

## Products & Materials

### Ultraviolet Cross-Linker

The UVC-508 UV Cross-linker can cross-link DNA to nitrocellulose, nylon, or nylon-reinforced nitrocellulose membranes. A

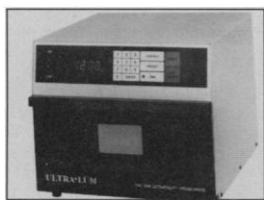


photo-feedback sensor system with micro-processor control provides the user control over the ultraviolet energy level, exposure time, and intensity. The control system automatically adjusts to variations in ultraviolet intensity as the ultraviolet source ages. Ultra-Lum. Circle 358.

### NMR Spectrometer

The 400-MHz Gemini nuclear magnetic resonance spectrometer provides greater sensitivity than lower frequency systems. This increased sensitivity allows data to be acquired faster or at lower concentrations, while increased dispersion allows the study of larger molecules. Users can customize the system with flexible macros, menus, and pulse sequence programming. The Gemini 400 can be fully automated. Varian Analytical Instruments. Circle 359.

### Miniblotter

The Miniblotter 12 provides maximum convenience and value by eliminating the need to cut membranes and reducing the amount of reagents necessary for screening antibodies and antigens. The 12 channels are engineered to match the 12 lanes of MiniGel and MiniGel Plus precast gels from Integrated Separation Systems. Cutting membranes to adapt them to a blotting manifold is no longer necessary. Simultaneous washing of all channels is rapid. Integrated Separation Systems. Circle 360.

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.

### Surface Protector

Benchkote Plus provides disposable protection for lab benches exposed to strong acids and bases, hot organic solvents, biohazards, poisons, and radiochemicals. Spills are kept from spreading by highly adsorbent paper that is coated on one side with an impermeable layer of polyethylene. It features high wet strength and short-term chemical resistance to hot water, hot organic solvents, and concentrated acids and bases. If expensive or valuable samples are spilled, they can be recovered by washing the sheet of BenchKote Plus with a suitable solvent. For extra safety around pathogenic materials, BenchKote Plus can be saturated with disinfectant. Whatman. Circle 361.

### Protein Sequencer

The ProSequencer protein sequencing system can sequence both covalently attached and adsorbed samples, completely in the liquid phase. The ProSequencer makes use of a common set of reagents and requires no time-consuming hardware, software, or chemical changes. A single point of control for all modules in the system makes sequencing easier. Waters Chromatography Division of Millipore. Circle 362.

### Low Profile Refrigerated Circulator

This fully programmable unit combines a compact refrigeration system in a low profile unit design for cooling a wide variety of instruments, such as spectrophotometers, viscometers, and electrophoresis apparatus. The unit provides temperature-controlled fluid over an operating range of  $-20^{\circ}\text{C}$  to  $200^{\circ}\text{C}$ . A built-in stainless steel reservoir can be used for immersion of flasks or tubes; the low profile provides ease of access to the internal 6-liter reservoir. A pressure/suction pump for use in closed loop systems or for recirculation from an open tank is standard. PolyScience. Circle 363.

### Particle Delivery System

The helium-driven Biolistic particle delivery system introduces biological particles into live cells and tissues via high-velocity microprojectiles. A "gene gun" propels millions of microscopic gold pellets coated with DNA directly onto the target cell or tissue. The technique has been applied successfully to a wide range of intact targets,



including plants, yeast, algae, organelles, cultured mammalian cells, and live animal tissues in situ. The method is well established for DNA applications, and it may also be used for the introduction of proteins and other molecules. The helium-driven acceleration process does not require a power load or vacuum. Seven microcarriers (two sizes of gold and five of tungsten) and nine rupture disks are available. Bio-Rad Laboratories. Circle 364.

### Literature

*Anti-Virus Warfare* is a new brochure from a computer security software manufacturer explaining its product range. Sophos. Circle 365.

*ECL Highlights* is a 12-page technical newsletter explaining new products and methods using enhanced chemiluminescence (ECL) technology. Amersham International. Circle 366.

*Extech Instruments 1992 Catalog* includes detailed specifications and descriptions of portable and benchtop instruments in the test and measurement, plant maintenance, water quality, and engineering fields. Extech Instruments. Circle 367.

*Ultra Pure Chemicals for Biotechnology* features hundreds of chemicals and reagents, including premixed buffers, saturated phenols and acrylamide stock solutions, agaroses, dyes and stains, and chemical salts. Amresco. Circle 368.

*CRAY Y-MP C90 Supercomputer System* is a brochure on a powerful parallel vector computer system with 16 central processing units. CRAY Research. Circle 369.

*DNA Synthesis Products* is a catalog describing a complete line of DNA synthesis columns and ancillary reagents. Prime Synthesis Inc. Circle 370.

*Haemopoietic Cell Lineage Wall Chart* is a guide to antigen expression and molecular weights of the CD molecules. Serotec. Circle 371.

# 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  
Daniel Moran, Traffic Manager  
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

### ASSISTANT PROFESSOR—ANATOMY

The Department of Surgery/Section of Anatomy at Yale University School of Medicine invites applications for two tenure-track positions at the level of assistant professor. Responsibilities include development of a strong independent research program and participation in the teaching of gross anatomy to medical students. Applicants should submit curriculum vitae, with a summary of present and future research interests by 15 April 1992 directly to: **Dr. William B. Stewart, Department of Surgery, Section of Anatomy, Yale University School of Medicine, P.O. Box 3333, New Haven, CT 06510.** *Yale University is an Equal Opportunity/Affirmative Action Employer and all women and members of minority groups are encouraged to apply.*

### ANIMAL OR WILDLIFE ECOLOGIST POSITION AT YALE UNIVERSITY

The Yale University School of Forestry and Environmental Studies is seeking to appoint an **ASSISTANT PROFESSOR** of animal or wildlife ecology to teach and advise graduate students and to conduct original research. Teaching responsibilities include courses in wildlife ecology and population ecology. Candidates working with terrestrial vertebrates, and those interested in population and community ecology are especially encouraged to apply. Applicants should have an interest in basic research and its applications to natural resource management and conservation, and be willing to interact with a diverse set of colleagues in an interdisciplinary program. Postdoctoral experience is desirable.

Please send curriculum vitae; statement of research and teaching interests; the names, addresses, and telephone numbers of three references; and reprints and other examples of academic and professional work to: **Professor Steven R. Beissinger, Chair, Animal or Wildlife Ecologist Search Committee, Yale University, School of Forestry and Environmental Studies, 205 Prospect Street, New Haven, CT 06511.**

Deadline for receipt of applications is 15 February 1992 or until suitable candidates are found. The position will be available 1 July 1992. For further information about the Yale School of Forestry and Environmental Studies and the position described above telephone: 203-432-5120 or 203-432-5076. *Yale University is an Equal Opportunity/Affirmative Action Employer. Women and minority group members are encouraged to apply.*

### ANATOMIST SOUTHERN ILLINOIS UNIVERSITY

The Department of Anatomy invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. Qualified candidates must have a Ph.D. or M.D. degree, at least 2 years of postdoctoral experience with demonstrated ability to perform independent research, experience in teaching the anatomical sciences and willingness to teach medical students in at least two anatomical disciplines. Special (but not exclusive) consideration will be given to those with research interests in cellular/molecular reproductive biology. Send curriculum vitae, names of at least three references, and a letter specifying teaching interests and research plans by 30 March 1992 to: **Anatomy Search Committee, School of Medicine, Southern Illinois University, Carbondale, IL 62901.**

*Southern Illinois University at Carbondale is an Equal Opportunity/Affirmative Action Employer.*

### ANESTHESIOLOGIST

Department of Anesthesiology at the SUNY Health Science Center in Syracuse, New York, is recruiting faculty at the **INSTRUCTOR, ASSISTANT AND ASSOCIATE PROFESSOR** levels. Qualified individuals with a strong academic commitment in all types of anesthesia, critical care and pain management are sought. SUNY Health Science Center is a tertiary care center and provides clinical services also to the Syracuse Veterans Administration Hospital. Rank and salary are commensurate with experience. Must be Board-certified or Board-eligible and possess a New York State medical license. Please send letter, curriculum vitae, names, addresses and phone numbers of three references to: **Enrico M. Camporesi, M.D., Professor and Chairman, Department of Anesthesiology, SUNY Health Science Center, Syracuse, NY 13210.** *The State University of New York Health Science Center is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR BIOCHEMISTRY

Develop an independent research program that emphasizes biochemical aspects of important biological problems. Interested in graduate and undergraduate teaching. Tenure-track, Ph.D. in biochemistry or related fields. Start-up funds and space in new molecular biology building available. Send curriculum vitae, description of research accomplishments and interests, and have three letters of recommendation sent by 15 March 1992, to: **Dr. Richard M. Robson, Department of Biochemistry and Biophysics, 1210 Molecular Biology Building, Iowa State University, Ames, IA 50011.** *Affirmative Action/Equal Opportunity Employer. Applications from women and minority candidates are especially encouraged.*

### ASSISTANT PROFESSOR SEARCH EXPANDED

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

Candidates should submit curriculum vitae and request that three letters of recommendation be sent to the Search Committee. A summary of present and future research interests is also required. Applications will be accepted until 15 March 1992 and should be sent to: **Dr. Corinne A. Michels, Chair of Search Committee, Department of Biology, Queens College of CUNY, 65-30 Kissena Boulevard, Flushing, NY 11367.**

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

**BIOLOGY SEARCH EXPANDED: ASSISTANT PROFESSOR** for fall 1992. Ph.D. required. Organ and systems mammalian physiologist with interests and expertise in cellular/molecular aspects and applications, who would be expected to teach undergraduate biology courses for majors and nonmajors plus supervise an active undergraduate research program. Position will begin in August 1992, is renewable, and may lead to tenure.

About the college: King's College is an independent coeducational institution enrolling about 1700 full-time and 600 part-time students. A rigorous core curriculum of liberal studies provides a foundation for 30 major programs in humanities, sciences, social sciences, and business. In an open Catholic tradition, King's fosters the religious, moral and social development of its students. The college is located in the center of the City of Wilkes-Barre on the western edge of the Pocono Mountains.

Application process: Applicants should send a letter of interest in the particular position, along with their curriculum vitae and names, addresses, and telephone numbers of at least three references to: **William A. Shergalis, Ph.D., Dean of the College of Arts and Sciences, King's College, Wilkes-Barre, PA 18711.** A review of applicants for the position will continue until a suitable candidate is found. *King's College is an Equal Opportunity Employer and specifically invites and encourages applications from women and minorities.*

### YESHIVA UNIVERSITY DEPARTMENT OF BIOLOGY

The small, selective liberal arts colleges of Yeshiva University seek a tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** starting in fall 1992. Teaching load is 12 hours/semester and may include general, developmental, cell and molecular biology and related laboratories. Qualifications: Ph.D., postdoctoral college teaching and research experience, commitment to undergraduate teaching, and the ability to conduct an active independent research program. Send letter, curriculum vitae, and have three letters of reference sent to: **Professor Carl Feit, Biology Search Committee, Yeshiva University, New York, NY 10033.** *Equal Opportunity Employer.*

## POSITIONS OPEN

### BIOMETEOROLOGY POSITION AT YALE UNIVERSITY

Applications are invited for the position of **ASSISTANT PROFESSOR** of biometeorology in the School of Forestry and Environmental Studies at Yale University. The successful applicant will be expected to teach a comprehensive graduate-level course in atmospheric science and an advanced course in biometeorology. Collaboration with other members of the faculty in team-taught courses and seminars (e.g., Forest Management for the Amelioration of Air and Water Resources) is encouraged. The applicant also will be expected to develop and sustain a research program in biometeorology addressing micro- and meso-scale phenomena. Interdisciplinary work (for example, studies of: ecosystem structure and function, the transport and ecological impact of air pollutants, and global change) with other members of the faculty, including researchers in the Department of Geology and Geophysics, is strongly encouraged.

