Institute is the first private foundation approved by the Korean Ministry of Science and Technology in 1984. The institute is located in the suburbs of Seoul and has excellent facilities for modern research. As a leader in the research and development in the biotechnology field, MOGAM biotechnology Research Institute is principally engaged in research on viral vaccines, genetically engineered human pharmaceuticals and signal transduction.

Please send applications, including a curriculum vitae, copies of publications, and two letters of reference to: **MOGAM Biotechnology Research Institute, 341 Pofungri, Koosungmyon, Yonginkun, Kyonggido, 449-910, Korea or Seocho P.O. Box 47, Korea Green Cross Corporation, Seoul, Korea. (PROOF)**

Tel: 02-741-0611 0331-281-3851  
FAX: 0331-281-6622

## POSITIONS OPEN

**TENURE-TRACK BIOCHEMIST—CARLETON COLLEGE** will have a tenure-track biochemistry position at the **ASSISTANT PROFESSOR** level beginning September 1993. We seek a person with a strong commitment to teaching and the ability to maintain an active research program in biochemistry; start-up funds will be provided. Teaching duties would normally include courses in the areas of biochemistry and organic chemistry. The Chemistry Department has a staff of 7, excellent students, facilities and equipment, and about 25 majors per year. Carleton is recognized for quality undergraduate teaching and student/faculty research. Applications should include a résumé, three letters of reference, graduate and undergraduate transcripts, a two-page discussion of teaching philosophy, and a discussion of research interests. Completed applications will be considered beginning October 16, 1992. Send all materials to: **Professor Jerry Mohrig, Department of Chemistry, Carleton College, Northfield, MN 55057.** We particularly encourage applications from women and members of minority groups. **EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.**

**ASSISTANT PROFESSOR:** Harvard Medical School, Department of Biological Chemistry and Molecular Pharmacology (BCMP).

The Department of Biological Chemistry and Molecular Pharmacology Harvard Medical School invites applications for three tenure-track positions at the Assistant Professor level.

We seek individuals with strong experimental backgrounds in biochemistry, molecular biology and molecular pharmacology, and a commitment to excellence in research and teaching. We are particularly interested in applicants with expertise in (1) membrane biology, receptor-ligand interactions and signal transduction processes; (2) molecular genetics, approaches to gene regulations and/or development; (3) biophysical and/or bioorganic approaches to structure and mechanisms. Applicants should submit, by 1 November 1992, curriculum vitae, bibliography, statement of research plans and arrange for three letters of recommendation to be sent to: **Professor Christopher T. Walsh, Chairman, BCMP, Harvard Medical School, 240 Longwood Avenue, C1-213, Boston, MA 02115.**

*Harvard University is an Equal Opportunity/Affirmative Action Employer and encourages the applications of qualified women and minorities.*

**BAYLOR UNIVERSITY—ORGANIC CHEMISTRY FACULTY POSITION.** The Department of Chemistry invites applications for a tenure-track organic faculty position at the **ASSISTANT PROFESSOR** level, beginning Fall 1993. A Ph.D. in chemistry is required and postdoctoral experience is desirable. The successful applicant will be expected to demonstrate excellence in teaching at the undergraduate and graduate levels and to establish an independent research program capable of attracting graduate students (M.S. and Ph.D.) and extramural funding. Applicants should submit a letter of application, curriculum vitae, including a list of publications, and a description of research interests and plans, and have three letters of recommendation sent to: **Professor Stephen L. Gipson, Department of Chemistry, P.O. Box 97348, Baylor University, Waco, TX 76798.** The deadline for receipt of all materials is October 23, 1992. Baylor is a Baptist university affiliated with the Baptist General Convention of Texas. *As an Affirmative Action/Equal Employment Opportunity Employer, Baylor encourages minorities, women and persons with disabilities to apply.*

## HAVERFORD COLLEGE

The Molecular, Cellular and Developmental Biology Department seeks two tenure-track **FACULTY MEMBERS** at the Assistant, or possibly Associate, Professorial rank for the Fall of 1993. Successful applicants will teach undergraduates at all levels and maintain an active research program with extensive undergraduate involvement. Areas of research should be in the regulation of gene expression or in cell biology with strong expertise in macromolecular biochemistry. Electron microscopy is desirable for one position. The department supports innovative teaching in the applicant's area of interest. A Ph.D. and postdoctoral research experience are required. Please send curriculum vitae, statements of teaching and research interests and three letters of recommendation by November 1, 1992 to: **Dr. Judy Owen, Biology Search, Haverford College, Haverford, PA 19041.** *Haverford College is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR DEPARTMENT OF STRUCTURAL AND CELLULAR BIOLOGY UNIVERSITY OF SOUTH ALABAMA COLLEGE OF MEDICINE

The Department of Structural and Cellular Biology invites applications for the position of tenure-track Assistant Professor. Preference will be given to those candidates who combine the methodologies of molecular biology, cell biology and biophysics to study fundamental problems in neuroscience. However, the department will be pleased to consider outstanding scientists working in other areas. The applicant should possess a Ph.D. degree and have at least two years of postdoctoral training. The successful candidate will conduct independent research and participate in teaching the anatomical sciences to medical students and/or advanced cell and molecular biology courses to graduate students. Applicants should send curriculum vitae, three recent reprints, a short summary of research interests, and the names of three references by November 18, 1992 to: **Dr. Steven R. Goodman, Chair, Department of Structural and Cellular Biology, University of South Alabama College of Medicine, MSB 2042, Mobile, AL 36688.**

*The University of South Alabama is an Equal Opportunity Employer. Women and minority candidates are encouraged to apply.*

## PLANT COMMUNITY ECOLOGIST

The Department of Botany, University of Georgia, invites applications and nominations for a tenure-track position beginning as early as September 1993; the appointment will be made at the **ASSISTANT PROFESSOR** level. Candidates are expected to conduct independent research in plant community ecology and to teach appropriate graduate and undergraduate courses in ecology. Please submit curriculum vitae, statements of research and teaching interests, reprints, and arrange for four letters of reference to be sent directly to: **Dr. Russell L. Malmberg, Department of Botany, University of Georgia, Athens, GA 30602.** Closing date is November 2, 1992. *An Equal Opportunity/Affirmative Action Employer.*

**YALE SCHOOL OF MEDICINE.** The Department of Surgery wishes to recruit an individual with training and experience in molecular genetics and microbiology for an academic track position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. The candidate should have a Ph.D. in a relevant field and at least three years of research experience with emphasis on receptor identification and signal transduction. The laboratory is a resource of the Department of Surgery and the faculty member must be willing to direct, instruct, and/or work with surgical residents, fellows, and faculty. Interested candidates should send curriculum vitae and bibliography to: **Dr. Barbara Kinder, Chief of Surgery, Department of Surgery, Veterans Administration Medical Center, West Spring Street, West Haven, CT 06516.** Applications will be received until November 1, 1992. *Yale University is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from women and members of minority groups.*

### YALE UNIVERSITY SCHOOL OF MEDICINE CLINICAL MICROBIOLOGIST

The Department of Laboratory Medicine at Yale University School of Medicine has an opening at the rank of **ASSISTANT** or **ASSOCIATE PROFESSOR** with clinical responsibilities as Assistant Director of the Clinical Microbiology Laboratory at Yale-New Haven Hospital. The successful candidate will be expected to establish a research program, participate in the direction of the Clinical Microbiology Laboratory, and teach residents and medical students. We prefer applicants who are board certified or board eligible in Clinical Pathology and/or Medical Microbiology. Candidates must have M.D./Ph.D., M.D., or Ph.D. degree. Send curriculum vitae and addresses of three references to: **Stephen Edberg, Ph.D., A.B.M.M., Chair, Search Committee, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510** before November 10, 1992. *Yale is an Equal Opportunity/Affirmative Action Employer. Women and minority applicants are encouraged to apply.*



## HOWARD HUGHES MEDICAL INSTITUTE

# 1993

# PREDOCTORAL FELLOWSHIPS IN BIOLOGICAL SCIENCES

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

- **Fellowship Terms**
- Full-time study toward the Ph.D. or Sc.D.
  - Up to five years of support possible
  - \$14,000 annual stipend
  - \$12,700 annual cost-of-education allowance

- **Fields of Study**
- |                       |                      |                    |
|-----------------------|----------------------|--------------------|
| • Eligible fields:    |                      |                    |
| biochemistry          | genetics             | pharmacology       |
| biophysics            | immunology           | physiology         |
| biostatistics         | mathematical biology | structural biology |
| cell biology          | microbiology         | virology           |
| developmental biology | molecular biology    |                    |
| epidemiology          | neuroscience         |                    |

- **Eligibility**
- Beginning graduate study (prior study toward an M.P.H. or a medical degree does not rule out eligibility)
    - college seniors
    - first year graduate students
    - medical students and physicians (M.D., D.O., D.D.S., or D.V.M.) not past the first year of a Ph.D. or Sc.D. degree program
  - Not in a funded M.D./Ph.D. program
  - No citizenship requirements: U.S. citizens may study abroad, but others must study in the United States

- **Schedule**
- Application deadline: November 6, 1992
  - Awards announced: early April 1993
  - Fellowships start: June 1993 - January 1994

---

### For 1993 Program Announcements, Eligibility Guidelines, and Applications

Hughes Fellowship Program • The Fellowship Office  
National Research Council • 2101 Constitution Avenue, N.W.  
Washington, D.C. 20418 • United States of America  
Telephone (202) 334-2872

The Howard Hughes Medical Institute welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

---

**Dean  
College of Liberal Arts  
The University of Iowa**

The University of Iowa invites applications and nominations for the position of Dean of the College of Liberal Arts and particularly encourages applications from women and minorities.

Candidates should have high intellectual standards and an ability to inspire others to meet such standards. The successful candidate must be a highly respected scholar and teacher with a record of accomplishments consistent with appointment at the rank of full professor.

The Dean should share and reinforce the spirit of liberal education reflected in the breadth of the College of Liberal Arts at The University of Iowa. Candidates should have demonstrated strong administrative skills, knowledge of public institutions, and commitment to public education. The successful candidate should have a record of success in increasing diversity among students, faculty and staff. Candidates must be able to recognize and build upon the College's particular strengths, work with faculty and administrators to maintain effective communications and good working relations with departments, schools, programs, and offices of The University of Iowa. The Dean must be a strong advocate for the College and compete vigorously for the resources necessary to fulfill its mission.

The University of Iowa, a comprehensive research university, is located in Iowa City, a community of 60,000 with a cosmopolitan atmosphere, exceptional cultural resources, excellent public schools and libraries, and outstanding medical care. The College of Liberal Arts is the largest college within the University, which also includes the Colleges of Business Administration, Dentistry, Education, Engineering, Law, Medicine, Nursing, and Pharmacy. With more than 45 departments, programs, and schools, approximately 650 tenured or tenure-track faculty, 15,500 undergraduate students and 3,000 graduate students, the College of Liberal Arts includes the natural sciences, the social sciences, the humanities, the fine arts, and professional schools.

The position is available July 1, 1993. Applicants should submit a letter and resume to the **Chair, Liberal Arts Dean Search Committee, 111 Jessup Hall, The University of Iowa, Iowa City, Iowa 52242**. The committee also invites letters of nomination which must include a brief summary of the nominee's qualifications. Applications will be accepted until the position is filled. Screening will begin immediately.

The University of Iowa is an equal opportunity and affirmative action employer.



**University of Otago  
Te Whare Wananga o Otago  
New Zealand**

**LECTURER IN IMMUNOLOGY**

Applications are invited for the position of Lecturer in Immunology in the Department of Microbiology. The main criterion for appointment is distinction in research, provided the applicant has good communication skills and some experience in teaching. Applicants should have a strong background in immunology and should have obtained a PhD by the time of appointment.