Please send curriculum vitae; a statement of research and teaching interests; the names, addresses, and telephone numbers of three references; and reprints and other appropriate examples of academic and professional work to: **Dr. Kristiina Vogt, Chair, Appointments Committee, Yale University, School of Forestry and Environmental Studies, 370 Prospect Street, New Haven, CT 06511.**

Deadline for receipt of applications is 15 February 1992 or until suitable candidates are found. The position will be available 1 July 1992. For further information about the Yale School of Forestry and Environmental Studies and the position described above telephone **Professor Vogt at 203-432-5076 or Professor Paul Barten at 203-432-5121.** *Yale University is an Equal Opportunity/Affirmative Action Employer. Women and minority group members are encouraged to apply.*

**FACULTY POSITION IN CELLULAR AND MOLECULAR BIOLOGY.** The Department of Biology and Environmental Science at the University of New Haven invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level. The successful candidate will be expected to develop and coordinate an M.S. program in cellular/molecular biology and carry out research in his/her area of interest. Teaching will involve appropriate courses at the graduate and undergraduate levels. Applicants should have a Ph.D. in cellular/molecular biology. *Applications from women and minorities are encouraged.*

Applications must be received by 28 February 1992 to ensure full consideration. Please send curriculum vitae, description of research interests, and three letters of reference to: **Search #92-05, Search Committee Chairperson, University of New Haven, 300 Orange Avenue, West Haven, CT 06516.**

### ASSISTANT PROFESSOR MOLECULAR IMMUNOLOGY

The Department of Microbiology and Immunology, Baylor College of Medicine, invites applications for tenure-track faculty positions in molecular immunology. Applicants must have a strong postdoctoral training record with significant research productivity in molecular biology and/or immunology and should intend to establish a strong independent research program. Excellent laboratory facilities and start-up funding, as well as access to peptide synthesis and sequencing, flow cytometry and transgenic animal facilities are available. Applicants should send curriculum vitae, a brief description of research plans, and names of three references to: **Dr. Susan Rich, Faculty Search Committee, Department of Microbiology, and Immunology, M929, Baylor College of Medicine, Houston, TX 77030.** Applications received before 1 March 1992 will receive preference in review. *Baylor College of Medicine is an Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT/ASSOCIATE PROFESSOR.** The Department of Pathology at the Medical College of Pennsylvania invites applications for a tenure-track position to begin fall of 1992. Individuals with research interests in cancer, growth factors and molecular biology are desired. A Ph.D., Ph.D./M.D. are required and postdoctoral experience essential. Applicants should submit curriculum vitae, a statement of research interests, copies of two recent papers and three letters of recommendation to: **Dr. Mark E. Stearns, Department of Pathology, 3300 Henry Avenue, Philadelphia, PA 19129.** The deadline for receipt is 15 March 1992.

## POSITIONS OPEN

### CELLULAR AND MOLECULAR IMMUNOLOGISTS COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS & SURGEONS

The Department of Microbiology of the College of Physicians & Surgeons of Columbia University seeks a highly qualified applicant to fill a tenure-track **ASSISTANT PROFESSOR** position. We invite applications from molecular or cellular immunologists who are qualified to establish strong, independent research programs in this field.

The new position includes a generous start-up package including newly constructed laboratory and office space and access to a variety of state-of-the-art core facilities including transgenic mouse and molecular embryology facilities and flow cytometry. Interested applicants should send curriculum vitae, a brief statement of research interests and three letters of recommendation to: **Dr. Alan M. Stall, Room 640 HHSC, Department of Microbiology, College of Physicians & Surgeons of Columbia University, 701 West 168th Street, New York, NY 10032.**

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

**HEMATOLOGY/ONCOLOGY.** The Division of Hematology and Oncology, University of California, Davis Medical Center, University of California, Davis School of Medicine, is seeking a full-time **ASSISTANT PROFESSOR.** Candidates must be Board-certified in internal medicine, certified/eligible in hematology and medical oncology and be eligible for California State licensure. A diverse clinical background is desired. The faculty member will have responsibility for the development of a multidisciplinary service for the treatment of lymphomas, including the treatment of AIDS-related lymphomas, participation in the Bone Marrow Transplantation Program, inpatient ward and consult service, outpatient clinic, and teaching medical students, house staff and fellows (70% time will be in direct patient care). Interested persons should forward their curriculum vitae to: **Frederick J. Meyers, M.D., Acting Chief, Division of Hematology and Oncology, University of California, Davis Cancer Center, 4501 X Street, Sacramento, CA 95817.** This position will be open until 1 May 1992. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

### MICROBIOLOGIST

The Department of Biological and Allied Health Sciences invites applications for a tenure-track position to begin fall 1992 at the **ASSISTANT PROFESSOR** level. Ph.D. required. Expertise in a nonclinical field of microbiology is desired. Primary responsibility will be to teach introductory microbiology, and to develop an advanced course. Other teaching responsibilities may include involvement in cell biology laboratories. Send a letter of application, curriculum vitae, official transcripts, and three letters of reference by 1 March 1992 to: **Dr. George Chamuris, Department of Biological and Allied Health Sciences, Bloomsburg University, Bloomsburg, PA 17815.** *An Equal Opportunity/Affirmative Action Employer.*

### WINONA STATE UNIVERSITY

**MOLECULAR BIOLOGIST, ASSISTANT PROFESSOR.** The Biology Department at Winona State University invites applications for a tenure-track position in the area of molecular biology. Ph.D. in one of the biological sciences from an accredited graduate institution required. Responsibilities include teaching molecular biology (molecular genetics), introductory biology for majors, microbiology and other courses in addition to developing an ongoing research program which involves undergraduate students in experiments involving recombinant DNA. Salary is dependent on qualifications and experience. Position may include off-campus teaching. Applicants should send (1) a letter of application stating teaching and research interests, (2) curriculum vitae, and (3) a list of four references (names, addresses and telephone numbers) from whom letters of recommendation have been requested to: **Molecular Biology Search, Affirmative Action Office, Winona State University (WSU), P.O. Box 5838, Winona, MN 55987-5838.** Consideration of applications begins 15 February 1992. *WSU is an Affirmative Action/Title IX/Equal Opportunity University. Women, minorities, and disabled individuals are encouraged to apply.*

## POSITIONS OPEN

### STOCKTON STATE COLLEGE

**MOLECULAR/MICROBIOLOGY, ASSISTANT PROFESSOR** (\$30,312 to \$34,860) or **INSTRUCTOR** (\$24,937 to \$28,676). Tenure track, fall 1992. Seeking excellent teacher for undergraduate, liberal arts state college. To teach general biology, microbiology, molecular genetics, creative general studies courses, supervision of student research. Research facilities available. Ph.D. required for assistant professor; A.B.D. for instructor. Salary may be higher depending on qualifications, experience and increases in the New Jersey Higher Education Compensation Plan. Screening begins immediately. Send letter of application, résumé and three letters of reference to: **Dr. Barbara Byrne, Dean, Natural Sciences and Mathematics, Stockton State College, AA29, Pomona, NJ 08240.** *Stockton is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply. R202092.*

### PHYSIOLOGIST, ASSISTANT PROFESSOR.

The Biology Department at Winona State University invites applications for a tenure-track position in the area of physiology. Ph.D. in one of the biological sciences from an accredited graduate institution required. Responsibilities include teaching an upper-division course in physiology for majors, human anatomy and physiology for allied health students and other courses consistent with the candidate's qualifications and experience. Position may include off-campus teaching. Applicants should send (1) a letter of application stating teaching and research interests, (2) curriculum vitae, and (3) a list of four references (names, addresses and telephone numbers) from whom letters of recommendation have been requested to: **Physiology Search, Affirmative Action Office, Winona State University (WSU), P.O. Box 5838, Winona, MN 55987-5838.** Consideration of applications begins 15 February 1992. *WSU is an Affirmative Action/Title IX/Equal Opportunity University. Women, minorities, and disabled individuals are encouraged to apply.*

Virginia Commonwealth University's Department of Pharmacology and Toxicology announces a non-tenurable **ASSISTANT PROFESSOR** position. Primary duty will be to conduct CNS pharmacology research. Applicant must have a Ph.D. in pharmacology and at least 2 years of postdoctoral experience in CNS pharmacology. Must possess research funding and peer-reviewed scholarly publications, as well as prior research experience with calcium-modulating hormones and their interaction with drugs of abuse. Must have teaching experience in graduate and professional education. Send curriculum vitae, letter of research interests and three letters of reference, by 1 April 1992, to: **Dr. L. Harris, Search Committee Chairman, Box 613, MCV Station, Richmond, VA 23298-0613.** *Virginia Commonwealth University is a culturally diverse Equal Employment Opportunity/Affirmative Action Employer and encourages women and minorities to apply. Position description available upon request.*

### INFECTIOUS DISEASES FACULTY POSITION

The University of California, Los Angeles (UCLA), Division of Infectious Diseases, Department of Medicine, at the UCLA Center for the Health Sciences in Westwood is recruiting a tenure-track faculty member at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. The position includes independent laboratory space and equipment, start-up funds, and protected time. Applicants must be Board-certified in internal medicine and Board-eligible or -certified in infectious diseases. Applicants must be prepared to establish an independent research program in bacterial pathogenesis, intracellular parasitism, or host-parasite interaction. Applicants must have a minimum of 3 years of full-time experience in basic laboratory investigation, acquired state-of-the-art skills in cell biology, immunology, biochemistry, or molecular biology, and published at least one first-authored paper in a prestigious peer-reviewed laboratory research-oriented journal. Send curriculum vitae; three copies of all papers, abstracts, manuscripts in press, and manuscripts submitted (optional); statement of future research interests; and three letters of recommendation to: **Infectious Diseases Search Committee I, c/o Marcus Horwitz, M.D., Chief, Division of Infectious Diseases, Department of Medicine, UCLA School of Medicine, 10833 Le Conte Avenue, Los Angeles, CA 90024-1688.** *The UCLA School of Medicine is an Equal Opportunity/Affirmative Action Employer.*

# POSTDOCTORAL RESEARCH SCIENTIST PROGRAM

The Upjohn Company, a recognized leader in pharmaceutical research and development, announces the 1992 Postdoctoral Research Scientist (PRS) Program for our Upjohn Laboratories Division. This Program reflects Upjohn's commitment to encourage creative and innovative science, to stimulate new scientific techniques and concepts and to provide an excellent training environment for our PRS scientists.

*Applications are invited from new or recent doctorates in science, medicine and/or veterinary medicine having a strong record of academic and scientific excellence in research. Upjohn is looking for qualified postdoctoral candidates to conduct research in the following areas:*

## MOLECULAR AND CELL BIOLOGY RESEARCH (specialty code 100-PRS)

- Cloning unique protein kinases. Experience required in molecular biology techniques, cloning, DNA analysis, recombinant DNA methods.
- Structure and function relationship in prlA (secY) gene product and its role in protein secretion in *E. Coli*.
- Role of cyclins and cdc2 kinase in cell cycle regulation.
- Investigations into membrane structures and functions. Working experience in fluorescence and/or electron microscopy, and fluorescence polarization measurement of membrane fluidity will be helpful.
- Molecular genetics and pathogenesis of the anaerobic spirochete, *Serpulina hyodysenteriae*. The applicant should be knowledgeable in molecular biology and have substantial experience and training in different aspects of vector construction, DNA sequencing, gene expression and regulation, site-directed mutageneses, and use of PCR techniques. Experience in microbial physiology and pathogenesis, particularly of spirochetes, is highly desirable.
- Membrane transport. Ideally, the individual should have experience in use of radio-labels, transport protein isolation/identification and voltage-clamp.