The Department supports active research programmes in Molecular Biology, Biotechnology, Clinical Microbiology and Immunology and is the host Department to the HRC Virus Research Unit and the Deer Research Laboratory. The Deer Research Laboratory is actively involved in immunological research into Tb diagnosis and prophylaxis, disease susceptibility and stress. There is active international collaboration with other groups specialising in tuberculosis and ruminant immunology. A full range of modern equipment dedicated to immunology is currently available within the Department. Specialised undergraduate courses in Immunology are given to Dental, Pharmacy and Biology students. Postgraduate Diploma, MSc and PhD programmes in Immunology are offered.

The successful applicant will be expected to take up this post on February 1, 1993.

Enquiries may be made to the Head of Department, Professor David T Jones, Facsimile (64) (3) 479 8540 or telephone (64) (3) 479 7735.

*Salary:* Lecturer \$NZ37,440 - \$NZ49,088 per annum.

Intending applicants should write for further particulars, available from the Registrar, Mr D W Girvan, P O Box 56, Dunedin, New Zealand, Facsimile (64) (3) 474 1607.

Applications quoting reference number A92/64 close with the Registrar on 1 December 1992.

*Equal opportunity in employment is University policy.*

**International Council of Scientific Unions (ICSU)**

**GLOBAL  
I G B P  
CHANGE**

*The Standing Committee on START  
of the International Geosphere-Biosphere Programme (IGBP):  
DIRECTOR*

Applications and nominations are invited for the position of Director of the International START Secretariat.

The Global Change SysTem for Analysis, Research and Training (START) is an evolving, global system of research networks focusing on the regional origins and implications of global environmental changes. Special emphasis is being given to the establishment of networks and centres in developing country regions. START is being organized by the major international global environmental change programmes, IGBP, in cooperation with WCRP (World Climate Research Programme), and HDP (Human Dimensions of Global Environmental Change Programme).

The position will become available September 1, 1993 for a term of three years and is renewable. The START Secretariat is currently based in Washington, D.C.

The Director of the International START Secretariat will be responsible for implementation of the START effort, including development of research networks and assisting in raising funding for these networks and centers, for linking the research agendas of the international research programmes to the regional research programmes, for the organizing inter-regional planning and research activities, and for creating an effective global network of regional research efforts. The Director is responsible for the office and a staff of 6-8 people. The Director will report to the START-Standing Committee.

Candidates should be internationally recognized individuals with extensive research and science management background. Necessary ingredients include:

- Advanced degree or equivalent experience
- Executive level scientific administrative experience
- Fluency in English; basic knowledge of one or more of the other official UN languages is an advantage
- Experience in international scientific collaboration
- Willingness to travel

Professional experience in any field of global environmental change research is necessary.

Salary and social benefits will be comparable to similar functions in international research programmes. Applicants should include detailed curriculum vitae, complete information on past relevant experiences, plus names and addresses of three references.

Nominators should send a letter giving reasons why a particular person should be considered, including the nominee's relevant experience and capabilities, with the current address and telephone number.

Send these materials no later than November 1, 1992 to: **Dr. Werner Menden, Federal Ministry for Research and Technology (BMTF), Heinemannstrasse 2, D-5300 Bonn 2, Germany. Telefax (+49-228) 59 36 01.**

For further information, you can also contact Professor Thomas Rosswall, International START Secretariat, 1825 K Street, NW, Suite 1101, Washington, DC 20006, Tel. (202) 457-5840, Fax. (202) 457-5859.

**Recruitment Advertisers**

**SAVE 25%**

Running your recruitment advertisement once may not be enough. Place the same ad again within the next four issues and we will give you 25% off your second insertion.

- **Get more attention**
- **Get more value**
- **Get more applicants**

Reach the global scientific community you need to maximize your recruitment efforts. Science does it bigger and better and now Science does it at greater savings for you.

Call, write, or fax:

**Science Classified Advertising**

**1333 H Street, N.W.**

**Washington, D.C. 20005**

**Phone: 202-326-6541/6555**

**Fax: 202-682-0816**

# DRUG METABOLISM AND PHARMACOKINETICS

**S**mithKline Beecham, a worldwide leader in pharmaceutical research, is currently offering the following opportunities in the area of Drug Metabolism and Pharmacokinetics.

## Senior Scientist

The selected candidate will study the pharmacokinetics, pharmacodynamics and disposition of therapeutic proteins in clinical and non-clinical investigations. Responsibilities include developing analytical methodologies, conducting basic research in areas in personal expertise, preparing internal reports, and publishing research results in scientific journals.

Qualified candidates will possess a Ph.D. in Protein Chemistry, Biochemistry, or a related field with an interest in drug metabolism and pharmacokinetics. Knowledge of biological, chemical and physical approaches for analyzing protein molecules in complex biological matrices and experience in functional, immunological and HPLC assays are required. The candidate will have demonstrated ability to integrate and apply multidisciplinary techniques. Experience in drug metabolism, animal studies, cell culture or flow cytometry would be advantageous. Good communication and interpersonal skills are necessary. Refer to Job #M056.

## Scientist

The selected scientist will develop analytical techniques to quantitate protein and peptide drugs in biological matrices. Responsibilities include performing assays, and performing pharmacokinetic studies in animals. The candidate will design and implement studies to elucidate the disposition of protein and peptide drugs, write internal reports, and publish in scientific journals.

Qualified candidates will possess an M.S. in Chemistry, Biochemistry or a related field, and significant experience in an academic or industrial laboratory. Expertise in electrophoresis, immunoblotting, radiolabeling, and protein purification would be a plus. The ability to independently develop and perform quantitative analytical assays is required. Good communication skills and experience with animals would be advantageous. Refer to Job #M057.

SmithKline Beecham offers a competitive compensation and benefits package and a stimulating team environment. For confidential consideration, send your resume specifying Job # to: R&D Employment, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are Equal Opportunity Employer, M/F/D/V.



**SmithKline Beecham**  
Pharmaceuticals

Challenging the natural limits.

## FACULTY OF HEALTH SCIENCES

# CHAIR OF ANATOMY AND HISTOLOGY

(Re-advertised)

A\$77 900 pa

**Ref 92159X.** The School of Medicine is located within the Flinders Medical Centre and is adjacent to the University, 12 km south of Adelaide's city centre.

The new Professor who will head the Department of Anatomy and Histology, will have: a distinguished research record in an area of Biomedical Science; evidence of ability to teach at undergraduate level in at least one branch of the anatomical sciences (gross anatomy, neuroanatomy, histology, cell biology or embryology) and to supervise higher degree students; and ability to provide academic leadership. The Department has six academic, five technical and one permanent administrative staff members; three research fellows and research officers and eight research support staff. The Department has an established reputation for research excellence in the fields of autonomic nervous system, microvasculature, retinal and biostatistical research. 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.

The Department has a major role in undergraduate medical teaching within the integrated teaching programmes of first, second and fourth years of a six year medical course. The Department maintains joint teaching with staff in other departments or schools of the University.

In addition to salary, a medically qualified appointee will also receive a clinical loading of up to A\$13 484 pa and have limited right to private practice.

Enquiries to the Dean, Professor J Chalmers (phone [61 8] 204 5511, ext 4160).

Selection criteria and conditions of appointment available from Human Resources Division (phone [61 8] 201 2300, fax [61 8] 201 3131).

**Applications, addressing the selection criteria, quoting the reference number, and giving details of qualifications and experience together with the names, addresses and facsimile numbers of three referees of whom confidential enquiries may be made, should be lodged with the Manager, Human Resources, The Flinders University of South Australia, GPO Box 2100, Adelaide SA, Australia 5001 by 16 October 1992.**

**The University reserves the right not to make an appointment or to invite applications.**

**Equal Opportunity is University Policy.**



**FLINDERS  
UNIVERSITY**  
ADELAIDE • AUSTRALIA





## ASSISTANT, ASSOCIATE AND FULL PROFESSOR IN PATHOLOGY

The Department of Pathology at The University of Tennessee Medical Center, Memphis and the affiliated VA Medical Center is continuing to expand its academic program. The department currently consists of 25 clinical faculty members who have diverse academic and diagnostic interests and 10 research faculty members whose interests are in the cell and molecular biology of cancer, cytokines, or neurological diseases. Multiple additional academic pathologists are now being recruited. Candidates must have a medical degree in pathology, with experience and clinical interests in areas such as, surgical pathology, cytology, autopsy pathology or clinical pathology, and/or interests in academic/experimental pathology that interface with an existing research focus within the department. Candidates who are interested in such tenure track positions should submit their curriculum vitae and bibliography along with three letters of recommendation as soon as possible. Evaluation of applications will begin in October, 1992 and will continue until all positions are filled. Please send all application materials to: Robert E. Scott, MD, Chairman, Department of Pathology, University of Tennessee, 800 Madison Avenue, Memphis, TN 38163.

\*The University of Tennessee, Memphis, is an Equal Employment, Affirmative Action, Section 504, Title IX, American's with Disabilities Act Employer.

## Advancement in Science Begins at Bio-Rad Laboratories

We are Bio-Rad Laboratories — a world leader in clinical diagnostics and one of the fastest growing companies in California. Continued growth has created several opportunities in major U.S. cities. We are seeking talented scientists who wish to begin their careers in industry.

As a Diagnostics Sales Representative, you will serve in a highly visible position with excellent opportunities for growth and advancement. Career paths include sales and product management leading to general management.

We require a BS or equivalent in a Life Science (MBA, MS or PhD a plus). Successful candidates must be willing to relocate.

We offer a competitive compensation package. Please send your resume to: Bio-Rad Laboratories, Dept. D375, 4000 Alfred Nobel Dr., Hercules, CA 94547. EOE M/F/D/V.

**BIO-RAD**  
Bio-Rad Laboratories

## POSITIONS OPEN

### COLBY COLLEGE

is seeking an **Animal Physiologist** to fill a tenure-track position as **ASSISTANT PROFESSOR** of Biology to begin September, 1993. Women candidates will be considered for a **Clare Boothe Luce Assistant Professorship**, which provides dedicated annual research funds, and salaries for undergraduate research assistants. Candidates should have a Ph.D. and a strong commitment to undergraduate education. Applicants should have broad training in animal physiology. A research interest in invertebrate, fish, amphibian, or reptile biology is preferred. Teaching will include comparative physiology, a course in the candidate's discipline, a course for non-biology majors in alternate years and team teaching in the introductory course in some years. An active research program, including supervision of undergraduate research, will be expected. Familiarity with liberal arts colleges, teaching experience, and/or postdoctoral training are desirable.

Please submit a letter of application, statement of teaching and research interests, curriculum vitae, reprints of publications, undergraduate and graduate transcripts, and three letters of recommendation to: **Professor David H. Firmage, Chair, Department of Biology, Colby College, Waterville, ME 04901.** Application review will begin **November 2, 1992.** *Colby College is an Affirmative Action/Equal Opportunity Employer, and encourages applications from minorities and women.*

### ASSISTANT/ASSOCIATE PROFESSOR Plant Molecular Genetics University of Connecticut

The Department of Molecular and Cell Biology invites applications for an anticipated tenure-track position with a target starting date of September 1, 1993. The successful candidate should have significant postdoctoral experience, and will be expected to establish a strong, extramurally funded research program in any area of higher plant molecular genetics. Additionally, the successful candidate will be expected to participate in graduate training and in the teaching program of the Department. Applicants should submit curriculum vitae, reprints or preprints of major publications, a statement summarizing research accomplishments and future plans, and have at least three letters of recommendation sent to: **Dr. Arthur Chovnick, Chair, Plant Molecular Genetics Search Committee, University of Connecticut, Department of Molecular and Cell Biology, U-131, 354 Mansfield Road, Storrs, CT 06269-2131.** The review of applications will begin on October 1, 1992 and continue until the position is filled. *The University of Connecticut encourages minorities, women and people with disabilities to apply for this position. (Search #3A27)*

### FACULTY POSITIONS IN PSYCHIATRY

Two tenure-track faculty positions at the **ASSISTANT, ASSOCIATE or FULL PROFESSOR** level are available in the Department of Psychiatry at the University of Wisconsin-Madison. Individuals who have a strong interest in independent research in the areas of brain imaging, psychopharmacology, psychogenetics or molecular biology involving either basic or clinical research are encouraged to apply. Individuals will be joining a team of scientists collaboratively working to understand the neurobiological basis of neuropsychiatric illnesses. Competitive salary and fringe benefits available. Send curriculum vitae to: **Dr. Ned Kalin, Department of Psychiatry, 600 Highland Avenue, Madison, WI 53792-2475** by October 31, 1992. *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.*

## NANOTECHNOLOGY

Reprint

*Engineering a Small World:  
From Atomic Manipulation to  
Microfabrication*

This 42-page special section, reprinted from the 29 November issue of **SCIENCE**, is your entry to the expanding world of small-scale engineering. It's a field that spans microelectronics, materials science, chemistry, molecular biology, and microscopy. In this special section, ten illustrated articles by research leaders and by science journalists present the full scope of this small world.

For each copy,  
send \$4.00 plus \$.50 for postage to:  
Science

Attention: Corrine Harris  
1333 H Street, N.W.  
Washington, DC 20005  
Telephone: 202-326-6527  
Visa and MasterCard orders  
accepted by

FAX: 202-682-0816

All orders must be prepaid.  
Payment in U.S. dollars only. Bulk rates available.

## Alternative Thinking Fellowships

The Alternative Thinking Program has been designed to support research and scholarship which represent new departures within and across disciplines. It is intended to encourage the development and expression of minority views which challenge received doctrines and paradigms, and in this way to promote rethinking across all fields of knowledge. The program offers full research fellowships (one or two semesters, extendible). Send applications (including C.V. & research proposals) to Prof. Meir Sternberg, Faculty of Humanities, Tel Aviv University, Israel.

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

### PROFESSOR OR ASSISTANT PROFESSOR

Section of Cell Growth, Regulation and Oncogenesis, Duke Comprehensive Cancer Center, Duke University Medical Center. Applications invited for a position at the level of either Professor or Assistant Professor in the Section of Cell Growth, Regulation and Oncogenesis. Research within the Section is focused on the genes and biochemical pathways that regulate cell growth and the molecular analysis of the disruption of such controls in cancer cells. Investigators working at the molecular level on signal transduction, oncogenes/anti-oncogenes, angiogenesis, metastasis and apoptosis are especially encouraged to apply. Applicants seeking a tenured professorship must have distinguished records of accomplishments and be internationally recognized as a leader and innovator in research. Applicants seeking a tenure-track assistant professorship must have a doctorate, at least two years of postdoctoral training and must have demonstrated high potential for imaginative independent research. Successful candidates will also be appointed into a basic science department within the Medical Center. Applicants for a tenured professorship position need send only a letter expressing interest, curriculum vitae and list of publications. All inquiries will be held in confidence. Applicants for an assistant professorship should send curriculum vitae, a brief description of present and proposed research and arrange for three or more letters of recommendation to be forwarded to: **Dr. Robert M. Bell, Head, Section of Cell Growth, Regulation and Oncogenesis, Duke Comprehensive Cancer Center, Box 3686, Durham, NC 27710.** To be assured of full consideration, the application should be received by October 23, 1992. *Duke University is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT OR ASSOCIATE PROFESSOR EXPERIMENTAL PATHOLOGY

The Department of Pathology, University of Oklahoma Health Sciences Center, Oklahoma City, invites applications for a tenure-track position at the assistant or associate professor level. The positions will be in experimental pathology and we seek candidates in the following areas: cardiovascular biology, endothelial cell biology, coagulation/clot-lysis, immunology, and tumor biology. The successful candidate will be expected to establish and maintain a vigorous and funded research program and participate in teaching at the graduate level. Candidates should have a M.D., Ph.D. or equivalent and postdoctoral research experience in an area related to their planned research program.

Applicants should submit curriculum vitae, a concise description of research interests and goals, and the name, address and telephone number of three references to: **Dr. Lawrence E. DeBault, Chairman of Search Committee, Department of Pathology, P.O. Box 26901, Oklahoma City, OK 73190.** Deadline for receipt of applications is October 1, 1992. *The University of Oklahoma is an Affirmative Action/Equal Opportunity Employer.*

### PROFESSOR—ANALYTICAL CHEMISTRY Department of Chemistry The University of British Columbia

The Department of Chemistry, University of British Columbia, invites applications for a tenure-track or higher level Professor in Analytical Chemistry, starting **July 1, 1993.** A Ph.D., (postdoctoral experience), and a strong research track record are required. The successful candidate will be expected to teach chemistry courses at the undergraduate level and graduate level and to develop a vigorous and creative research program. The salary will be commensurate with education and experience.

The University of British Columbia encourages qualified women and minority applicants. The position is subject to final budgetary approval and, in accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

Applications should consist of curriculum vitae, list of publications, summary of research interests, a detailed research proposal, and the names and addresses of at least three references. The applicant should arrange for the complete application and letters of reference to be sent, by the closing date of December 1, 1992 directly to: **Professor M. Blades, Chairperson, Future Appointments Committee, Department of Chemistry, University of British Columbia, 2036 Main Hall, Vancouver, British Columbia, CANADA V6T 1Z1.**

## National Institutes of Health (NIH)

### ASSOCIATE DIRECTOR FOR COMMUNICATIONS

The National Institutes of Health (NIH), Public Health Service, Department of Health and Human Services, invites nominations and applications for this Senior Executive Service (SES) position, with a current salary range of \$90,000 to \$112,000 per annum.

The Associate Director carries out the primary information mission of NIH through a comprehensive national public affairs program providing information to health care providers, researchers, and the public. The Associate Director will develop agency-wide plans for communications programs that display NIH-sponsored research results and their impact. The Associate Director will also develop and implement communications programs in support of appropriate elements of NIH's strategic plan. The Associate Director manages the Office of Communications and serves as the Freedom of Information Act Officer for NIH.

The complete Civil Service vacancy announcement which lists the managerial and technical qualifications required, the forms required for application to the SES position, and an Application for Federal Employment (SF-171) may be requested by letter or by telephoning (301) 496-2400.

Complete applications must be **received no later than September 30, 1992**, at the following address:

**National Institutes of Health  
Office of the Director  
Personnel Office  
ATTN: D. Kraut  
Building 31, Room 1C-27  
9000 Rockville Pike  
Bethesda, Maryland 20892**



All qualified candidates will receive consideration without regard to race, religion, color, sex, age, national origin, political affiliation, marital status, union membership, or any nondisqualifying handicapping condition.

NIH is an Equal Opportunity Employer

## BIOPHYSICIST/ SKIN RESEARCH

### THINK BEYOND THE CONVENTIONAL

An ability to think across traditional scientific boundaries can lead to breakthrough discovery. Here at Unilever Research U.S., one of four international research laboratories for one of the world's leading manufacturers of consumer products, foods and value-added chemicals, you'll find the challenges and rewards you need to succeed.

Using the resources and long-term commitment only a major multinational company can provide, we are taking a vastly different approach to conventional skin research. By bringing together top scientists from a wide range of disciplines, we are creating an environment where individuals can excel in their chosen areas, as well as broaden their knowledge through continuous interactions.

Currently we are seeking an individual with a PhD in biophysics or physical chemistry to explore the effects of surfactants and environmental factors on the biophysical state of human skin. A demonstrated record of carrying out research in biological systems that probe the relationship of structure to function is also essential. 0-5 years' postdoctoral experience and familiarity with bioorganic chemistry and surfactant physical chemistry are desirable. Excellent communications and interpersonal skills are also required.

If you would like to join us in developing the science and technology that will drive our business into the next century, send your C.V. to: James R. Conti, Human Resources, Dept. S911, Unilever Research U.S., 45 River Road, Edgewater, NJ 07020. Equal Opportunity Employer.

Will your next idea be our next "first"?



**Unilever**  
Unilever Research U.S.

## POSITIONS OPEN

### PROFESSOR, ASSOCIATE PROFESSOR ASSISTANT PROFESSOR VASCULAR CELL BIOLOGIST

The Section of Surgical Biology, Department of Surgery, University of Arizona Health Sciences Center invites applications for a full-time faculty, tenure-track position. The individual should have a Ph.D. and/or M.D. degree and provide evidence of a strong research program in vascular biology. Applicants with an interest in the molecular mechanisms regulating cell-cell interactions at the blood vessel wall are especially encouraged to apply. The successful candidate will join a multidisciplinary team of cardiovascular biologists and clinicians. Rank and salary commensurate with qualifications. Submit curriculum vitae and three letters of reference to: **Stuart K. Williams, Ph.D., Chief, Section of Surgical Biology, Department of Surgery, University of Arizona Health Sciences Center, College of Medicine, Tucson, AZ 85724.** Review begins September 1, 1992 and remains open until filled. *The University of Arizona is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

### RESEARCH ASSOCIATE or ASSISTANT PROFESSOR

Research Associate or Assistant Professor position available for two years starting in winter 1992 for Ph.D. with experience in Molecular Biology. Project involves implementation of a sensitive hybridization assay for the detection of HIV-1 RNA in human cells using a novel ribozyme-mediated ligation reaction followed by RNA amplification using Q-Beta replicase. Work is funded by the Howard Hughes Medical Institute, the Rockefeller Foundation and the National University of Mexico. Research facilities include state-of-the-art instrumentation such as a Molecular Dynamics phosphorimager, a fluorescent DNA sequencer, advanced thermal cyclers and several ethernet-networked Macintosh II and Sparcstation computers. Salary is in the range of \$18,000-\$25,000 per annum (negotiable depending on level and qualifications). Familiarity with the Spanish language would be an asset, but is not essential. Please FAX curriculum vitae, statement of research interests, as well as the names of three references to **Dr. Paul M. Lizardi, Depto. de Bioquímica, Instituto de Biotecnología, Cuernavaca, MEXICO. FAX (52-73) 17-73-88.**

The Department of Chemistry solicits applications and nominations for the position of **CHAIR**. The candidate is expected to possess a distinguished record of research, teaching, and extramural funding, as well as demonstrated skills in leadership, administration, and interpersonal relations. In addition to normal academic duties within a department dedicated to excellence in both research and teaching, the responsibilities of the position specifically include the direction of departmental initiatives in research at the interface of chemistry and biology, and interamerican scientific collaboration. The Department offers Ph.D., M.S., B.S. (both ACS-certified and noncertified), and A.B. degrees.

Inquiries, applications and nominations should be directed to: **Dr. Manuel A. Huerta, Chair, Search Committee, Department of Chemistry, The University of Miami, P.O. Box 249118, Coral Gables, FL 33124.** To be assured of consideration, all materials should be received by November 30, 1992. *The University of Miami is an Equal Opportunity/Affirmative Action Employer and a drug/smoke-free workplace.*

**ASSISTANT MEMBER** in Molecular Pharmacology. The department of Biochemical and Clinical Pharmacology encompasses innovative and productive programs directed at understanding molecular mechanisms of action and resistance to cancer chemotherapeutic agents. A junior faculty position is available to establish a high quality program in the area of regulation and control of genes involved in drug resistance. Preference will be given to applicants working in the area of molecular biology/pharmacology of cancer, who have an interest in development of molecular approaches to treatment. Successful candidates will be expected to develop an extramurally supported, independent research program. Applicants should send curriculum vitae and names of three references by November to **Dr. Peter J. Houghton, Chairman, Department of Biochemical and Clinical Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101.** *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**DIRECTOR, DIVISION EXPERIMENTAL PATHOLOGY.** The Department of Pathology and Laboratory Medicine of the University of Rochester is conducting a search for a scientist to be appointed Director of the Experimental Pathology Division and George Hoyt Whipple Professor of Pathology and Laboratory Medicine. Research goals of this newly reorganized division center on the elucidation of the cellular and molecular basis of human diseases. The appointee will provide leadership to enhance and expand the scientific endeavors of the Department through recruitment of additional faculty and graduate and post-graduate trainees and coordination of current programs in the division. Applications from individuals with M.D., M.D./Ph.D., or Ph.D. degree are welcome.