## NEUROBIOLOGY (specialty code 101-PRS)

- Drug-neurotransmitter receptor interactions. The candidate should be a Neurobiologist with some molecular biology experience.
- The role of oxygen radicals in acute and chronic neurodegeneration models. The candidate should possess skills in neurochemical analyses.

## EXPERIMENTAL PARASITOLOGY (specialty code 102-PRS)

- Receptor purification/cloning, preferably with experience in peptide receptors.
- Experimental physiology/biochemistry of transport. Of particular interest is experience in anion transport.

Experience in parasitology for either of these positions is not required, but desirable.

## MEDICINAL CHEMISTRY RESEARCH (specialty code 200-PRS)

- Synthetic transformations on an important and highly complex natural product. The project also involves the isolation of related natural products and precursors from the same biological sources as the parent. In addition, work will be directed at the synthesis of simplified model compounds mimicking all or part of the parent.

The successful applicant will be skillful in all aspects of synthetic organic chemistry, particularly in the transformation and manipulation of complex, highly functionalized materials.

## PHYSICAL AND ANALYTICAL CHEMISTRY (specialty code 201-PRS)

- Research opportunities in applying material science approaches to describe the impact of residual water and temperature on the physical properties of amorphous protein powders and the subsequent stability of the protein in that amorphous matrix.
- Mass spectrometry. Knowledge of electrospray ionization technique and MS/MS would be an asset. Familiarity with protein and nucleotide chemistry, especially knowledge of enzymatic and chemical degradation of proteins would be desirable. Familiarity with computer system used in MS will be an asset.

Appointments are for one year, renewable for a second year. The Upjohn PRS Program is designed to provide a top-quality research experience and the opportunity to publish scientific results with an excellent salary and benefits package offered. Upjohn laboratories offers a stimulating, multi-disciplinary research environment at our modern facilities located in Kalamazoo, a southwestern Michigan community located midway between Chicago and Detroit. Our region provides an outstanding mix of cultural and recreational pursuits and a reasonable housing cost market. Qualified candidates are invited to forward their curriculum vitae and cover letters describing education, research experiences, publications, interests, objectives and availability dates to:

**THE UPJOHN COMPANY  
CORPORATE RECRUITING  
POSTDOCTORAL RESEARCH SCIENTIST PROGRAM  
7000 PORTAGE ROAD  
KALAMAZOO, MI 49001-0199**

Please refer to one of the above specialty codes in your cover letter. A number of PRS positions are currently open with most appointments being decided by mid-year. We are an Equal Opportunity Employer M/F.

*OUR COMMITMENT TO SCIENTIFIC EXCELLENCE CONTINUES...*

**Upjohn**

## POSITIONS OPEN

### RESOURCE POLICY POSITION AT YALE UNIVERSITY

The Yale University School of Forestry and Environmental Studies is searching for a tenure-track faculty member in the area of resource policy at the **ASSISTANT or ASSOCIATE PROFESSOR** level. Appropriate candidates should have a scholarly record of research and publication in matters relating to the formulation and implementation of resource policy. An interest in issues concerning natural resource conservation and management, or formulation and implementation of international resource policy, is desired. Candidates can be trained in a variety of social science and environmental disciplines, although a political science background is preferred.

Please send curriculum vitae; statement of research and teaching interests; the names, addresses, and telephone numbers of three references; and reprints and other examples of academic and professional work to: **Professor Stephen R. Kellert, Chair, Resource Policy Search Committee, Yale University, School of Forestry and Environmental Studies, 205 Prospect Street, New Haven, CT 06511.**

Deadline for receipt of applications is 15 February 1992 or until suitable candidates are found. The position will be available 1 July 1992. For further information about the Yale School of Forestry and Environmental Studies and the position described above, telephone: **203-432-5114 or 203-432-5076.** *Yale University is an Equal Opportunity/Affirmative Action Employer. Women and minority group members are encouraged to apply.*

### FACULTY POSITION NEUROBIOLOGY

The Vollum Institute invites applications for a faculty position at the **ASSISTANT, ASSOCIATE OR FULL PROFESSOR** level in the field of neurobiology. We are especially interested in candidates using biophysical/physiological approaches to understanding neuronal regulation, structure or function at the molecular and cellular level, but the quality of the research program and its relationship to existing strengths will be the most important considerations. Persons interested in this appointment should submit curriculum vitae and statement of research interests to: **Neurobiology Search Committee, Vollum Institute, L-474, Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3098.** *An Affirmative Action/Equal Opportunity Employer.*

### COLUMBIA UNIVERSITY DEPARTMENT OF OPHTHALMOLOGY PROFESSOR OF MOLECULAR BIOLOGY (IN OPHTHALMOLOGY) WITH TENURE

The department is seeking an individual with a strong background in the field of molecular genetics to develop a laboratory which would devote a significant amount of time researching the genetic aspects of glaucoma. Candidates must provide evidence of significant research accomplishment and the ability to establish an independent, nationally recognized research program. Applicants should submit recent curriculum vitae, list of publications, names and addresses of three references, and a one-page summary of research interests to: **Anthony Donn, M.D., Chairman, Department of Ophthalmology, Edward S. Harkness Eye Institute, 635 West 165th Street, Box 20, New York, NY 10032.** *Columbia University takes Affirmative Action to ensure Equal Opportunity.*

### NORTHWESTERN UNIVERSITY CHICAGO, ILLINOIS SOLOVY-ARTHRITIS RESEARCH SOCIETY CHAIR

The Division of Arthritis-Connective Tissue Diseases is seeking to fill an endowed position with an accomplished investigator. We are seeking a Ph.D. or M.D. with interests in basic cellular and molecular immunology. The individual should qualify at the rank of a **SENIOR ASSOCIATE or FULL PROFESSOR**. The position offers an opportunity to collaborate with basic and clinical scientists within an exciting environment. If interested, please send curriculum vitae, a statement of research interests and the names of three references to: **Richard M. Pope, M.D., Department of Medicine, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.** *Northwestern University is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### ASSISTANT/ASSOCIATE PROFESSOR NEUROSCIENCE

The Department of Biology at Georgia State University invites applications for a tenure-track position at the level of assistant or associate professor in neuroscience. Appointment will start September 1992. Research interest may include all areas of neuroscience, including molecular or cell biology, genetics, and systems neuroscience. Responsibilities include participation in research and teaching in graduate and undergraduate programs. Applicants at the assistant level must have demonstrated research potential through postdoctoral experience and publication record; applicants at the associate level must have a record of extramural funding. Applications, including curriculum vitae, reprints, a statement of research plans, and three letters of reference should be sent to: **Chairman, Department of Biology, Georgia State University, P.O. Box 4010, Atlanta, GA 30302-4010.** Deadline for receipt of application is 15 February 1992. Salary will be commensurate with qualifications. *Georgia State University, a unit of the University System of Georgia, is an Equal Opportunity/Affirmative Action Employer.*

### NATURAL RESOURCE ECONOMIST POSITION AT YALE UNIVERSITY

The Yale University School of Forestry and Environmental Studies is seeking to appoint an **ASSISTANT or ASSOCIATE PROFESSOR** of natural resource economics to teach and advise graduate students and to conduct original research. Candidates with background training either in economics, agricultural economics or forest economics are desirable. The individual is expected to apply economics to a broad array of resource questions and be willing to interact with a diverse set of colleagues in an interdisciplinary program. The applicant should have an active research interest in at least one of the following areas: forests, wildlife, energy, water fisheries, and pollution.

Please send curriculum vitae; statement of research and teaching interests; the names, addresses, and telephone numbers of three references; and reprints and other examples of academic and professional work to: **Professor Robert O. Mendelsohn, Chair, Natural Resource Economics Search Committee, Yale University, School of Forestry and Environmental Studies, 360 Prospect Street, New Haven, CT 06511.**

Deadline for receipt of applications is 15 February 1992 or until suitable candidates are found. The position will be available 1 July 1992. For further information about the Yale School of Forestry and Environmental Studies and the position described above telephone: **203-432-5128 or 203-432-5076.** *Yale University is an Equal Opportunity/Affirmative Action Employer. Women and minority group members are encouraged to apply.*

**FLUORESCENCE EXPERT.** The Department of Physiology and Biophysics at the University of Illinois, College of Medicine at Chicago, invites applications for the position of **RESEARCH ASSISTANT PROFESSOR**. Applicants should have a Ph.D. degree and documented skills and productivity in the area of optical spectroscopy and fluorescence, especially as applied to measurements of intracellular cations. Salary is dependent upon background and experience. Please send résumé and references to: **Dr. R. John Solaro, Department of Physiology and Biophysics, M/C 901, University of Illinois at Chicago, P.O. Box 6998, Chicago, IL 60680.** *The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.*

### PROFESSOR OF BIOLOGICAL AND MOLECULAR PHARMACOLOGY/ HARVARD MEDICAL SCHOOL

Applications are invited for the position of professor of biological chemistry and molecular pharmacology, Harvard Medical School. Candidates should have strong credentials in the areas of the biochemistry, molecular genetics and pharmacology of human parasites. Major responsibilities will include supervision of an active research program in this area and teaching of biochemistry and pharmacology to graduate and medical students. Applicants should submit curriculum vitae and bibliography to: **Dr. Priscilla A. Schaffer, Chairperson of the Search Committee, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115.** *Harvard Medical School is an Equal Opportunity/Affirmative Action Employer. Qualified female and minority applicants are encouraged to apply.*

## POSITIONS OPEN

### FOREST MANAGEMENT POSITION AT YALE UNIVERSITY

The Yale University School of Forestry and Environmental Studies is seeking to appoint a tenured **PROFESSOR** of forest management to teach and advise graduate students, conduct original research and to take a leading role in the development of the Weyerhaeuser Program in Forest Resource Management and Policy. The person must have an active research interest in the management of forests for wood products but should also be interested in integrating the multiple uses of forest resources. Interacting with other members of the faculty through interdisciplinary teaching or research is important. A doctoral degree is required.

Please send curriculum vitae; statement of research and teaching interests; the names, addresses, and telephone numbers of three references; and reprints and other examples of academic and professional work to: **Professor John C. Gordon, Chair, Forest Management Search Committee, Yale University, School of Forestry and Environmental Studies, 205 Prospect Street, New Haven, CT 06511.**

Deadline for receipt of applications is 15 February 1992 or until suitable candidates are found. The position will be available 1 July 1992. For further information about the Yale School of Forestry and Environmental Studies and the position described above telephone: **203-432-5076 or 203-432-5107.** *Yale University is an Equal Opportunity/Affirmative Action Employer. Women and minority group members are encouraged to apply.*

### PROFESSOR OF MEDICINE HARVARD MEDICAL SCHOOL DANA-FARBER CANCER INSTITUTE

Harvard Medical School and the Dana-Farber Cancer Institute invite applications for a position of Professor of Medicine to serve as Chief of the Laboratory of Immunobiology, Dana-Farber Cancer Institute. We seek an individual whose primary interest is in the application of techniques of molecular immunology to the study of fundamental problems in T-lymphocyte biology. Expertise in the analysis of the structure and function of surface molecules of T-lymphocytes, and in T-lymphocyte activation and differentiation at the biochemical and molecular level is required. Expertise in the interaction of viruses pathogenic for T-lymphocytes with cell surface structures is desirable. Applicants should submit curriculum vitae, bibliography and statement of research interests to be sent to: **Kurt J. Bloch, M.D., Clinical Immunology and Allergy Units, Massachusetts General Hospital, Boston, MA 02114.** *Harvard Medical School and the Dana-Farber Cancer Institute are Equal Opportunity/Affirmative Action Employers and encourage the applications of qualified women and minority candidates.*

The Swiss Federal Institute of Technology and the University of Zurich are accepting applications for a joint faculty position of:

### PROFESSOR OF GEOLOGY

We are seeking an internationally recognized creative scientist to lead a geodynamics-tectonics-structural geology group. Applications are encouraged from candidates with interests in physical processes of rock deformation, rheology and kinematics studied by field as well as experimental or theoretical means. Research should be directed towards developing models for the evolution of mountain ranges such as the European Alps and of extensional terrains.

Emphasis is placed on skill and enthusiasm in fieldwork. Collaboration with research groups in petrology, geophysics and sedimentology is expected. Teaching responsibilities include graduate courses as well as basic courses in tectonics, structural geology and field courses.

Applicants should submit detailed curriculum vitae, publication list and a statement of research interests by 31 March 1992 to: **The President of ETH Zurich, Professor Dr. J. Nüesch, ETH Zentrum, CH-8092 Zürich.** *Applications from female scientists are specifically encouraged.*

### YOUR PERSONNEL PLACEMENT AD

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



# RESEARCH SCIENTISTS

Bristol-Myers Squibb, a worldwide leader in the development and marketing of sophisticated pharmaceutical, medical care, consumer and nutritional products, has exceptional opportunities for Research Scientists at the Pharmaceutical Research Institute in Princeton, NJ.

## Molecular Biology

This individual should have a BS/MS degree, extensive experience in tissue culture techniques and overall ability to manage a tissue culture unit. Must be highly dedicated with a strong commitment to tissue culture research. The incumbent will be part of a very competitive 15-member basic research unit involved in studies aimed at understanding the mechanism of action of various types of oncogenes such as growth factor receptors and tyrosine protein kinases. Previous experience in embryonic stem cells and/or neuronal cell culture techniques will be an asset. Please reply to **Dept. 271A-BM**.

## Metabolic Diseases

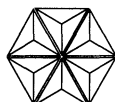
This position will participate in a new project studying vascular wall biology and inflammatory mechanisms in atherosclerosis with particular focus on LDL oxidative modification and monocyte/macrophage involvement. This will entail the use of cellular, biochemical and molecular biology experimental approaches to develop new assays and methods to study atherogenesis. Requires BS/MS degree and 2-4 years experience. Please reply to **Dept. 271B-AR**.

## Chemistry (2 Positions)

- The successful candidate will be responsible for performing research involving the synthesis, purification and characterization of organic compounds, primarily peptide mimetics of biological interest. This will require the application of advanced laboratory techniques for: a) performing the synthesis of compounds under a wide variety of reaction conditions. b) purification of intermediate and final compounds using various chromatographic techniques such as HPLC, TLC, LC flash, LC, etc. c) operation and maintenance of specialized laboratory instruments and proper interpretation of experimental data. d) documenting work in the form of written reports and chemical transmission records. Must be able to seek out information necessary to perform new chemical manipulations and interpret/report laboratory observations to supervisor and research group. Requires BS or MS degree in chemistry with 4-8 years experience in organic synthesis. Please reply to **Dept. 271C-BM**.

- The successful candidate will be responsible for performing synthetic chemical research and solid phase peptide synthesis involving the design and synthesis of pharmacologically active agents. The emphasis will be on peptides and peptide mimetics. This position will involve the application of specialized scientific knowledge and advanced laboratory techniques to problems in organic/medicinal chemistry. The exercise of creativity, judgment and decisiveness will be necessary to achieve the goal of creating new drug candidates. A PhD in organic or medicinal chemistry and 3-5 years of experience in drug discovery are required. Please reply to **Dept. 271D-BM**.

Bristol-Myers Squibb offers the advantages of sustained career growth, highly competitive salaries and extensive benefits. Please send resume with salary requirements and appropriate Department Code to: **BRISTOL-MYERS SQUIBB, Pharmaceutical Research Institute, P.O. Box 4000, Princeton, NJ 08543-4000**. Equal Opportunity Employer, M/F/D/V.



**Bristol-Myers Squibb Company**

## Career Opportunities for Research Scientists

*Oncogene Science is expanding its basic drug discovery Research and Development program. Oncogene Science combines state-of-the-art molecular biology with sophisticated laboratory automation to lead the way in the discovery of new small molecule and recombinant biological therapeutics for the treatment of cancer and cardiovascular disease. Our gene expression and cancer biology programs have several positions available at both entry and senior levels for qualified candidates in the following areas:*

### Molecular Biology

*Several positions are available for candidates with Ph.D.s in Molecular Biology or related fields to join our drug discovery teams. A background in regulation of gene transcription, cardiovascular disease or cancer research is preferred.*

### Cell Biology

*The cancer research program is currently seeking a Ph.D. cell biologist to join a multidisciplinary drug discovery team. The successful candidate will be responsible for development of cell based screens, follow-up of lead compounds and determination of mechanism of action. A broad background in cell biology is required with research experience in cancer cell biology preferred.*

### Protein Biochemistry

*We are currently seeking a protein biochemist for structure-function experiments, expression and purification of transforming growth factor beta 3 (TGF-B3). The ideal applicant will have a background in protein biochemistry and experience in recombinant expression techniques. Good written and oral communication skills are required. This is an excellent opportunity to join a dynamic team involved in development of this bi-functional growth regulator.*

### Drug Discovery

*We are currently seeking Ph.D.s with 2+ years of postdoctoral research experience in pharmacology, medicinal chemistry, biochemistry, or a related discipline to head small teams of scientists involved in discovery programs targeting the role of specific genes in various disease states. Experience in the Pharmaceutical industry and good computing skills would be assets, but are not essential requirements.*

### Postdoctoral Positions

*Oncogene Science is initiating a postdoctoral research program to investigate the molecular mechanisms of gene expression. Recent Ph.D.s with a background in the regulation of gene expression are encouraged to apply.*

*Oncogene Science is strategically located on Long Island with ready access to major academic institutions in the New York City metropolitan area.*

*Oncogene Science offers an excellent compensation and benefits package. Qualified candidates should send their resumes, including a list of publications and references to: **Oncogene Science, Inc., Human Resources Department, 106 Charles Lindbergh Blvd., Uniondale, New York 11553; Attn: CO**. An Equal Opportunity Employer.*



**THE****BIOGEN****MISSION**

## Career Growth

Biogen is a thirteen year old leading biotechnology company engaged principally in developing genetically engineered human pharmaceuticals. As a result of its early research, Biogen now derives revenues from five products being sold by its licensees or affiliates in various countries. Biogen currently directs its research and development into areas where the company has particular strength - inflammation, cardiovascular disease, AIDS and selected cancers.

### Regulatory Affairs Associate

We are actively seeking an individual to enhance our efforts in the area of Regulatory Affairs. The successful candidate will play a key role in the preparation and submission of IND, PLA, ELA and NDA applications. In addition, you will provide support to critical IND clinical programs currently in progress. Ideally, you will hold a minimum of a BS degree in a biological science and possess at least 3 years' regulatory affairs experience in either the pharmaceutical or biotechnology industry. Strong skills in written/oral communication are required, as are a sense of initiative and urgency.

Our compensation and benefits package is one of the best in the industry, and is designed to attract and retain the finest talent available.

**For immediate consideration, call Joe Tringali at (617) 252-9802, or mail/fax your resume to his attention at Biogen, Inc., Ref. SMRA0124, 14 Cambridge Center, Cambridge, MA 02142. Fax: (617) 252-9617. Biogen is an Equal Opportunity Employer.**

**BIOGEN**

### Calendar of Upcoming Meetings

SCIENCE will be distributed to scientists attending the following meetings:

**ASBMB**

10 to 17 February 1992, Houston  
Issue date: 31 January 1992

**Society of Toxicology**

23 to 27 February 1992, Seattle  
Issue date: 14 February 1992

**The Pittsburgh Conference**

3 to 9 March 1992, New Orleans  
Issue date: 21 February 1992

**FASEB**

5 to 10 April 1992, Anaheim  
Issue date: 27 March 1992

**Your classified ad will enjoy  
BONUS DISTRIBUTION  
at these events.**

**Deadline for line classified ads:  
15 days prior to issue date at 10:00 a.m.  
Call for display ad deadlines.**

**SCIENCE Classified Advertising  
Telephone: 202-326-6555  
FAX: 202-682-0816**

## Scientist Biochemistry and Molecular Biology

Baxter Diagnostics Inc., Life Sciences Research Laboratory (LSRL) is proud to announce the opening of our state-of-the-art research facility dedicated to basic and applied research. LSRL scientists are involved in multidisciplinary studies focused on the diagnosis of infectious and genetic diseases.

This new facility is located in the technology-rich San Diego, California area and is currently seeking applications for a postdoctoral level position in the area of Biochemistry and Molecular Biology. Qualifications include:

- PhD with up to 2 years postgraduate experience and an interest in prokaryotic expression and protein purification
- experience with thermophilic bacteria helpful

Interested applicants should send a CV and three letters of reference to: **Director, Life Sciences Research Laboratory, Baxter Diagnostics Inc., P.O. Box 910492, San Diego, CA 92121-0492.** We are an equal opportunity employer m/f/h/v.

**Baxter Diagnostics Inc.**

**Baxter**

## POSITIONS OPEN

### ASSISTANT MEMBER MEMORIAL SLOAN-KETTERING CANCER CENTER

The Program in Molecular Biology, Sloan-Kettering Institute (SKI), Memorial Sloan-Kettering Cancer Center (MSKCC), invites applications for a position as **ASSISTANT MEMBER**. The successful candidate will have demonstrated outstanding potential for a research career and will be using a combination of modern biochemical, cell biological, or molecular genetic approaches to study the regulation of cellular growth processes in higher eukaryotes. Areas of interest include: genome structure and function, cellular signaling mechanisms, replication, transcription, translation, oncogenesis, and developmental control mechanisms. Applications should include curriculum vitae, a summary of current research activities and future research plans, and three letters of references. Please send applications, which we would appreciate receiving by 31 March 1992, to:

**Dr. Kenneth J. Marians  
Chairman**

**Program in Molecular Biology  
Sloan-Kettering Institute**

**Memorial Sloan-Kettering Cancer Center  
1275 York Avenue  
New York, NY 10021**

*SKI/MSKCC is an Equal Opportunity Employer.*

### NATIONAL SCIENCE FOUNDATION (NSF)

NSF's Division of Environmental Biology (formerly Biotic Systems and Resources) is seeking qualified applicants for **PROGRAM DIRECTOR** positions in fiscal year 1993. The incumbents to these positions will administer grant programs in support of research in the following areas: ecology, systematic biology, population biology and ecosystem studies. These positions will be filled on a 1- or 2-year visiting scientist/temporary basis and are excepted from the competitive civil service.

The per annum salary range is \$54,607 to \$85,500. The visiting scientist receives a leave of absence from his/her employer and salary is set in accordance with NSF's Visiting Scientist Program.

Applicants must have a Ph.D. or equivalent experience. In addition, six or more years of successful research experience beyond the Ph.D. is required. Some administrative experience is also desired.