Interested candidates should submit by November 15, 1992 curriculum vitae and other credentials to: **Search Committee for Director, Experimental Pathology Division: c/o Dean A. Arvan, M.D.; Department of Pathology and Laboratory Medicine, University of Rochester Medical Center, 601 Elmwood Avenue, Box 608, Rochester, NY 14642 (USA); Telephone: 716/275-5891.** *The University of Rochester is an Equal Opportunity Employer (M/F).*

### PLANT GENETICIST

The National Research Initiative Competitive Grant Program of U.S. Department of Agriculture seeks a qualified scientist to serve as **PROGRAM DIRECTOR** for grants administration in the area of Plant Genome. Candidates must have a B.S. or higher degree with major study in plant genetics, or a closely related discipline. In addition the candidate must have a Ph.D. or equivalent specialized experience directly related to molecular biology.

Closing date is October 13, 1992. For information on the position, contact: **Dr. Sally Rockey, National Research Initiative Competitive Grants Program, CSRS/USDA, Room 323 Aerospace Building, Washington D.C. 20250-2200. Telephone: (202) 401-5114.** For information on application procedures/forms, contact **Ms. Kathy Asmuseen, personnel staff specialist, (202) 720-9811.** *USDA is an Equal Opportunity Employer.*

### VICE CHANCELLOR FOR RESEARCH DEAN OF THE GRADUATE COLLEGE THE UNIVERSITY OF ILLINOIS AT CHICAGO (UIC)

UIC seeks highly qualified applicants for the position of Vice Chancellor for Research and Dean of the Graduate College. The incumbent reports directly to the Chancellor and joins his policy and management group and is responsible for the enhancement of excellence in research and graduate education throughout the campus. Qualifications of the successful candidate will include the following: An academic/scientific background in research and/or research management and in facilitation of graduate education and research, achievements to justify appointment as tenured professor, strong management capabilities, and demonstrated experience in fostering research between a university and extramural entities including industry. The successful candidate will also have the capacity to serve as a catalyst for cross-disciplinary interactions through the creation of incentives for multi- and interdisciplinary research. The search will remain open until the position is filled. However, review of applications will begin September 1, 1992. Nominations/applicant names and curriculum vitae should be sent to:

**John W. Chandler, M.D.  
Chairman, Search Committee  
UIC Eye Center  
1855 West Taylor Street  
Chicago, IL 60612**

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

**NMR ELECTRONICS FACULTY POSITION:** Expert in rf electronics and coil design and construction to interact with community of MRI(S) investigators involved in clinical and experimental research. Ability to conduct independent innovative research essential. Faculty status and salary commensurate with experience. Write to: **Jerry D. Glickson, Director of NMR Research, Department of Radiology, The Johns Hopkins School of Medicine, Houch B112, Baltimore, MD 21205.** *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### MOLECULAR VIROLOGISTS/ONCOLOGISTS

Three tenure-track **FACULTY POSITIONS.** The Department of Microbiology and Immunology, Louisiana State University Medical Center (LSUMC), invites applications and nominations for three tenure-track faculty positions at the levels of Professor, Associate Professor, and Assistant Professor. We seek outstanding candidates with postdoctoral experience and demonstrated ability to direct an independent research program in the areas of molecular virology, viral genetics, and/or molecular investigations of HIV, oncogenes, tumor suppressor genes, or cancer. Candidates for senior positions must have a record of distinction in published research and obtaining extramural research funding. Responsibilities include training doctoral and postdoctoral students and teaching in courses for graduate and medical students. Faculty are provided generous seed funds and participation in a research incentive plan. LSUMC and this Department are in a phase of expansion with the construction of a ten story Biomedical Research Institute, development of Centers for Cancer and Arthritis Research, and growth of its doctoral program. Applicants should send curriculum vitae, a statement of research plans and funding, and three letters of reference to: **Dr. Dennis J. O'Callaghan, Professor and Head, Department of Microbiology and Immunology, Louisiana State University Medical Center, 1501 Kings Highway, Shreveport, LA 71130-3032.**

**CLINICAL NEUROPHYSIOLOGIST** position is open in MEG Center, Albuquerque VA Medical Center, with a **TENURE-TRACK FACULTY** appointment in the Department of Neurology, University of New Mexico (UNM) School of Medicine. Level of appointment may vary with qualifications of the candidate. Applicant must be a BE/BC physician with experience in clinical neurophysiology. He/She is expected to assume a major responsibility in the clinical program of MEG Center, which is operated jointly by the VAMC, UNM and Los Alamos National Laboratory and is committed to evaluation of MEG as a tool for clinical and basic neuroscience. Other responsibilities will be in clinical neurology at UNM. Submit résumé to: **Prof. Y. Okada, Chair, Search Committee, MEG Center (101), VAMC, 2100 Ridgecrest Drive, S.E., Albuquerque, NM 87108.** *All non-VA applicants tentatively selected for this position are subject to a urinalysis to screen for illegal drug use prior to appointment. Applicants who refuse to be tested will be denied employment with VA. Closing date for applications is October 31, 1992. VAMC and UNM are Affirmative Action/Equal Opportunity Employers.*

### TENURE-TRACK FACULTY AND POSTDOCTORAL POSITIONS

Available immediately in the Institute of Molecular Biology, Academia Sinica. Tenure-track faculty position applicants should be cell biologists or mass spectrometer specialists. Postdoctoral applicants can be individuals in the areas of molecular parasitology, immunology, cell biology, plant molecular biology, virology, molecular genetics and structural biology. Salaries are internationally competitive. Detailed information on request. Send letter, curriculum vitae, and names of three references to: **Dr. C. C. Wang, Director, Institute of Molecular Biology, Academia Sinica, Nankang, Taipei 11529, Taiwan, R.O.C.**

**NEUROSCIENTISTS**—Full-time, tenure-track faculty positions open for neuroscientists (neurobiologists, neuroendocrinologists) with experience at the cellular/sub-cellular level (cell/molecular biology). Team-teaching responsibility in gross-, microscopic-, or neuro-anatomy. Rank and salary commensurate with credentials and experience. Please send current curriculum vitae, a statement of research interests and three references directly to: **Dr. James C. Story, Chairman, Department of Anatomy and Cell Biology, Meharry Medical College, 1005 D. B. Todd Boulevard, Nashville, TN 37208, by October 15, 1992.** *An Equal Opportunity/Affirmative Action Employer.*

### YOUR PERSONNEL PLACEMENT AD

in our line classified columns  
can be boxed for higher visibility.  
Call **SCIENCE** at 202-326-6555 for details.

# "MINORITIES IN SCIENCE... A SEARCH FOR SOLUTIONS"

## 13 November Issue Cover Story in **SCIENCE**

In a first-time cover story, the 13 November issue of Science explores the complex problems and obstacles facing minorities as they work and compete in the scientific community.

### HIGHLIGHTS INCLUDE:

AFFIRMATIVE ACTION PROGRAMS  
CAREER PROFILES  
BARRIERS FACING MINORITIES  
THE SEARCH FOR SOLUTIONS

### BENEFITS OF ADVERTISING IN THIS SPECIAL ISSUE:

- **MORE VISIBILITY.** Strategically located in the main body of the magazine, next to career-related editorial.
- **HARVEY RESEARCH STUDY** measures reader awareness and retention of your ad.

### BONUS DISTRIBUTION:

**REPRINTS DISTRIBUTED TO:** Minority Access to Research Centers • Minority Biomedical Research Support Program • National Hispanic Leadership Conference • National Network of Minority Women in Science • National Organization for the Advancement of Black Chemists and Chemical Engineers • National Puerto Rican Coalition • National Technical Association. *In addition to these organizations, many more will receive this section for use through mailings and at meetings.*

**Don't miss this first time advertising opportunity!**  
**Contact Janis Crowley at (212) 496-7704.**

**Space Reservation Deadline: Tuesday, October 27**

NRC – Canada's top R&D organization – helps its industry partners become stronger global competitors. Currently, NRC's Plant Biotechnology Institute is looking for those rare people who can help further our record of excellence.

## Research Officer (Saskatoon, Saskatchewan)

The Plant Biotechnology Institute of the National Research Council of Canada in Saskatoon has a continuing staff position for a Research Officer. The scientist will work in the legume biotechnology group on the development and use of transgenic plants. Major duties will be the planning, managing and reporting of independent research within the context of an integrated group project, but participation in overall project planning and promoting interaction between the project and external partners is expected. Duties also include supervision and evaluation of laboratory personnel.

Applicants must have a Ph.D. in plant biotechnology or related discipline, with emphasis on plant molecular genetics. A good understanding of molecular biology, biochemistry and genetics in relation to crop improvement and a strong record of publication are expected. Experience in production of transgenic plants and in molecular identification of plant genes or regulation of gene expression in plants is required. The position requires high levels of scientific creativity and judgment, the ability to function both individually and as a team member or leader and good skills in verbal and written communication in English.

**SALARY RANGE:** Commensurate with qualifications.

*Ceux qui désirent recevoir une copie de cette annonce en français peuvent communiquer avec l'agent de dotation à l'adresse ci-dessous.*

Apply in writing, before September 30, 1992, giving complete details of education and experience to: The Recruitment and Staffing Section, National Research Council of Canada, Ottawa, Ontario, K1A 0R6. In reply, please quote PB-91-16.SCI

**THE MAX-PLANCK-GESELLSCHAFT**  
invites applications for the position of a

## RESEARCH GROUP LEADER

from young scientists who have achieved a degree of international recognition in their field, preferably in

**Cell Biology, Developmental Biology or Neurobiology.**

The successful applicant will be expected to conduct a vigorous, original and independent research programme at the

## Friedrich-Miescher Laboratory in Tübingen.

The position is for 5 years, carries a salary of about 90,000 DM p.a. (C3 scale of the Bundes-Besoldungsgesetz) and is roughly equivalent to an Assistant Professorship (US) or University Lectureship (UK). There is no teaching commitment.

The group will have modern laboratory facilities, operating expenses, and funding for scientific and technical co-workers.

Applications, including a tabular curriculum vitae, list of publications, and a description of major scientific achievements and future research plans, should be submitted until

**October 31, 1992,**

to:

**Max-Planck-Gesellschaft zur  
Förderung der Wissenschaften e.V.  
-Generalverwaltung-  
Postfach 674  
D-8000 München 1.**

**PRESS RELEASE**

**COMMUNIQUEE DE PRESSE**

**PRESSE - MELDUNG**

## Good News for all European Science Recruiters...



The **SCIENCE** European Recruitment Advertising Office is now  
**OPEN!**

So the next time you want to advertise your vacancy in **SCIENCE** you can make the arrangements with a local contact. Pick up the phone now and speak to Annemarie Vis on +44 223 424695 for more information on deadlines, rates, and upcoming special issues.

Send in your orders to:

Annemarie Vis

**SCIENCE**

14. Sherbourne Court

Chesterton, Cambridge CB4 1SJ

Tel. +44 223 424695

FAX +44 223 424695 (24 hours)

**ULTIMISSIME NOTIZIE**

**PERSBERICHT**

**NOTICA DE ULTIMA HORA**



# IT TAKES INNOVATIVE THINKING TO BE AN INDUSTRY PIONEER.

For over 100 years, Abbott Laboratories has been at the forefront of new product development for the health care market. Now, you could join us and apply your innovative skills to the complex R&D challenges of the 90's.

*Experience The  
Abbott Edge.*

## Diagnostics Division SR. RESEARCH BIOCHEMIST

Researching new biochemical markers of disease, this position will involve investigation of biochemical mechanisms of physiological disorders and assay methods development of new markers, rare reagent development, and assay of clinical samples. We require a PhD including at least 5 years biochemical research experience relating to original medical diseases. Immunoassay, molecular biology, and protein biochemistry experience is required. **Reply to Ann Ribbens, Job# 53795.**

## MOLECULAR BIOLOGY Research Associate

A newly formed department of Molecular Diagnostics is seeking BS or MS level candidates to fill a position in the Protein Engineering Laboratory. The main goal of the research program is to develop methods to design and construct binding surfaces on proteins, and to apply engineered proteins in diagnostics. The successful candidate will have 1+ year(s) of laboratory experience and work background in several of these techniques: gene cloning, expression, site-directed mutagenesis, PCR, DNA sequencing, construction of gene libraries, gel electrophoresis, protein chromatography, HPLC. **Reply to Ann Ribbens, Job# WM.**

## Pharmaceutical Products Division MOLECULAR MODELER

As part of the Protein Modeling Group within our Department of Structural Biology, you will work closely with all therapeutic areas relating to drug discovery. We require an innovative-minded professional with a PhD and significant experience solving drug design problems. Familiarity with the full range of molecular modeling tools for the modeling and simulation of peptides and proteins is essential. Background correlating molecular structure and function is desired. **Reply to Patricia Handy, Job# 48644.**

Abbott provides an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located approximately 30 miles north of Chicago. For confidential consideration, please forward a resume (indicating appropriate reply name and Job#) with salary history to: **Corporate Staffing, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action Employer/Smoke-Free Environment.

## ABBOTT LABORATORIES



**Quality  
Health Care  
Worldwide  
1888-1992**



## Worcester Foundation for Experimental Biology

### FACULTY POSITIONS CELL BIOLOGY, NEUROBIOLOGY & REPRODUCTIVE BIOLOGY

Positions are available at the Worcester Foundation for Experimental Biology at both junior and senior faculty levels. We are seeking investigators whose expertise will fortify or complement our existing strengths. The areas in which we seek applicants include:

- Tumor Suppressor Genes/ Oncogenes
- Cell Cycle/Growth Control
- Cell Motility
- Gene Expression
- Development/ Differentiation
- Cell-Cell Interactions
- Receptors/Signal Transduction
- The Synapse/Ion Channels

We are particularly interested in individuals employing molecular and genetic approaches, although overall scientific excellence and promise will be the primary criteria.

Faculty appointments at the Worcester Foundation carry institute-backed salary guarantees and liberal start-up packages for personnel, equipment and operating costs. One or more of these appointments may include membership in the Foundation's NCI-designated Cancer Center.

Submit a detailed C.V., a one- to two-page summary of current and near-term research, and the names of at least three scientists who have a knowledgeable opinion of your research. We intend to fill the first of these positions in early 1993.

**Send your application to: Faculty Search Committee, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Ave., Shrewsbury, Massachusetts 01545.**

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

## National Institute of Mental Health

### The Human Brain Project: Integrating Enabling Technologies with Neuroscience Research

#### Satellite Symposium

to be Held in Association with the  
Annual Meeting of the Society for Neuroscience

Sunday, October 25, 1992  
Anaheim, California

The Human Brain Project is a federally-funded initiative which will facilitate and coordinate the development of tools aimed at integrating neuroscience information across disciplines and across geographic locations. The principal aim of this symposium is to inform the general neuroscience community about the Human Brain Project, and about the opportunities afforded neuroscience by technology.

#### Session Topics and Invited Speakers

##### Goals and Models of the Human Brain Project

M. Huerta (Moderator), D. Purpura, C. Rosse, B. Schatz

##### Contemporary Tools for Neuroscience

L. Sokoloff (Moderator), F. Bloom, A. Evans, P. Fox  
J. Nissanov, J. Schwaber, R. Thatcher, A. Toga, D. Woodward

##### Opportunities for the Human Brain Project

S. Koslow (Moderator), J. Bower, M. Gazzaniga  
P. Goldman-Rakic, T. Hokfelt

**For registration information:** call (703) 821-8955, Extension 8515, and leave your name and fax number. Registration is free, but limited.

**For further information regarding symposium content:** Michael F. Huerta, Ph.D., Division of Basic Brain and Behavioral Sciences, NIMH, Room 11-105, 5600 Fishers Ln., Rockville, MD 20857. Phone: (301) 443-3948. Fax: (301) 443-4822. Bitnet: HMI@NIHCU. Internet: HMI@CU.NIH.GOV. Also see Society for Neuroscience Program.

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS

Three postdoctoral positions are available immediately in the Department of Molecular Biology at the University of Wyoming. The areas of research include: (i) yeast genetics specifically involving isolation and characterization of mutations affecting the coordination of mitochondrial and cytoplasmic metabolic activities (contact **Dr. Peter Thorsness**), (ii) protein toxins involving identification of neutralizing antibody binding sites in presynaptic neurotoxins and generation of toxin-neutralizing antibodies raised against synthetic peptides (contact **Dr. Ivan Kaiser**), and (iii) membrane protein receptors involving identification, cloning and characterization of insect receptors that specifically bind toxins of *Bacillus thuringiensis* (contact **Dr. Lee Bulla**). Experience in yeast genetics, protein toxins and membrane receptors for the three areas, respectively, is desirable but not essential. However, experience in molecular biological techniques and good communication skills are essential for all three positions. Please send curriculum vitae, summary of previous research and the names and addresses of at least three references to: **Department of Molecular Biology, P.O. Box 3944, University Station, Laramie, WY 82071-3944.**

**POSTDOCTORAL POSITION.** United Biomedical, Inc., Pioneering in Peptide Technology, and Combating Immune Disorders and Infectious Diseases. Available immediately. Research related to contraceptive vaccines development. Ph.D. or equivalent and experience in reproduction/immunology/toxicology. Send curriculum vitae and references to: **United Biomedical, Inc., 25 Davids Drive, Hauppauge, NY 11788. Attention: Manager, Human Resources. Equal Opportunity Employer M/F/D/V.**

### POSTDOCTORAL POSITIONS DESERT ECOSYSTEMS RESEARCH

Available immediately on an NSF project examining the response of Chihuahuan Desert shrublands to environmental change. Positions include periods of field work in New Mexico. Position #1: Dartmouth College. Plant-soil interactions and nutrient cycling. Experience in soil chemistry and stable isotopes desired. Position #2: Duke University. Whole plant response to environmental stress and its effect on ecosystem dynamics. Strong quantitative skills and previous modeling experience desired. To apply send curriculum vitae, publications, and names of three references to: **Dr. Ross A. Virginia, Environmental Studies Program, Dartmouth College, Hanover, NH 03755-3560, Telephone: 603-646-1456; or Dr. James F. Reynolds, Department of Botany, Duke University, Durham, NC 27708-0340, Telephone: 919-684-6523.**

*An Equal Opportunity/Affirmative Action Employer.*

 **Check It Out!**  
**Science's**

**New Computer  
Marketplace Section**  
See the latest in computer  
technology including  
software programs designed  
specifically for scientific  
applications.

Located at the end of the  
Classified Section in this  
issue of **SCIENCE**.

## POSITIONS OPEN

### POSTDOCTORAL POSITION

Available immediately to candidates with experience in biochemistry of signal transduction to study pathways involved in neurite growth. Experience with calcium imaging or molecular biology preferred. Fellowship salary is \$27,000 to \$30,000 and includes health insurance. Send curriculum vitae, summary of research experience and names of references to: **Dr. Robert Messing, University of California at San Francisco, San Francisco General Hospital, Building 1, Room 1011, San Francisco, CA 94110. An Equal Opportunity Employer.**

### POSTDOCTORAL POSITIONS STRUCTURE AND FUNCTION OF DYSTROGLYCAN

Immediate openings for postdoctoral fellows to study dystroglycan and its interactions with the extracellular matrix. Current research projects involve the characterization of laminin binding properties of dystroglycan in skeletal and cardiac muscle; molecular assembly and biological function of dystroglycan and the dystrophin-glycoprotein complex; expression and site directed mutagenesis of dystroglycan; role of dystroglycan in autosomal muscular dystrophies; and the structure, function and CNS distribution of dystroglycan. Background in biochemistry, cell biology, molecular biology or genetics is desirable.

Send curriculum vitae with the names and addresses of three references to: **Dr. Kevin P. Campbell, 400 EMRB, Department of Physiology and Biophysics, University of Iowa College of Medicine, Iowa City, IA 52242. An Equal Opportunity Employer.**

**A POSTDOCTORAL POSITION** is available immediately for studies of membrane-associated transport systems in anaerobic ruminal bacteria. Studies will focus on mechanisms for regulating pentose transport. Relevant experiences in microbial physiology, biochemistry or a similar discipline are required. Applicants should submit a résumé with three references to: **Dr. Herbert Strobel, Department of Animal Sciences, 212 W. P. Garrigus Building, University of Kentucky, Lexington, KY 40546-0215; telephone (606) 257-7554. Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL ASSISTANT** for a southwest Ohio University. Research on eye diseases causing impaired vision and blindness, in particular on genes regulating inflammatory and reparatory processes in eye tissue. Research directed toward new therapeutic and preventive treatment in eye disease. Teaching and supervising medical students conducting ophthalmic research and new researchers experimenting with animals and human tissue. B.S. in medicine or biomedical science plus one year of experience which must have involved recombinant DNA, DNA sequence, and *in situ* hybridization techniques; tissue culture; computer analysis of genetic data; computer comparison of structure and function of proteins and nucleic acid with relevant gene banks; biostatistics; and experimental animal care. Forty hours per week, 8:00 a.m. to 5:00 p.m., salary \$8.95 per hour. *Must have proof of legal authority to work indefinitely in U.S.* Send résumé in duplicate (no calls) to: **J. Davies, JO#1230844, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

### CELLULAR/MOLECULAR PARASITOLOGY UNIVERSITY OF WISCONSIN-MADISON

NIH-funded **PRE- AND POSTDOCTORAL FELLOWSHIPS** available for advanced studies in parasitology. Training program includes a variety of course offerings in parasitology/tropical diseases, and exciting opportunities for research training in immunoparasitology, molecular parasitology, vector biology, parasite biochemistry, neurobiology and physiology. For further information contact: **Timothy P. Yoshino, Director, Cellular and Molecular Parasitology Training Program, Department of Pathobiological Sciences, University of Wisconsin-Madison, 2015 Linden Drive West, Madison, WI 53706.** Application deadline: November 15, 1992. *Equal Opportunity/Affirmative Action employer. Women and minorities are encouraged to apply. U.S. citizenship or permanent residency required.*

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available in the Head and Neck Tumor Biology Program. Areas of interest include: cytogenetic analysis, oncogene activation, tumor suppressor gene inactivation, and cellular signaling mechanisms in squamous cell carcinomas of the head and neck. Send curriculum vitae, names of three references and a statement of research interests to: **Dr. Kenneth D. Somers, Department of Microbiology/Immunology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501. AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.**

### POSTDOCTORAL FELLOW RESEARCH ASSOCIATE

Position available to investigate molecular and cellular mechanism of birth defects. Studies include analysis of cellular signal transduction mechanisms. Particular emphasis directed toward clarification of interactions among growth factors, protein kinases and transcription factors in regulating gene expression and cell differentiation during normal and abnormal mammalian embryonic development. Strong background in biochemistry, cell and/or developmental biology required; expertise in molecular methodologies recommended. Inquiries may be sent to: **Dr. Robert M. Greene, Molecular Mechanisms of Birth Defects Training Program, Jefferson Medical College, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107. We are committed to a smoke-free environment. Equal Opportunity Employer.**

**POSTDOCTORAL FELLOWSHIP IN EXOCYTOSIS** is available to investigate the biochemical mechanisms underlying exocytosis using bovine adrenal chromaffin cells and frog oocytes injected with chromaffin granules. The postdoctoral fellow should have molecular biology expertise to use a recently developed transient transfection system to study the role of specific proteins in exocytosis in primary chromaffin cells. Contact: **Dr. Ronald W. Holz, Department of Pharmacology, University of Michigan Medical School, Ann Arbor, MI 48109-0626. Telephone 313-764-2267, FAX: 313-763-4450. The University of Michigan is an Equal Opportunity Employer.**

**POSTDOCTORAL FELLOWSHIP.** Unique position for a recent Ph.D. with expertise in biochemistry/molecular biology of intracellular regulatory pathways involved in human immune response. Research involves discovery from marine organisms and studies on the mechanism of action of the next generation of anti-inflammatory compounds. Competitive stipends, excellent funding and the opportunity to make major contributions. Contact: **Dr. Robert Wallace, Director, Division of Biomedical Marine Research, Harbor Branch Oceanographic Institution, 5600 Old Dixie Highway, Ft. Pierce, FL 34946. Equal Employment Opportunity/Affirmative Action Program.**

### POSTDOCTORAL FELLOWSHIPS IN CARDIOVASCULAR AND PULMONARY BIOLOGY

Postdoctoral fellowships are available in UCSF's Cardiovascular Research Institute for basic science training in the Molecular, Cellular, and Structural Biology of the Cardiovascular and Pulmonary Systems. Program areas include Receptors and Signal Transduction, Growth Factors and Cytokines, Developmental Biology, Ion Channels, Lipoproteins, Transgenic Models, Protein-Protein Interactions, Crystallography, etc. Up to three years' funding is available on a competitive basis through an NIH Program of Excellence in Molecular Biology of Cardiovascular Disease and through the CVRI's NIH Training Grants. Candidates who have M.D. or Ph.D. degrees are eligible to apply.