Applications are also being accepted for future vacancies for these positions.

Applicants should submit a Standard Form 171, Applications for Federal Employment, or résumé to: **National Science Foundation, Division of Human Resource Management, Room 208, 1800 G Street, N.W., Washington, DC 20550. Attention: Catherine Handle. Telephone: 202-357-9681** for further information about the NSF application process, or **202-357-7332** for technical details on these specific positions. Hearing impaired individuals should call **202-357-7492**. *NSF is an Equal Opportunity Employer.*

### ASSOCIATE/FULL MEMBER MEMORIAL SLOAN-KETTERING CANCER CENTER

The Program in Molecular Biology, Sloan-Kettering Institute (SKI), Memorial Sloan-Kettering Cancer Center (MSKCC), invites applications for a position as **ASSOCIATE MEMBER** or **FULL MEMBER**. The successful candidate will have an outstanding record of research accomplishment and will be using a combination of modern biochemical, cell biological, or molecular genetic approaches to study the regulation of cellular growth processes in higher eukaryotes. Areas of interest include: genome structure and function, cellular signaling mechanisms, replication, transcription, translation, oncogenesis, and developmental control mechanisms. Applications should include curriculum vitae, a summary of current research activities and future research plans, and the names, addresses, and telephone numbers of at least four references. Please send applications, which we would appreciate receiving by 31 March 1992 to:

**Dr. Kenneth J. Marians  
Chairman**

**Program in Molecular Biology  
Sloan-Kettering Institute**

**Memorial Sloan-Kettering Cancer Center  
1275 York Avenue  
New York, NY 10021**

*SKI/MSKCC is an Equal Opportunity Employer.*

## POSITIONS OPEN

### CHAIRMAN FOR THE DEPARTMENT OF IMMUNOLOGY

The Duke University School of Medicine invites nominations and applications for the position of chairman of the new Department of Immunology at Duke University. We are seeking an individual with an international reputation in immunology, with expertise in cellular and molecular immunology. Applicants should have a record of distinguished accomplishment and continuing commitment to the education of predoctoral and postdoctoral students and the development of junior faculty. Substantial financial and space commitments will be dedicated to this position, including faculty positions. Interested applicants should send curriculum vitae, description of research interests, and the names of three references to: **Dr. Barton F. Haynes, Chair, Department of Immunology Search Committee, Box 3258, Duke University Medical Center, Durham, NC 27710.** Committee will begin to review applications 1 March 1992. *Duke University is an Equal Opportunity/Affirmative Action Employer.*

### CHAIRMAN DEPARTMENT OF BIOCHEMISTRY

The School of Medicine of the University of Puerto Rico is seeking a chairman for the Department of Biochemistry. Potential candidates should have a demonstrated commitment to excellence in teaching and research in biochemistry. Salary range is \$50,000 to \$95,000. The chairman will have the opportunity to fill one postdoctoral and at least two tenure-track faculty positions. Applicants should send curriculum vitae, statement of research interests and names of three references to: **Susan Opava-Stitzer, Ph.D., Search Committee, Department of Physiology, P.O. Box 365067, University of Puerto Rico, School of Medicine, San Juan, PR 00936-5067.** Women and minorities are encouraged to apply.

**CURATOR** (Museum Specialist 3-G) at New Mexico Museum of Natural History and Science: Oversee museum collections in modern and paleo- botany, conduct research, and work with exhibits and education departments. Individuals with Ph.D. encouraged to apply. Prefer candidates with publications in plant systematics emphasizing Southwestern flora and in biogeography/community ecology, demonstrated experience in working successfully in museum public programs, and record of successful external funding. Start date: 1 August 1992. Salary range \$28,000 to \$39,500. For application details telephone: **Personnel Officer, Office of Cultural Affairs, State of New Mexico at 505-827-7355.** Deadline for receipt of complete applications 24 February 1992. *The State of New Mexico is an Affirmative Action/Equal Opportunity Employer.*

**DEPARTMENT HEAD, TOXICOLOGY.** Manage and perform contract regulatory toxicity studies of new pharmaceuticals, chemicals, and pesticides in vivo. Studies must meet regulations governing safety testing of potential new products. Must have Ph.D. in toxicology and 5 to 8 years of experience as a toxicologist. Prior experience in toxicology contract research laboratory and working with pharmaceutical/chemical companies and government regulatory authorities is desired. Suburban Maryland location. Mail résumé or curriculum vitae to: **VTS, P.O. Box 326, Middletown, MD 21769.**

### STOCKTON STATE COLLEGE

**DIRECTOR, ACADEMIC LABORATORY AND FIELD FACILITIES.** Appointment effective 1 July 1992. Supervises laboratory and field facilities in all science disciplines; oversees health, safety and other regulatory compliance; supervises purchasing, monitors budgets, and keeps inventories; directs professional and student staff members. Ph.D. in chemistry and management experience preferred; master's and academic laboratory management experience considered. Salary: \$40,624 to \$46,720. Salary may be higher depending on qualifications, experience and increases in the New Jersey Higher Education Compensation Plan. Screening begins immediately. Send letter of application, résumé and three letters of reference to: **Dr. Barbara Byrne, Dean, Natural Sciences and Mathematics, Stockton State College, AA29, Pomona, NJ 08240.** Stockton is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply. **R202092.**

## MOLECULAR BIOLOGY RESOURCE RESEARCH DIVISION

### THE UNIVERSITY OF TEXAS M.D. ANDERSON CANCER CENTER

The University of Texas M.D. Anderson Cancer Center, one of the world's leading cancer research centers, has an outstanding opportunity at our research facility located in Smithville, Texas.

#### RESEARCH SCIENTIST

Reporting to the Associate Director of Science Park—Research Division, you will be responsible for developing and directing a new resource center in molecular biology and related technical services. Requirements include a PhD in Biology or Biochemistry. The successful candidate will bring experience not only in molecular biology or biochemistry, but also in computer technology and equipment. The candidate should have extensive experience at the graduate or postdoctoral level in one or more of the following areas:

image analysis  
densitometry  
DNA sequence analysis

Qualified applicants should send a CV and a list of references.

#### RESEARCH ASSISTANT II

Reporting to the Director of the Molecular Biology Core, you will be responsible for providing technical support and training for users of computerized image analysis and densitometry equipment. The successful applicant will combine experience and training in molecular biology or biochemistry with experience in computer applications. Experience in image analysis, densitometry, DNA sequence analysis and/or oligonucleotide synthesis would be highly desirable. Alternatively, extensive experience in network interconnectivity and/or scientific programming applications would be equally desirable. Requirements include a masters in Biology, Biochemistry, or related field; or a Bachelors with two years experience. Qualified candidates should send a CV or resume and a list of references.

Send resume and transcript to:

Personnel, Science Park-Research Division  
P.O. Box 389, Smithville, TX 78957.  
Telephone: 512-237-2403.

*The University of Texas M.D. Anderson Cancer Center is  
an Equal Opportunity/Affirmative Action Employer.*

## FACULTY POSITIONS

### Massachusetts General Hospital Harvard Medical School Cutaneous Biology Research Center

Applications are invited for several positions at the Assistant and Associate Professor level to join the Cutaneous Biology Research Center (CBRC), which was recently established to perform basic research in areas relevant to the understanding of the biology of the skin. Applicants must have a PhD and/or MD degree and relevant postdoctoral experience in either molecular, cellular or developmental biology. Only applicants with a strong research record and the potential to develop extramurally supported research programs will be considered. Individuals with a demonstrated ability to develop imaginative approaches to important biological questions are particularly encouraged to apply. The CBRC occupies 45,000 square feet of fully equipped laboratory space in a new multidisciplinary research facility. Generous start-up funds are available.

Interested individuals should send curriculum vitae, reprints, a statement of research and future directions, along with the names, addresses and telephone numbers of three references to:

**Paul F. Goetinck, Ph.D.**  
**Chair, Faculty Search Committee**  
**Cutaneous Biology Research Center**  
**Massachusetts General Hospital-East**  
**Building 149 13th Street**  
**Charlestown, MA 02129**

*The MGH/Harvard Cutaneous Biology Research Center is a committed Equal Opportunity/Affirmative Action Employer. Minorities, women, handicapped and veterans are encouraged to apply.*



## POSITIONS OPEN

### DIRECTOR OF SURGICAL RESEARCH

The Department of Surgery of Tulane School of Medicine seeks a surgical investigator to direct its Division of Surgical Research. The M.D. degree, the Ph.D. degree or both are required. Experience in managing research projects and a clear record of productivity in basic research as well as clinical research is highly desirable. Submit curriculum vitae to: **Lewis Flint, M.D., Chairman, Department of Surgery, 1430 Tulane Avenue, New Orleans, LA 70112.** *Tulane University is an Equal Opportunity/Affirmative Action Employer and applications from qualified women and minority group members are especially encouraged.*

### LABORATORY DIRECTOR

Director, Laboratory of Molecular Biology—A Ph.D.-level molecular geneticist is sought to direct product development in gene characterization technology for BIOS Laboratories. BIOS is actively involved in producing products, and performing research in the human genetics area. Candidate must have experience in gene analysis techniques including: PCR, DNA sequencing, library construction and screening, physical and genetic mapping, and Southern and Northern analysis. Experience as a group leader in new product development is important. Candidate must have knowledge of grant preparation, and be interested in participating in business decisions and corporate planning. Please send correspondence to: **Personnel Manager, BIOS Laboratories, 291 Whitney Avenue, New Haven, CT 06511.**

### DEPUTY DIRECTOR

#### OFFICE OF BIOLOGICS RESEARCH

The Food and Drug Administration is recruiting for Deputy Director, Office of Biologics Research, Center for Biologics Evaluation and Research, Bethesda, Maryland. The position is in the Senior Executive Service with a salary range of \$87,000 to \$100,500. The Deputy Director shares responsibility with the Director for scientific research and regulatory review of biological products and for managing research to understand disease pathogenesis, immune responses, blood components, growth factors, etc. As the Office Director's principal adviser, influences the formulation of office policy, and represents the Office Director in conferences on medical and scientific matters of significance to the agency.

Applicants must have: An M.D. degree from an approved medical school . . . or . . . a bachelor's or higher degree in a related biological or physical science; experience at the executive level in planning, directing, and evaluating broad scientific research or regulatory programs and activities which demonstrates the ability to effectively coordinate and productively integrate the multidisciplinary efforts of a scientific, professional and technological workforce; administrative or managerial experience at the executive level which demonstrates strong leadership abilities in a scientific environment; experience which indicates the ability to deal effectively with high level governmental officials, the scientific and academic communities, medical and health-related organizations, representatives of the regulated industry and others and the ability to implement equal employment opportunity programs. It is desirable that applicants have: academic training through the Ph.D. or equivalent level in the biological or physical sciences; Board certification for medical officers or postdoctoral training for Ph.D.'s in a related scientific discipline; thorough working knowledge and understanding of the provisions, limitations and practical application of FDA laws and regulations related to biological products; receipt of honors, awards or other recognition for performance or contributions in his/her field; and professional experience at the GS-15 or equivalent level in the research testing, inspection, or regulation of biological products or related scientific disciplines.

If you are interested, send curriculum vitae to: **John Anderson, Division of Human Resources Management, Food and Drug Administration, Parklawn Building, Room 4B-09, 5600 Fishers Lane, Rockville, MD 20857.**

If you need more information, call Mr. Anderson collect at 301-443-1755.

This position can also be filled by current Commissioned Officers of the U.S. Public Health Service, or by former officers willing to rejoin the Corps.

Applications will be accepted until 28 February 1992.

*FDA is smoke-free.*

## POSITIONS OPEN

### CANCER CENTER DIRECTOR

Bowman Gray School of Medicine of Wake Forest University seeks a leading physician-scientist to direct its Comprehensive Cancer Center. A strong clinical program with regional research network and basic sciences core laboratories are prominent features. *Minority and women candidates are especially encouraged.* *Wake Forest is an Affirmative Action/Equal Opportunities Employer.* Reply to: **William R. Hazzard, M.D., Medical Center Boulevard, Winston-Salem, NC 27157-1052.**

**DEPARTMENT HEAD/POLYPEPTIDES:** Nichols Institute's Reference Facility, a leading innovator in laboratory technology, is seeking a department head. Candidates must possess a Ph.D. in biological sciences with prior experience with hormonal immunoassays; research experience in protein chemistry and chemoluminescence preferred. Reference laboratory management experience a plus. Responsibilities include performing R&D on peptide hormones, and management of the laboratory department. A commitment to quality and to staff is required. We offer a competitive salary and benefits package in a *non-smoking environment.* Please send résumé with salary history to: **Nichols Institute, Human Resources—Hazel Larsen, 33608 Ortega Highway, San Juan Capistrano, CA 92690-6130.** FAX: 714-728-4985. *Equal Opportunity Employer.*

### STOCKTON STATE COLLEGE

**MARINE SCIENCE LABORATORY PROGRAM ASSISTANT,** Full-time position as field station operator available April 1992. Assist in teaching marine science courses; assist with student and faculty research projects; train and supervise student assistants; oversee regulatory compliances; instruct on safe use of boats and equipment; operate and maintain outboard engines and small boats; maintain and repair laboratory and field equipment including sea-water system; collect and maintain living aquatic organisms. B.S. in marine science or related field required; master's strongly preferred; current captain's license highly desirable. Salary \$23,748 to \$27,314, may be higher depending on qualifications, experience and increases in the New Jersey Higher Education Compensation Plan. Screening begins immediately. Send letter of application, résumé and three letters of reference to: **Dr. Barbara Byrne, Dean, Natural Sciences and Mathematics, Stockton State College, AA29, Pomona, NJ 08240.** *Stockton is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.* **R202092.**

### THE UNIVERSITY OF IOWA VICE PRESIDENT FOR RESEARCH

The University of Iowa seeks nominations and applications for the position of Vice President for Research. Reporting directly to the President, the Vice President promotes and facilitates research and scholarship and fosters their excellence; strengthens relationships with public and private agencies that support research and other scholarly endeavors; advances the role of the university in economic development; develops research agreements; and formulates and implements policies regarding research, patents, copyrights, and intellectual property rights.

The Vice President for Research is expected to have a Ph.D., or equivalent degree or achievement, and preferably also experience at a major research organization. Candidates must have the ability to communicate university policies relating to research to all of the university's constituencies, both internal and external. It is preferred that candidates have administrative experience and qualify for tenure. *The President and the Search Committee are particularly eager to identify qualified women and minority candidates.*

The preferred starting date is on or about 1 July 1992. Please send nominations or applications to:

**Professor Alice B. Fulton, Chair  
Search Committee, Vice President for Research  
105 Jessup Hall  
The University of Iowa  
Iowa City, IA 52242**

*The University of Iowa is an Equal Opportunity and Affirmative Action Employer.*

More than 150,000 people paid to see your ad in **SCIENCE.** Classified Advertising Department telephone: 202-326-6555. FAX: 202-682-0816.

## POSITIONS OPEN

**VICE CHAIRPERSON.** The Department of Pathology at Wayne State University invites applications for a Vice Chairperson to direct an experimental pathology section. The position includes teaching pathology residents, directing a graduate program and involvement with second-year medical students organizing the medical student teaching program. The individual will also be charged with building a cancer-related research group. Wayne State University Medical Center is a comprehensive cancer center, which is comprised of six hospitals with 45 pathologists and 20 Ph.D.'s. Interested applicants should submit their curriculum vitae and references to: **John D. Crissman, M.D., Professor and Chair, Department of Pathology, Harper Hospital, 3990 John R, Detroit, MI 48201.** *An Equal Opportunity/Affirmative Action Employer, M/F.*

**ANALYTICAL/ORGANIC PHARMACEUTICAL ANALYSIS. TEMPORARY, NON-TENURE-TRACK POSITION** available at the University of Michigan College of Pharmacy to teach drug assay course during fall semesters of 1992 and 1993 (half year appointments, 1 July-31 December each year). Candidates should have Ph.D. degree in relevant discipline or master's degree with equivalent experience and should be familiar with standard methods of drug analysis (spectroscopic, chromatographic, immunoassay, etc.). Responsibilities will include two lectures per week and supervision of four laboratory classes per week (with laboratory assistants). Send curriculum vitae and three letters of recommendation to: **Professor Henry I. Mosberg, College of Pharmacy, University of Michigan, Ann Arbor, MI 48109-1065.** Preference will be given to those candidates submitting applications by 15 March 1992. *The University of Michigan is a nondiscriminatory, Affirmative Action Employer.*

### UNIVERSITY OF HAWAII MARINE BIOTECHNOLOGY

The University of Hawaii seeks a molecular biologist for a full-time, tenure-track faculty position (**ASSOCIATE/FULL RESEARCHER**) in marine biotechnology. This will be a joint appointment to the Hawaii Institute of Marine Biology and the Biotechnology Program of the Pacific Biomedical Research Center.

The Hawaii Institute of Marine Biology (HIMB) is a research unit of the School of Ocean and Earth Science and Technology with particular strengths in fish biology and in coral reef biology and coastal ecology. The Biotechnology Program is an activity of the Pacific Biomedical Research Center and the Hawaii Institute of Tropical Agriculture and Human Resources. The program coordinates campus-wide biotechnology research and provides services in protein sequencing, peptide and oligonucleotide synthesis, and has extensive hardware and software for computer-assisted constructions and data analysis.

We seek a marine biologist whose research focuses on the molecular mechanisms regulating gene expression in the control of growth, differentiation, reproduction or environmental adaptation. Minimum qualifications: Candidates must have a Ph.D. in a biological science, a minimum of 2 years of postdoctoral experience in molecular genetics and a demonstrated record of funding. Desirable qualification: Research that targets economically important marine animals.

The successful candidate will be expected to develop an internationally competitive and extramurally funded research program in molecular genetics that exploits the special attributes of the Hawaiian marine environment. The appointee will be offered space at the Hawaii Institute of Marine Biology or on the Manoa campus and will have full access to the molecular biology core facility. Appointments to the appropriate graduate faculty and academic department are anticipated. The successful applicant will be expected to recruit and support graduate students and will be encouraged to teach a graduate course in their specialty.

Salary and rank will be commensurate with qualifications and experience (minimum salary for Associate Researcher, \$51,816; Researcher, \$63,048). There will be continuous screening until the position is filled. The first screening date for applications is 15 March 1992. Send curriculum vitae, a description of research accomplishments and the names of three scholars from whom we can solicit letters of reference to: **E. Gordon Grau, Associate Director, HIMB, P.O. Box 1346, Kaneohe, HI 96744.** FAX: 808-236-7443. *The University of Hawaii is an Equal Opportunity/Affirmative Action Institution.*

## The Hong Kong Institute of Biotechnology Director

### The Institute

The Hong Kong Institute of Biotechnology (HKIB), a non profit organization in Hong Kong since 1989 and located at The Chinese University of Hong Kong, is seeking a Director for the Institute. The mission of HKIB is to assist in the development of a biotechnology industry for Hong Kong through providing downstream R&D capabilities in support of product commercializations.

### The Directorship

The Director will be a full-time appointment with residence in Hong Kong. The successful candidate should be a senior, internationally recognized scientist in the field of biotechnology, with academic qualifications equivalent to those normally expected of a full professor at a major university. Additionally, it is highly desirable for the new Director to be experienced in the development or commercialization of biotechnology-based products.

### Remuneration and Benefits

This is a fixed term renewable contract appointment. The HKIB offers a competitive remuneration package. Salary will be commensurate with qualifications and experience, with a minimum of HK\$685,620 per annum (exchange rate: US\$1 = HK\$7.8; £1 = HK\$13.9). Benefits include 21 days of annual leave, a contract-end gratuity (25% of total basic salary), medical and dental care, education allowances for children, housing benefit (with appointee contributing 7.5% of salary towards the provision of housing) and leave passage benefits for appointee and eligible dependents.

### Application Procedure

Applicants should submit a curriculum vitae with the names and addresses of at least 3 referees to Professor Charles K. Kao, Chairman, HKIB Directorship Search Committee, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong. The closing date for applications is **March 1, 1992**.

## College of Graduate Studies Medical University of South Carolina Charleston, South Carolina

### Chair

#### Department of Biostatistics, Epidemiology and Systems Science

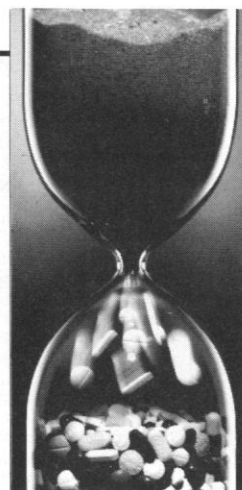
The Medical University of South Carolina is seeking applications and nominations for the position of Chairperson of the Department of Biostatistics, Epidemiology and Systems Science. Candidates must have the M.D., Ph.D., or Dr.P.H. degree with documented scholarly activities of excellence in their field and significant administrative experience.

Please send nominations or letters of application with resumes to:

James F. Spann, M.D., Chairman  
Search Committee for the Chair of Biostatistics,  
Epidemiology and Systems Science  
Cardiology Division  
Medical University of South Carolina  
171 Ashley Avenue  
Charleston, South Carolina 29425

Applications and nominations can be reviewed beginning immediately and the search will continue until a suitable candidate is selected.

The Medical University of South Carolina is an Equal Opportunity Employer.



## A TIME FOR ACHIEVEMENT

The recent opening of the new Glaxo Inc. Girolami Research Institute, located at our headquarters site in Research Triangle Park, NC, represents Glaxo's continued commitment to the discovery of medicines for the treatment of serious diseases of mankind. Our expanding Immunology Department will give individuals the opportunity to contribute to projects involving immunoregulation, gene regulation and cell activation. The following **three** positions are now available.

## SENIOR SCIENTIST

A position is available within the Immunoregulation Group for a Senior Scientist with extensive experience in all aspects of cell sorting, phenotyping and functional analysis of fluorescently labelled cells. The ideal candidate will be enthusiastic, communicative and capable of interacting with different project groups to develop and implement novel approaches to drug discovery research in the areas of inflammation/immunology, cancer and metabolic disorders. Candidate will use systems such as: Becton Dickinson FACStar Plus™ and FACScan™.

Background should include a B.S., M.S., or Ph.D. in biological discipline and extensive experience in cell sorting and analysis.

Please refer to Job # 9128-SS-SC on all resumes.

## ASSOCIATE SCIENTIST

Selected individual will play an important role in the exciting and growing program within the Gene Regulation Group. Candidate will be responsible for investigating the role of nuclear factors in gene expression and cell activation. Duties will include: general molecular biology, transcriptional assays, study of promoter function, and the analysis of nuclear factor proteins.

Background must include a B.S./M.S. in Molecular Biology, or a related discipline, with a minimum of 2-4 years laboratory experience. Experience in cell culture, gel shift and DNA footprinting analysis, preparation of nuclear and cytoplasmic cell extracts, and the study of DNA binding factors are required.