UCSF faculty members include and are not limited to: Henry Bourne, Shaun Coughlin, John Clements, A. Roger Cooke, Robert Fletterick, Richard Havel, Samuel Hawgood, Marc Kirschner, Gail Martin, Jay Nadel, Patrick O'Farrell, Charles Ordahl, John Taylor, Lewis T. Williams and Keith Yamamoto.

Interested candidates may obtain additional information from: **Ms. Marie Demcho-Wagor, University of California, San Francisco, 505 Parnassus Avenue, Box 0130, San Francisco, CA 94143-0130.**

**CARDIOVASCULAR RESEARCH INSTITUTE  
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO.** *An Equal Opportunity/Affirmative Action Employer.*

## 5th International Workshop on Chromosomes in Solid Tumors

January 10-12, 1993  
Tucson, Arizona

Jeffrey M. Trent, Ph.D.  
Conference Chairman  
The University of Michigan

**Invited Speakers:** R. Berger, M.D.,  
E. Blackburn, Ph.D., L. Bolund, Ph.D.,  
G. Brodeur, M.D., F. Collins, M.D., Ph.D.,  
J. Gray, Ph.D., W. Hittelman, Ph.D.,  
N. Mandahl, Ph.D. P. Meltzer, M.D., Ph.D.,  
J. Neel, M.D., Ph.D., D. Pinkle, Ph.D.,  
J. Rowley, M.D., G. Stark, M.D.,  
T. Tlsty, Ph.D., B. Trask, Ph.D.,  
H. Willard, Ph.D.

This Workshop will be divided into a series of invited and competitively selected presentations as well as extended time for poster sessions. An optional mini-symposium on fluorescent in situ hybridization (FISH) will immediately follow the workshop.

Requests for abstract forms and correspondence regarding the workshop should be addressed to: Conference Coordinator, Arizona Cancer Center, 1515 North Campbell Avenue, Tucson, Arizona 85724 (602) 626-2276.

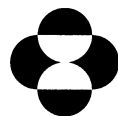
## BIOPHARMACEUTICS/DRUG DELIVERY

The Pharmaceutical Research Department of Merck Research Laboratories in West Point, PA has career opportunities for two BS/MS level scientists. The successful candidates will be part of a team conducting *in vivo* and *in vitro* studies to support development of new compounds from Basic Research.

**Biopharmaceutics and Drug Delivery** – Development and execution of analytical methods for determination of drug levels in biological fluids and conduct of physical/chemical testing of factors affecting drug absorption will be an integral part of the position. Hands-on experience in the design and conduct of *in vivo* studies to obtain specimens for analysis, HPLC and radiotracer techniques and strong training in the physical sciences is required. This interdisciplinary position requires a BS/MS degree in chemistry, biochemistry, pharmacetics, biology or the equivalent as well as 2-5 years of relevant experience. Excellent written and oral communications skills are essential.

**Biopharmaceutics** – Current experience in conducting preclinical *in vivo* studies, including acute surgical preparation, collection of tissues for analysis and use of radioisotopes, is required. The successful candidate will have formal training in physiology/biochemistry, with emphasis on gastrointestinal physiology and absorption processes. Experience in performing HPLC analysis is preferred. A BS or MS degree in biology, physiology, biopharmaceutics, biochemistry or the equivalent and 2-5 years of relevant experience are required. Excellent written and oral communication skills are essential.

Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia. Please send curriculum vitae and cover letter to: Personnel Manager, AD #C-21, MRL Human Resources, Merck Research Laboratories, P.O. Box 4, West Point, PA 19486. EEO/AA/VH/Employer.



**MERCK**  
Research Laboratories



**Wellcome**

## GREAT PEOPLE DOING GREAT THINGS.

Burroughs Wellcome Co. is known for creativity and innovation. Great things happen when a group of dedicated individuals work toward a goal. And with you on our team, greater things are yet to come. Discover the meaning of greatness at Burroughs Wellcome Co.

### Research Scientist II/ Senior Research Associate

This individual will aid in quantitative and qualitative mass spectrometric analysis of project compounds and aid in mass spectrometric method development in drug development research. Individual will perform sample analysis, develop methods in research and mass spectrometric-related projects, and be responsible for routine instrument maintenance. The position will be filled at the Research Scientist II or Senior Research Associate level.

**Research Scientist II:** Must have a four-year college curriculum with a major concentration in Chemistry plus four years of experience in mass spectrometry or relevant experience **OR** a Master's degree in Chemistry/Biological Chemistry plus two years of experience in mass spectrometry or relevant experience **OR** Ph.D. in Chemistry/Biochemistry with experience in mass spectrometry.

**Senior Research Associate:** Must have a four-year college curriculum with a major concentration in Chemistry plus six years of experience in mass spectrometry or relevant experience **OR** a Master's degree in Chemistry/Biological Chemistry plus four years of experience in mass spectrometry or relevant experience **OR** a Ph.D. in Chemistry/Biochemistry plus one year of experience in mass spectrometry or relevant experience.

Other factors to be considered include knowledge of drug metabolism, mass spectrometry, method development and organic chemistry. Candidates selected for interview will take an on-site writing assessment.

Burroughs Wellcome Co. offer a stimulating and challenging work environment, with one of the best compensation and benefits packages in the industry, including comprehensive health and dental plans, life and disability coverage, tuition reimbursement, relocation benefits, pension and investment savings plan, fitness facilities, and others. You will also enjoy the outstanding variety of cultural, educational and recreational advantages that come with living and working in the Research Triangle Park area, one of the most desirable and fastest-growing regions of the country. Please send your resume, indicating position #64104-20 in your cover letter, by **September 30, 1992**, to: **Burroughs Wellcome Co., Recruiting and Staffing, 3030 Cornwallis Road, Research Triangle Park, NC 27709.**

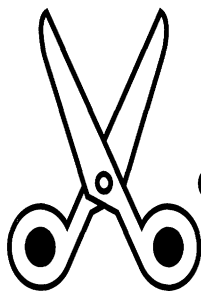
For information on other job opportunities with Burroughs Wellcome Co., call our Job Information Line at (919) 248-8347.



**Wellcome**

**BURROUGHS WELLCOME CO.**

An Equal Opportunity Employer



# Science

## CLIP AND FAX CLASSIFIED AD ORDER FORM

To: Science Classified Advertising

From: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

Please publish attached ad in

☐ Next available issue    ☐ The issue(s) of \_\_\_\_\_  
(give date or dates)

Send invoice to:

Name \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Purchase Order Number \_\_\_\_\_

Simply send completed form and ad text to be published  
(double-spaced without abbreviations, please) to:

# FAX NUMBER 202-682-0816

**Chief, Geosciences Laboratory  
Office of Ocean and Earth Sciences  
National Ocean Service  
Rockville, Maryland**

The National Oceanic and Atmospheric Administration seeks to fill this position in the Senior Executive Service/ES-1301 (Pay range: \$90,000 to \$112,100 based on qualifications). This position requires a forward-looking manager experienced in ocean and earth sciences to direct interdisciplinary applied research programs in solid earth and crustal dynamics, earth orientation, marine and terrestrial gravity, satellite remote sensing, and advanced geodetic measurement techniques. Applicants are expected to have extensive experience with the national and international ocean and earth science research communities. Candidates must have demonstrated thorough knowledge of the interdisciplinary aspects of contemporary earth science and be able to provide leadership in the application of geodetic, geophysical, and oceanographic methods to problems of climate and global change.

The vacancy announcement for this position (NOAA 92-11DS) opens on August 19, 1992 and closes on September 23, 1992. For further information and to receive the position description, supplemental qualifications questionnaire, and other instructions, contact Debbie Scholl or Tito Santiago at the NOAA Personnel Office, (301) 713-0530—National Oceanic and Atmospheric Administration, Personnel Division—OA2/SSMC1/Room 3102, 1335 East West Highway, Silver Spring, Maryland 20910. NOAA is an equal opportunity employer.

## UNIQUE CAREER CHANGE OPPORTUNITY

Ph.D.s & Doctoral Professionals

**T**he College of Osteopathic Medicine and Surgery in Des Moines, Iowa, offers an accelerated three-year program leading to the Doctor of Osteopathy (D.O.) degree. Doctors of Osteopathy are fully licensed physicians who practice all aspects of medicine in every state.

Your doctoral degree in biological sciences or medical sciences qualifies you to be considered for admission to this accelerated program.

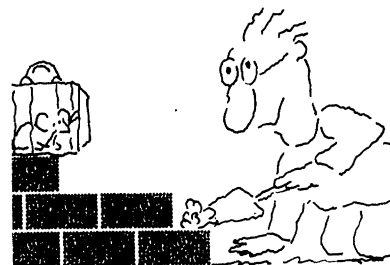
The Graduate Professional Education Program (GPEP) features:

- Three years of didactic and clinical training.
- Significant reduction in total tuition and living costs compared to standard four-year medical programs.
- Financial assistance to qualified students.
- Self-paced learning through independent study.

For more information and an application contact:

**Admissions Office, GPEP Program  
University of Osteopathic Medicine  
and Health Sciences  
3200 Grand Avenue  
Des Moines, IA 50312-4198  
(515) 271-1450 or 271-1614**

## 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:

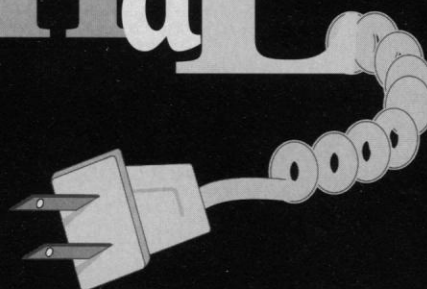
**SCIENCE Magazine  
New Lab Service Department  
1333 H Street, N.W., Rm 830  
Washington, DC 20005**

The Global Weekly of Research  
**SCIENCE**

Journals come in various shapes, styles and sizes.

# Journal

Ours you plug in.



## THE ONLINE JOURNAL OF CURRENT CLINICAL TRIALS

Editorial excellence, technological know-how

Launched July 1, 1992, *Current Clinical Trials* publishes original peer-reviewed research reports, reviews, metaanalyses, and editorials on trials of therapies, procedures, and other interventions relevant to care in all fields: medicine and its subspecialties, surgery and its subspecialties, dental medicine, dermatology, gynecology, neurology, obstetrics, pediatrics, psychiatry, and all other fields relevant to these main clinical areas.

1992 subscription price is \$95 plus monthly telecommunication charges

For information on manuscript submission, contact the  
Managing Editor at (202) 326-6735  
fax (202) 842-2868

For subscription information, call (202) 326-6446 or write to  
1333 H Street, NW, Washington, DC 20005 USA

A joint venture of the American Association for the  
Advancement of Science (AAAS) and  
OCLC Online Computer Library Center, Inc.