Please refer to Job # 9128-AS-SC on all resumes.

## POST-DOCTORAL FELLOW

Working within the Gene Regulation Group, selected individual will provide basic research in the area of lymphocyte activation and apoptosis (cell death). Research goals will include the identification of death-related genes and proteins and the analysis of their role in pathways leading to cellular activation, differentiation and cell death.

Background must include a Ph.D. in Molecular Biology, Immunology or a related discipline, with previous experience in molecular biology techniques and cell culture. Additional experience in the production of subtraction cDNA libraries is helpful.

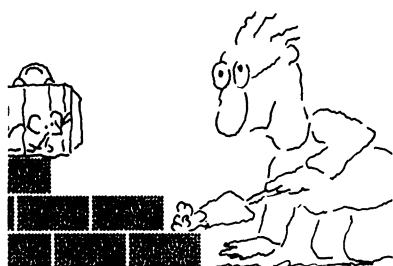
Please refer to Job # 9128-PD-SC on all resumes.

Our Research Triangle Park, NC location (near Raleigh, Durham and Chapel Hill) offers a lot more for people who seek a well-rounded lifestyle. This world-famous scientific, industrial and academic community affords access to respected universities, beautiful residential areas, major retail centers, excellent health care and abundant cultural and recreational facilities. Join Glaxo and enjoy excellent salaries, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction.

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

# Glaxo Inc.

# We'll Help You Build A New Lab



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

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

Write to:

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

The Global Weekly of Research  
**SCIENCE**

## POSITIONS OPEN

### ASSISTANT STAFF POSITION SECTION OF DIGESTIVE DISEASE RESEARCH THE CLEVELAND CLINIC FOUNDATION

Two new positions at the Assistant Staff (Professor) level are available in the Section of Digestive Disease Research, Research Institute, Cleveland Clinic Foundation. Positions are targeted for expansion of basic investigation in inflammatory bowel disease. The candidates must have a Ph.D. or M.D. degree and potential for an independent career in research. Their area of expertise can include molecular biology, cell biology, immunology, biochemistry, etc., but they must be interested in the gastrointestinal tract as a target organ and/or inflammation as a mechanism of disease. Package includes laboratory space, equipment, supplies, and salary for the staff and technician/fellows, and it is negotiable depending on qualifications. Interested individuals should send curriculum vitae and correspondence to:

**Dr. Claudio Fiocchi**  
Section of Digestive Disease Research  
Research Institute NNI-26  
The Cleveland Clinic Foundation  
9500 Euclid Avenue, Cleveland, OH 44195

*The Cleveland Clinic Foundation provides a smoke-free environment and is an Equal Opportunity Employer.*

### MOLECULAR BIOLOGY OF THE KIDNEY TULANE UNIVERSITY MEDICAL SCHOOL

The Department of Medicine, Section of Nephrology, is seeking a Ph.D. **FACULTY MEMBER** in the area of the molecular biology of the kidney. Area of interest can include transport, hormonal regulation of gene expression, metabolism or hypertensive-related research. Associate professor/professor level individual with track record of publications and funding preferred. Interested applicants should send curriculum vitae, statement of research interests and names of three references to: **Jules L. Puschett, M.D., Chairman, Department of Medicine, 1430 Tulane Avenue, New Orleans, LA 70112-2699. Tulane University is an Affirmative Action/Equal Opportunity Employer.**

**BIOLOGIST, SYSTEMATIC.** One-year position at University of Minnesota, Morris, beginning 16 September 1992. A.B.D. in organismic zoology/biology and 1 year of teaching experience required (graduate teaching experience acceptable). Ph.D. preferred. Duties include teaching plant and animal diversity and invertebrate zoology or other systematics/organismic course. Send letter of application, résumé, transcript, and three letters of reference by 6 March 1992 to: **Dr. M. S. Korth, Chair, Division of Science and Mathematics, University of Minnesota, Morris, Morris, MN 56267. The University of Minnesota is an Equal Opportunity Educator and Employer.**

**PHYSIOLOGIST.** Colorado College invites applications for a 1-year sabbatical replacement in animal physiology for the 1992-93 academic year. Courses to be taught include introductory vertebrate zoology, animal cell physiology, and vertebrate physiology. A Ph.D. is required. Engaging students in a research project is encouraged. The college seeks candidates who understand the perspectives of women and minorities in the curriculum and invites candidates to identify their strengths or experiences in these areas. Colorado College is a private, undergraduate, liberal arts institution enrolling 1850 students. Applicants should send a cover letter describing background and teaching interests, curriculum vitae, and three letters of recommendation to: **Ronald L. Capen, Chair, Department of Biology, The Colorado College, Colorado Springs, CO 80903, telephone: 719-389-6403. Applications must be postmarked by 6 March 1992. An Equal Opportunity Employer.**

**RESEARCH INSTRUCTOR IN MEDICINE.** Work independently with direction of division director in the following areas: generation and purification of monoclonal antibodies, peptide synthesis, PAGE analysis of membrane proteins radioiodination, HPLC purification and sequencing of peptide fragments of membrane proteins. Responsible for teaching basic laboratory techniques to fellows and students. M.D. or Ph.D. in human physiology and 2 years in fellowship training. There is no classroom teaching required for this non-tenure earning position. Salary: \$35,000 per annum; 8:00 a.m. to 5:00 p.m.; 40 hours per week. Contact: **Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222, Job Order #AL0626368.**

## POSITIONS OPEN

**RESEARCH INSTRUCTOR** to teach laboratory methodology and techniques. Develop and design experimental projects on assigned science topic. Interpret data applied to the project. Requires Ph.D. degree in molecular biology, biochemistry, or directly related field and 2 years of teaching/research experience in gene expression and immunology. Full-time position. Please submit cover letter, curriculum vitae, summary of proposed research and professional goals, to: **Dr. J. Donald Capra, Department of Microbiology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9048. Equal Opportunity/Affirmative Action Employer.**

### FACULTY AND POSTDOCTORAL POSITIONS

Available immediately in the Institute of Molecular Biology, Academia Sinica. Faculty position applicants should be individuals working in cell biology. 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, Republic of China.**

**POSTDOCTORAL POSITION.** Available 1 January 1992 to investigate the genetic and replication strategies used during poliovirus RNA replication in vivo. Send curriculum vitae, statement of research interests and experience, and names of three references to: **Dr. James Bert Flanagan, Department of Immunology and Medical Microbiology, Box 100266 JHMH, University of Florida, Gainesville, FL 32610-0266. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION, MOLECULAR IMMUNOLOGY.** Postdoctoral position available to study the molecular biology of CD4 and MHC class II proteins. Knowledge of immunology and techniques in molecular biology is desired. Funding available for U.S. citizen or permanent resident. Send curriculum vitae and names and telephone numbers of three references to: **Dr. Carolyn Doyle, Division of Immunology, Duke University Medical Center, P.O. Box 3010, Durham, NC 27710.**

### POSTDOCTORAL POSITION MEDICAL LABORATORY IMMUNOLOGY

Position is available 1 July 1992 for 2 years to provide training in all areas of diagnostic laboratory immunology. M.D. or Ph.D. applicants should send current curriculum vitae with the names of three references by 1 March 1992 to: **James D. Folds, Ph.D., Clinical Microbiology-Immunology Laboratories, CB #7600, Room 1035 East Wing, UNC Hospitals, The University of North Carolina, Chapel Hill, NC 27514. The University of North Carolina and The UNC Hospitals are Equal Opportunity/Affirmative Action Employers.**

**POSTDOCTORAL POSITION IN CONSERVATION BIOLOGY** available immediately, for at least 1 year, to study effects of habitat fragmentation on breeding bird communities. Duties include helping develop study design, censusing, and developing proposals for continuing funding. Additional opportunities for involvement in studies of an endangered cooperative breeder, the red-cockaded woodpecker. Send curriculum vitae with names of three references by 15 February 1992 to: **Dr. Jeffrey Walters, Department of Zoology, North Carolina State University (NCSU), Box 7617, Raleigh, NC 27695-7617. NCSU is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** immediately available for investigating the cellular and molecular biology of genes in tumor progression of leukemias and lymphomas. Research involves genomic, cDNA cloning of novel genes and their variants, analysis and characterization of gene structure, regulation of gene expression, studies on the protein products, transfection into hematopoietic and nonhematopoietic cells. Send curriculum vitae and names of three references to: **Dr. Charlotte E. Gauerker, Jefferson Cancer Institute, Blue Nile Life Sciences Building, Room 1006, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107. FAX: 215-923-2117. Thomas Jefferson University is an Equal Opportunity Employer. Women and minority are especially encouraged to apply.**

## Women In Science 13 March 1992

### Recruitment Advertisers:

This career-related issue is the perfect environment for your recruitment message and an excellent way to reach *SCIENCE's* readership of nearly 1/2 million\* scientific professionals.

### Topics to be explored: Women's Progress In Science Mentoring Networking Career Advancement Two Career Couples In Science

Take advantage of greater exposure by placing your full page ad in this special section featuring women in science. The traditional recruitment section is also available.

### Bonus Distribution: Association For Women In Science

Your recruitment ad will receive even more visibility in this issue which will be sent in a special mailing to the members of the Association For Women In Science.

Call Janis Crowley at 212-496-7704 or 202-326-6532.

# SCIENCE

\* Harvey Research Studies.

## CHAIR, PHARMACOLOGY DEPARTMENT

St. Jude Children's Research Hospital, a private research institute, is recruiting a new chairperson for its established Department of Pharmacology. The appointee will be expected to lead an internationally recognized program in his/her area of interest and to shape the future direction of research within the institution, through faculty recruitment and by contributions to the institution's overall scientific leadership, as a member of the Institution's Executive Committee. The institute is currently undergoing major expansion, and has recently occupied a new 240,000 sf research tower, where substantial laboratory and office space has been reserved for the pharmacology chair. The department currently has 9 faculty, all of whom are NIH funded investigators, and the new chair will be expected to recruit additional faculty. The current departmental budget is approximately \$3 million. The department interfaces with established basic science programs in Virology and Molecular Biology, Biochemistry, Immunology, and Tumor Cell Biology, and established clinical research programs in Hematology/Oncology, Pharmaceutical Sciences and Infectious Diseases. Appointment to the University of Tennessee graduate faculty is also possible. The Chair's salary will be provided through committed endowment funds, together with additional resources commensurate with the needs of a dynamic and productive individual.

**Applicants should submit a curriculum vitae and the names and addresses of four references to:** Dr. William E. Evans, Chair, Pharmacology Search Committee, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, Tennessee 38105



St. Jude Children's Research Hospital is an Affirmative Action/Equal Opportunity Employer

## ECOTOXICOLOGIST

EBSI has an immediate opening for a qualified individual specializing in Ecotoxicology. The successful candidate will have a Ph.D. in Ecotoxicology or a related field and 1-2 years experience in Environmental Risk Assessment, effluent biomonitoring, and toxicity reduction/identification evaluations. It would also be advantageous if the candidate has knowledge/background in the areas of wastewater and solid/hazardous waste treatment and in-stream hazard assessments. The successful candidate will act as a consultant to our affiliates on matters pertaining to the assessment of environmental hazards associated with effluents, hazardous wastes, site remediation, etc. Client interactions are an important aspect of our work, and thus, we are seeking an individual who has excellent communication skills, as well as the ability to manage small to large projects.

We offer a competitive salary, attractive benefits, and a chance to join a dynamic organization in a position with opportunities for career growth. Please send resume to Francaen T. Cohen, Human Resources.