- Edward J. Huth, MD, Editor
- Thomas C. Chalmers, MD, Deputy Editor

#### Associate Editors

- |                              |  |
|------------------------------|--|
| ■ Jesse A. Berlin, ScD       | ■ Donald Eliot Goodkin, MD                     |
| ■ Vincent T. DeVita, Jr., MD | ■ Alan S. Hollister, MD, PhD                   |
| ■ Kay Dickersin, PhD         | ■ Robert H. Rubin, MD                          |
| ■ Murray W. Enkin, MD        | ■ Curtis L. Meinert, PhD,<br>Consulting Editor |



# We're working to prepare her for our future.



Children are our greatest hope. Their education is our greatest concern.

At the American Association for the Advancement of Science we're investing in our future with Project 2061.

This national program, sponsored by the AAAS, is designed as a blueprint for science education. Project 2061 is based on the premise

that students learn best when connections are made between fundamental scientific theories and real-life applications. From rural Georgia to San Francisco; from Philadelphia to suburban Wisconsin, the AAAS is working with teachers to design the science curriculum of the future.

Although just a beginning, AAAS and its members are

not only dedicated to the advancement of science today, but through Project 2061 and other educational programs, to the continual advancement of science in years to come.



**AMERICAN ASSOCIATION FOR  
THE ADVANCEMENT OF SCIENCE**

## HUBBLE POSTDOCTORAL FELLOWSHIPS

The Space Telescope Science Institute announces the continuation of the Hubble Fellowship Program in cooperation with astronomical institutions throughout the United States. The main objective of the Program is to provide recent postdoctoral scientists of unusual promise and ability opportunities for research on problems, largely of their own choosing, that are related to the Hubble Space Telescope science and compatible with the interests of the host institutions. The program is open to scientists of any nationality who have earned their doctorates after January 1, 1990, in astronomy, physics, or related disciplines.

The duration of the fellowship is for a total of three years, which includes an initial appointment of two years and an extension to a third year, contingent on a positive mid-term review. Contingent on funding from NASA, up to 15 new Hubble Fellows will be supported this year by grants to United States institutions.

The Announcement of Opportunity, including the application instruction, may be obtained from the address listed below. The application deadline is November 20, 1992. The new Hubble Fellow appointments are expected to begin on September 1, 1993. Minorities and women are strongly encouraged to apply. EEO/AA/M/F/D/V.

**Hubble Postdoctoral Fellowships**  
**SPACE TELESCOPE SCIENCE INSTITUTE**  
3700 San Martin Drive • Baltimore, MD 21218  
SPAN:6559::HFELLOWS  
BITNET: HFELLOWS@STSCI.BITNET  
INTERNET: HFELLOWS@STSCI.EDU  
Attention: Hubble Fellowship Program Office



## STUDY DIRECTORS

The Institute of Medicine (IOM) is seeking three study directors for new projects on behavioral, substance abuse, and mental health research related to (1) AIDS and HIV infection, (2) psychosocial interventions, and (3) nicotine dependence. Study director for AIDS and HIV infection research will conduct a 20-month study reviewing research portfolios ranging from basic molecular biology to health services research. Study director for psychosocial interventions research will conduct an 18-month study assessing clinical studies of psychosocial interventions and developing research strategy for integration of knowledge from several fields ranging from molecular neuroscience to social psychology. Study director for prevention of nicotine dependence in children and adolescents will conduct an 18-month study reviewing the current state of knowledge about the biology of dependence and the social and behavioral factors that contribute to the initiation of smoking among children and adolescents. Duties for all positions include technical, financial and administrative management; supervision of staff; development of study plan; appointment of study committee; research and analysis; and report preparation.

Positions require MD, PhD, MSW, or equivalent in a related field (biological, behavioral, or social science research for AIDS and HIV infection position; clinical medicine, physiology, health policy, or social psychology for psychosocial intervention position; psychology, neurobiology, social science for nicotine dependence position); at least 4 years experience in research, service delivery, or (preferably) public policy analysis. Demonstrated written and oral communication skills; ability to manage committees and budgets; skills in staff supervision and policy analysis; ability to meet deadlines; and careful fiscal management. Knowledge of the organization and research agenda of institutes and offices of the former ADAMHA is desirable for AIDS study. Expertise in relevant clinical and behavioral research desired for both AIDS and psychosocial interventions studies. Familiarity with tobacco policy research desirable for nicotine study.

The IOM offers competitive salaries and exceptional benefits package. Please send resume in confidence to: **IOM, FO-3020-RCD, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.** EOE.

**NATIONAL RESEARCH COUNCIL**



## SCIENTIST/GROUP LEADER

Upstate Biotechnology, Inc., a rapidly growing supplier of quality products for biological research, currently has an opening for a Scientist to serve as Group Leader in Cell Biology. The Group Leader will supervise 2-4 technicians in the production and testing of growth factors, signal transduction reagents and antibodies. There will also be an opportunity to be involved in new product development.

The position requires a Ph.D. in Cell Biology and experience or familiarity with cell biology techniques including cell culture, immunocytochemistry, antibody production in cell culture and protein purification.

UBI is located in beautiful Lake Placid, New York, a year-round center for outdoor recreation in the heart of the Adirondack Mountains. UBI's affiliation with the W. Alton Jones Cell Science Center, also located in Lake Placid, provides a stimulating scientific environment. UBI offers a competitive salary, moving expenses and excellent benefits. A position with UBI will provide the successful applicant with a diversity of experiences including an excellent introduction to industry in a relaxed, yet challenging, environment.

Send curriculum vitae and list of references to:



UPSTATE BIOTECHNOLOGY, INC.  
PRODUCTS FOR BIOLOGICAL RESEARCH

**Dr. Robert E. Wagner, Jr.**  
**Upstate Biotechnology, Inc.**  
**89 Saranac Avenue**  
**Lake Placid, New York 12946.**

*Equal Opportunity Employer*

## SHAPE THE FUTURE, SHARE THE REWARDS.

When you bring your talents to Hawaii Biotech, you'll find an exciting young company which values and rewards your independence, creativity and initiative. In our labs overlooking Pearl Harbor, you'll work with a bright youthful staff and grow with our company while enjoying the beauty and aloha of Hawaii.

### DIRECTOR, IMMUNOLOGY

Your scientific expertise and leadership will help shape our business in this highly responsible position. Taking a hands-on approach, you will lead research focused on the development of immunodirected therapies using marine toxins including prodrugs, bispecific antibodies and other highly innovative uses for mAbs. Additionally, you will develop new product proposals, contract immunoassay research and prepare grant proposals. Industry management experience is highly desirable. Direct your correspondence to: Tom Humphreys, Ph.D. Vice President.

### IMMUNOLOGIST

We're seeking a recent Ph.D. for immunoassay development and enzyme/antibody conjugation (Urease). Direct your correspondence to: Diane Kurtz, Manager-Administration.

Our closely held company offers competitive salaries, excellent benefits and exceptional opportunities for ownership and growth. We encourage you to send your curriculum vitae with three references to:

**Hawaii Biotechnology Group, Inc., P.O. Box 1057,  
Honolulu, Hawaii 96701.**



**Hawaii Biotechnology Group, Inc.**

## POSITIONS OPEN

**POSTDOCTORAL RESEARCH ASSOCIATE POSITION FOR GENETIC RESEARCH IN DIABETES** is available for M.D. and/or Ph.D. Candidates interested in joining a multidisciplinary group applying molecular genetic techniques to evaluate diabetes susceptibility in families should submit curriculum vitae, interests, and names of three references to: **Drs. M. Alan Permutt or Helen Donis-Keller, Box 8127, Department of Medicine/Genetics, Washington University Medical School, 660 South Euclid, St. Louis, MO 63110.** *An Equal Opportunity/Affirmative Action Employer.*

### SENIOR RESEARCH ASSOCIATE SECTION LEADER, PERMANENT POSITION ACADEMIC APPOINTMENT POSSIBLE

Experienced cell biologist/biochemist at The Chicago Medical School, Heather M. Bligh Cancer Research Laboratories. Benchwork-oriented individual with meticulous working habits for in-depth investigations of role of human carcinoma cell membrane glycoconjugates in primary tumor establishment. Technical help available. Especially outstanding salary and benefits in view of the importance of the academic task, not grant-dependent. Send curriculum vitae, details of benchwork expertise, and bibliography to: **Box 538, Lake Bluff, IL 60044.** *Equal Opportunity Employer, M/F.*

### LEAD SCIENTIST—FOREST GENETICS

Weyerhaeuser, a Fortune 100 forest products company with a history of excellence in forestry research and tree improvement, is seeking an experienced scientist to lead and carry out a program of leading-edge research in forest genetics and tree improvement, as a key member of a dynamic multidisciplinary team centered in western Washington. In addition to his/her applied and strategic research role, this scientist will be expected to play an active role in the scientific community through publications, associations, cooperative research, grants, and sponsorship of students and visiting scientists, particularly in areas relating to genetic diversity, long-term adaptation and sustainable forestry. The successful candidate will also provide periodic quantitative genetics analysis support to the company's ongoing tree improvement programs. A Ph.D. in forest genetics, plant or animal breeding or population genetics is required, with a minimum of five years of broad-based postgraduate experience, and demonstrated competency in genetics research and quantitative genetics analysis. Start date for this position will be January 4, 1993. Please send postmarked by October 1: cover letter, résumé, list of professional references, to: **Technical Staffing—Geneticist, WTC-1G42, Tacoma, WA 98477.**

### CONSERVATION SCIENTIST

World Wildlife Fund (WWF-US) is the largest private organization working worldwide to protect endangered wildlife and wildlands, and the U.S. affiliate of the international WWF family, with national organizations or representatives in nearly 40 countries. WWF seeks a Conservation Scientist in the field of Vertebrate Ecology for its expanding new program in Conservation Science. Conservation Scientist will initiate and conduct original field research in approved areas of conservation science, including the presentation of research results and scientific information for publication in scientific journals and books. Up to half-time may be dedicated to field research and scientific writing. Will assist the Conservation Science Program to establish leadership in defining and articulating priorities for conservation science, and provide technical assistance to WWF regional programs.

Qualified applicants must have a graduate degree at the doctorate level in conservation science, ecology, or biology. Postdoctoral research training is preferable. Must have at least five (5) years of field research experience, preferably in tropical regions, and demonstrated capability to carry out field research projects, including the analysis of data and publication of results in scientific journals. Strong command of at least one foreign language, preferably French or Spanish, and administrative experience in project management, budgeting and oversight is desirable.

Send cover letter, a brief statement of research goals, names of three references, and résumé to: **WWF, Attn: Human Resources, Department 212-F, 1250 24th Street, NW, Washington, DC 20037.** *Affirmative Action/Equal Opportunity Employer. FAX (202) 293-9211. Targeted starting date: January 1993.*

## POSITIONS OPEN

### PROTEIN AND NUCLEIC ACID BIOCHEMIST Howard Hughes Medical Institute (HHMI) at the Massachusetts General Hospital (MGH)

A unique and exciting opportunity is open for an appropriately qualified Biochemist to operate and supervise a joint HHMI/MGH, Microchemical Facility equipped with state-of-the-art instrumentation. Responsibilities include nucleic acid synthesis, protein microsequencing, peptide synthesis and characterization. Some time may be available for development of new methodologies.

An M.S. with experience or Ph.D. degree in biochemistry required. Top salary and excellent benefits. Please forward résumé to: **Richard Petruzzelli, HHMI/Massachusetts General Hospital, 50 Blossom Street, Wellman 513, Boston, MA 02114.** No phone calls please. *We are an Equal Opportunity Employer.*

**ACADEMIC CARDIOLOGISTS**—Tulane University. A developing Cardiology Section seeks academically committed individuals for tenure-track positions. A variety of opportunities are available in invasive and noninvasive cardiology, electrophysiology and basic research. Academic rank will be commensurate with experience and abilities. Applications will be accepted until a qualified candidate is selected. Interested individuals should send curriculum vitae and names of three references to: **Andrew J. Buda, M.D., Chief, Cardiology Section, SL-48, Tulane University School of Medicine, 1430 Tulane Avenue, New Orleans, LA 70112.** *Affirmative Action/Equal Opportunity Employer.*

## ANNOUNCEMENTS

### BURROUGHS WELLCOME FUND AWARDS

The Burroughs Wellcome Fund offers 5-year, \$350,000 scholar awards for researchers in 1993 through the following programs (deadlines): Experimental Therapeutics (November 2, 1992); Toxicology (December 1, 1992); Molecular Parasitology (January 15, 1993); Immunopharmacology of Allergic Diseases (April 1, 1993); and Drug Design and Discovery (April 1, 1993). *Applicants must be U.S. citizens or permanent residents.*

For application guidelines, contact: **The Burroughs Wellcome Fund, 3030 Cornwallis Road, Research Triangle Park, North Carolina 27709.** Telephone: (919) 248-4136 FAX: (919) 248-0488.

The Burroughs Wellcome Fund is a non-profit foundation supported by Burroughs Wellcome Co., a research-based pharmaceutical company.

## MEETINGS

**THIRD CONFERENCE ON RESEARCH POLICIES AND QUALITY ASSURANCE.** Government Regulations. May 2-5, 1993, Baltimore, Maryland. Request brochure from:

**Dr. ADIL E. SHAMOO**  
Department of Biological Chemistry  
University of Maryland at Baltimore  
660 WEST REDWOOD STREET  
BALTIMORE, MD 21201  
OR FAX (301) 328-8297

### FREE PRODUCT INFORMATION SERVICE

Send a letter stating the specifics about your new laboratory and *Science* will put you in touch with the vendors whose products you will need.

Write to:

**Science New Lab Service Department**  
1333 H Street, NW  
Washington, DC 20005

## COMPUTERMARKETPLACE

### STATISTICAL SOFTWARE

Accurate, easy to learn. For MS-DOS. Includes t-tests, ANOVA, chi-square tests, DOE, survival analysis, sample size and power analysis, curve fitting, graphics, more. Spreadsheet-style interface. Transfer graphics to other programs. Thousands of users. Base system: \$125. Complete: \$395. Ask for Dr. Hintze (PhD statistician) at (801) 546-0445. FAX: (801) 546-3907. NCSS, 329 North 1000 East, Kaysville, UT 84037.

Circle No. 19 on Readers' Service Card

*SCIENCE* welcomes placement of line classified ads by FAX. Please include name and telephone number for our confirmation call when transmitting ad to:

FAX NUMBER: 202-682-0816

## MARKETPLACE

**Quality DNA**  
Services from \$3/base+set-up  
**Call Midland**  
**1-800-247-8766**

Circle No. 7 on Readers' Service Card

**HybriLogic Corp**  
**Custom Hybridoma**  
**Cell Line Development**  
800 / 643-6780  
FAX: 503 / 255-4891  
**"RESULTS OR IT'S FREE" POLICY**  
Call for details

Circle No. 3 on Readers' Service Card

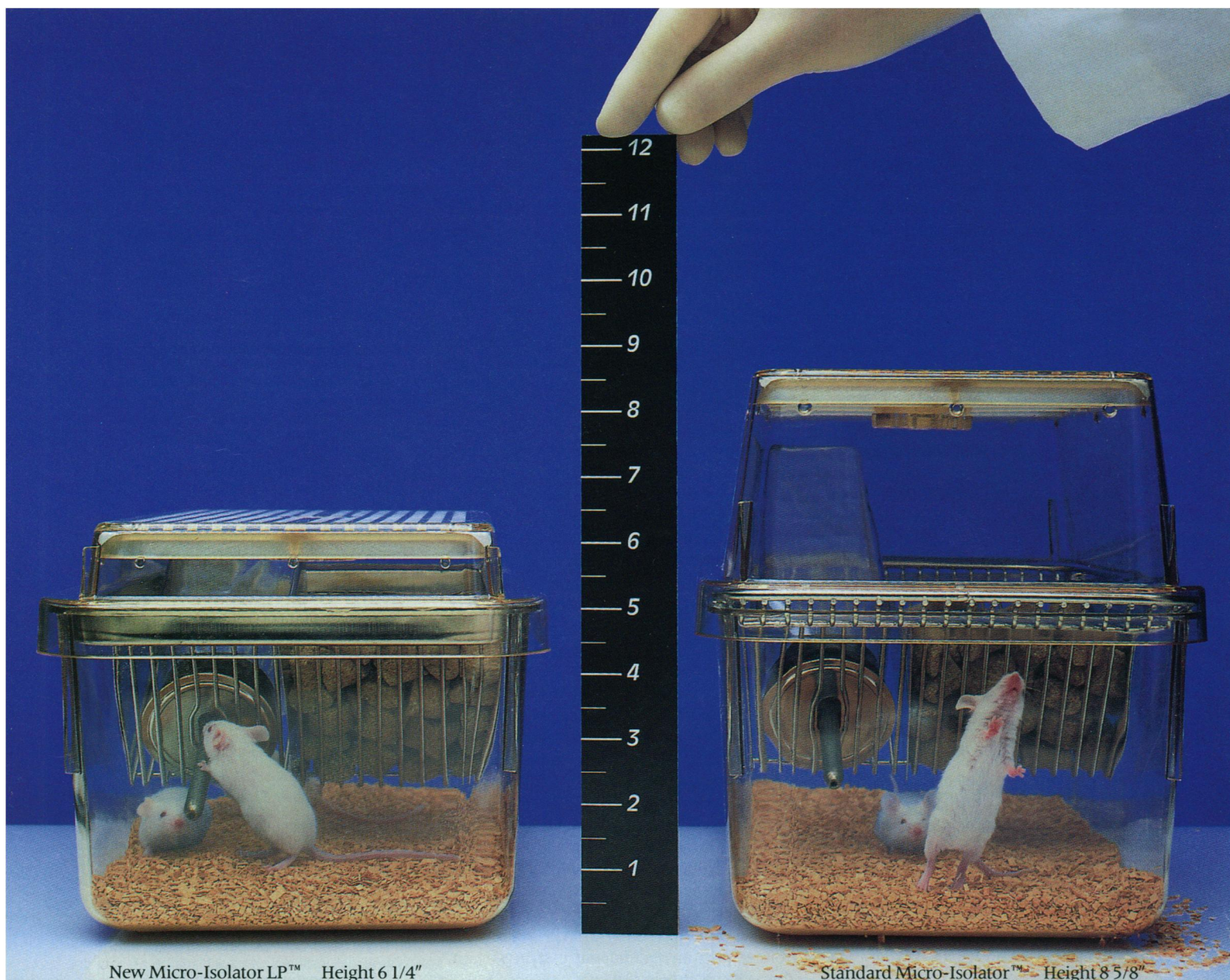
Custom made  
**PEPTIDES**  
Around the globe  
**\$30.00** /residue  
Shipped in 10 days  
Your Source of Peptides  
**BIO-SYNTHESIS**  
1-800-227-0627 Fax: 214-420-0442

Circle No. 22 on Readers' Service Card

**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. 5 on Readers' Service Card





New Micro-Isolator LP™ Height 6 1/4"

Standard Micro-Isolator™ Height 8 5/8"

## Gain 50% or more space and keep a cleaner environment with the new Low Profile Micro-Isolator™ and new Formed Lid.

**NEW LOW PROFILE MICRO-ISOLATOR TOP:**  
The lower height of our new Micro-Isolator filter top maintains the same internal environmental conditions as the standard top.



**NEW FORMED LID:**  
The key to the tighter seal of the new Micro-Isolator LP is the stainless steel, formed lid with a smooth flat rim.

**Standard Cage:**  
The standard Micro-Isolator cage remains the same.

### Introducing the Micro-Isolator LP™

Many of our customers asked for a Micro-Isolator™ system that was more space efficient and effectively contained bedding material. Lab Products, Inc. came back with the Micro-Isolator LP™, a new standard in housing for mice, designed to maximize your rack capacity and keep your shelves clean.

For example, 126 new Micro-Isolator LP cages can now be stacked onto a shelf rack where, typically, only 84 cages would fit. This means fewer racks, and fewer racks mean more space available for other functions—a valuable savings on lab real estate. (Where you formerly used 3 rooms, you can now use 2.)

You can realize cost efficiencies, as well, on cleaning and sterilization.

Your Lab Products salesperson will be happy to detail how you can benefit from these new improvements.

**lab products inc**

a BioMedic company

255 West Spring Valley Avenue, P.O. Box 808, Maywood, New Jersey 07607  
800/526-0469 201/843-4600 FAX: 201/843-6040

Micro-Isolator and Micro-Isolator LP are trademarks of Lab Products, Inc. U.S. Patents applied for. © 1992 by BioMedic Corporation



# Extremely Sensitive Immunoassays for the Quantitation of Cytokines.

## QUANTIKINE<sup>TM</sup>



### Quantikine Kit

*The Tool To Measure Cytokines:*

IL-1 $\alpha$	TNF $\alpha$
IL-1 $\beta$	TNF $\beta$
IL-2	G-CSF
IL-3	GM-CSF
IL-4	New: LIF
IL-6	IL-1ra
IL-7	Erythropoietin*
IL-8	Transferrin Receptor

The R&D Systems' Quantikine series of immunoassays is a complete set of reagents designed to accurately measure the concentration of cytokines in fluids. The high sensitivity and wide standard curve range offered by each Quantikine Kit enables precise measurement of cytokines at both high and low concentrations in less than 4½ hours.

**FOR RESEARCH USE ONLY. NOT FOR USE IN  
DIAGNOSTIC PROCEDURES.**

\*CLINIGEN ERYTHROPOIETIN KIT - FOR IN VITRO DIAGNOSTIC USE.

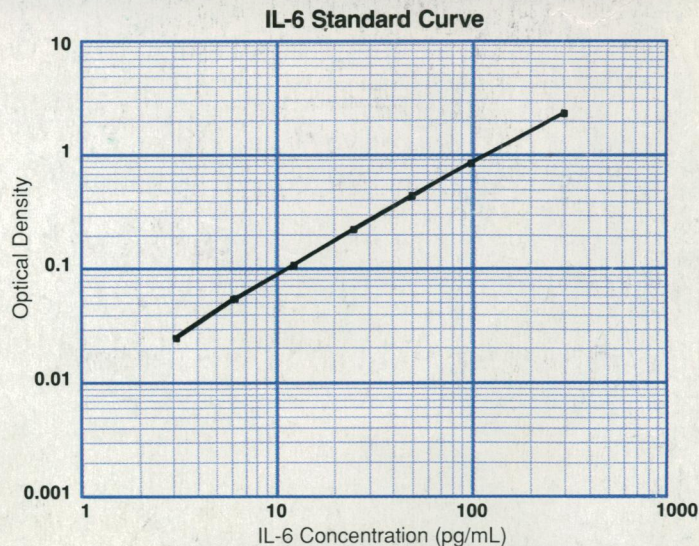
In Europe contact:

**British Biotechnology, Ltd.**  
4-10 The Quadrant, Barton Lane  
Abingdon, Oxon OX14 3YS  
Telephone: +44 (0865) 781045  
Fax: +44 (0235) 533420

In Japan contact:

**Funakoshi Co., Ltd.**  
9-7, Hongo 2-Chome  
Bunkyo-ku, Tokyo 113  
Telephone: +81 (03) 56841622  
Fax: +81 (03) 56841633

**R&D Systems**  
614 McKinley Place N.E.  
Minneapolis, MN 55413  
In Minnesota: (612) 379-2956  
Fax: (612) 379-6580



**1-800-343-7475**

**R&D  
SYSTEMS**

Circle No. 17 on Readers' Service Card