**EXXON BIOMEDICAL SCIENCES, INC.**  
Mettlers Road, CN 2350  
East Millstone, NJ 08875-2350  
Equal Opportunity Employer M/F/H/V

## PHARMACOLOGY RESEARCH ASSOCIATE PROGRAM

The National Institute of General Medical Sciences is seeking applications for the Pharmacology Research Associate (PRAT) Program at the National Institutes of Health (NIH). The PRAT program is a 2 year postdoctoral training program for 11 recently training, highly qualified scientists per year to spend 2 years working in one of the research laboratories of the component institutes of the NIH and the Alcohol, Drug Abuse, and Mental Health Administration. A wide variety of research opportunities are available for people trained in pharmacology who wish to expand that training at the NIH, and for people trained in related areas who wish to apply their training to problems of pharmacological interest. Research proposals are not required for application. **Deadline for receipt of applications for positions beginning in July of 1993 is March 2, 1992.** For more information and application material, please write to:

**Program Assistant  
Pharmacology Research  
Associate Program  
National Institute of General  
Medical Sciences  
Westwood Building, Room 919  
Bethesda, Maryland 20892**

NIH is an Equal Opportunity Employer

## Director - Immunology

**Experienced scientist (Ph.D. or M.D.) to lead and direct immunochemistry research involved in development of immunoassays and immunotoxins, isolation of marine natural products, and development of novel uses for monoclonal antibodies. Hands on involvement expected. Develop new product proposals, contract research and grant proposals. Industry management experience desirable. This position offers an outstanding opportunity to shape the future growth of the business and share in its rewards.**

**Hawaii Biotech offers excellent salary and benefits, opportunities for equity participation, and a location with quality of life second to none. Send your application, resume and three references to:**



**Tom Humphreys, Ph.D.  
Vice President  
Hawaii Biotechnology  
Group, Inc.  
99-193 Aiea Heights Dr.  
Honolulu, HI 96701**

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available 1 July 1992 for an M.D. or Ph.D. with three or less years of experience in molecular biology/genetics to work with group identifying genes determining insulin resistance, obesity, insulin secretion, and diabetes mellitus in man. Salary up to \$30,000 per year depending on experience. Send curriculum vitae to: **Clifton Bogardus, M.D., National Institutes of Health, 4212 North 16th Street, Room 541, Phoenix, AZ 85016.**

### POSTDOCTORAL POSITION IN YEAST MOLECULAR BIOLOGY

Available immediately to perform promoter and DNA sequence analysis of cloned lysine genes. Experience in subcloning, Northern, Southern, deletion analysis and DNA sequencing required. Send résumé, evidence of research experience and recommendation letters to: **Dr. J. K. Bhattacharjee, Department of Microbiology, Miami University, Oxford, OH 45056. FAX: 513-529-2431.**

**POSTDOCTORAL POSITION** available to characterize and clone novel cell interaction molecules expressed within lymphoid tissue using molecular and biochemical approaches. Applicants should have a strong background in molecular biology. Please send curriculum vitae to: **Andrew Farr and Alejandro Aruffo, Department of Biological Structure SM-20, University of Washington, Seattle, WA 98195.**

### POSTDOCTORAL FELLOWSHIP

A postdoctoral fellowship is available in the area of signal transduction and molecular mechanism of neuroendocrine function. Laboratory is interested in hormone binding, calcium ion channels, protein kinase C, calmodulin, gene regulation and expression, intracellular and extracellular calcium, lipid metabolism and their regulation of hormonal release, receptor up and down regulation, and target cell sensitization and desensitization.

The University of Iowa College of Medicine is the home of the largest teaching hospital in the United States and is a major research center (upper 15% of NIH grantees). It is located in a rural setting offering excellent profession, undergraduate, and public schools along with low crime and a pleasant lifestyle.

Qualified applicants should forward curriculum vitae, list of publications, a statement of interest and the names of three to five individuals suitable as professional references to:

**Dr. P. Michael Conn**  
Professor and Chairman  
Department of Pharmacology  
The University of Iowa College of Medicine  
Iowa City, IA 52242-1109  
Telephone: 319-335-7965  
FAX: 319-335-8930  
BITNET: CMDPMCWY@UIAMVS

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

### TILTON POSTDOCTORAL FELLOWSHIP IN SYSTEMATICS

A 1-year award for collection-based research at the California Academy of Sciences. Stipend of \$22,000 plus \$1,000 for research expenses. Doctoral degree must have been awarded within past 5 years; begins 1 September 1992. To apply, send résumé, research plan, and three references by 15 February 1992 to: **Human Resources, Tilton Fellowship Committee, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118.**

### POSTDOCTORAL RESEARCH FELLOW

Position available for studies on the role of nervous tissue proteoglycans in cell interactions and developmental processes using molecular and cell biological approaches. Please send curriculum vitae and the names of three references to: **Dr. Richard Margolis, Department of Pharmacology, New York University Medical Center, New York, NY 10016. An Equal Opportunity Employer.**

**SCIENCE** recruitment ads reach thousands of scientists in all disciplines, worldwide. Classified Advertising telephone: 202-326-6555. FAX: 202-682-0816.

## POSITIONS OPEN

### POSTDOCTORAL FELLOWS CENTER FOR NEUROBIOLOGY UNIVERSITY OF CALIFORNIA (UC), DAVIS

The Center for Neurology at UC Davis has positions available for postdoctoral research and training in cognitive neuroscience. Persons holding Ph.D. or M.D. degrees that are interested in the brain bases of cognitive function are encouraged to apply. The newly established center will serve as a focus for the continuing development of the neurosciences at UC Davis. Faculty members in the cognitive neuroscience group have active research programs in various areas of cognition, including studies of attention, learning, memory, language, visual and auditory perception, hemispheric specialization and cortical function. Research in healthy persons and well-defined patient populations is conducted using behavioral, electrophysiological, and metabolic and structural imaging methods. Studies are also conducted in animals including nonhuman primates, the latter being facilitated by the California Primate Research Center at UC Davis. Send curriculum vitae, statement of interests and the names, telephone numbers and addresses of three references to: **Dr. Michael Gazzaniga, Director, Center for Neurobiology, Division of Biological Sciences, University of California, Davis, CA 95616. The University of California at Davis is an Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL FELLOWSHIP RESEARCH ASSOCIATE IN HUMAN MONOCLONAL ANTIBODY LABORATORY

Candidates should have 1 to 2 years of postdoctoral experience in microbiology/immunology with an emphasis in humoral immunity. Background in immunochemistry or molecular biology would be desirable but secondary to cell biology experience. The successful candidate must be available for a personal interview. Send curriculum vitae and three references to: **Dr. Marshall R. Posner, Director of Human Monoclonal Antibody Laboratory, New England Deaconess Hospital, CRI Building—011, 185 Pilgrim Road, Boston, MA 02215.**

### FELLOWSHIPS IN VISION SCIENCE

Predocorral and postdoctoral research fellowships are available at the University of Florida College of Medicine through an NIH, National Eye Institute Training Grant. Research emphases are in vision cell biology, molecular biology, and biochemistry. The 12 faculty preceptors maintain primary appointments in the Departments of Anatomy and Cell Biology, Biochemistry and Molecular Biology, Immunology and Medical Microbiology, Neuroscience, Pathology, and Pharmacology, thus allowing trainees to gain access to virtually the full range of scientific and training expertise available at the college. Inquiries for complete program description and applications forms should be sent to: **Dr. William Hauswirth, Box 100284, University of Florida, Gainesville, FL 32610-0284.** Applications will be accepted at any time, but decisions are normally made in April/May for August admission. *Equal Opportunity/Affirmative Action Employer.*

**GLOBAL CHANGE POSTDOCTORAL FELLOWSHIPS** are available from the Department of Energy for research related to the U.S. Global Change Research Program. The fellowships address the nation's global change activities carried out by DOE and the Committee on Earth and Environmental Sciences. Stipend is \$35,000. Fellowships are tenable at approved federal and university laboratories including those of DOE, NASA, EPA, and others agencies in CEES. A doctoral degree received after 1 May 1989 is required as is *U.S. citizenship or PRA status*. Deadline is 15 February 1992. Contact: **Global Change Postdoctoral Fellowships, Science/Engineering Education Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117; telephone: 615-576-4805.**

### POSTDOCTORAL RESEARCH ASSOCIATE

Position available to study role of tumor suppressor genes in human hereditary tumors. Experience in basic molecular biology techniques and cell culture is required. Submit curriculum vitae and names of three references to: **Medical Genetics Search Committee, H. A. Chapman Research Institute of Medical Genetics, Children's Medical Center, 5300 East Skelly Drive, Tulsa, OK 74135.**

## POSITIONS OPEN

**POSTDOCTORAL RESEARCH ASSOCIATE, BROOKHAVEN NATIONAL LABORATORY.** The Biology Department has a position available for a recent Ph.D. preferably with experience in protein purification and/or DNA sequence analysis to participate in studies related to the function of a human nuclear protein kinase (DNA-PK) that is activated by double-stranded DNA. DNA-PK phosphorylates several DNA binding proteins including transcription factors Spl, Oct-1, Fos, Jun and SRF, as well as viral and cellular tumor antigens. Applicants should submit curriculum vitae, a statement of research interests, and names and addresses of three references to: **Dr. Carl W. Anderson, Biology Department, Building 463, Brookhaven National Laboratory, Associated Universities, Inc., Upton, Long Island, NY 11973. Equal Opportunity Employer/MF.**

### POSTDOCTORAL RESEARCH INSTITUTE OF BIOSCIENCES AND TECHNOLOGY—HOUSTON

We are interested in adding highly motivated individuals to our research effort concerning the structural and functional organization of the two major domains of the human insulin receptor: the extracellular ligand binding domain [*J. Biol. Chem.* **265**, 13386-13392 (1990)] and the cytoplasmic protein-tyrosine kinase domain [*J. Biol. Chem.* **266**, 990-996; 1390-1395; 3565-3570; 12369-12371; 13405-13410; 21804-21809 (1991)]. A strong background in protein chemistry and/or molecular genetics would be particularly useful. Applicants should send curriculum vitae, including a statement of research interests and the names of at least three references to:

**Leland Ellis, Ph.D.**  
Professor of Biochemistry and Biophysics  
Institute of Biosciences and Technology  
Texas A&M University  
2121 Holcombe  
Houston, TX 77030

*Equal Employment Opportunity/Affirmative Action.*

### POSTDOCTORAL RESEARCH ASSOCIATE ELECTROPHYSIOLOGY/CELL VOLUME

Positions to study (i) modulation of Na channels at single channel level with patch clamp and (ii) effects of ion transport and cGMP on cardiac cell volume with video microscopy. Experience in related techniques preferred. Contact: **Dr. C. M. Baumgarten, Department of Physiology, Medical College of Virginia, Richmond, VA 23298-0551, Baumgart@VCUVAX or @ruby.vcu.edu. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Opportunities Employer.** Application deadline is 30 days from date; review will continue until position is filled. *Women and minorities are encouraged to apply.* Experience working in a culturally diverse setting is highly preferred.

### POSTDOCTORAL RESEARCH ASSOCIATE REGULATORY LIPID BIOCHEMISTRY AND CELL BIOLOGY

A postdoctoral position is available to participate in an ongoing research program focused on the biochemical characterization and cloning of key enzymes that modulate phospholipid synthesis and degradation. Candidates with a Ph.D. degree interested in joining a multidisciplinary group applying contemporary techniques of molecular biology and biochemistry to problems related to the regulation of lipid metabolism should submit their curriculum vitae, reprints and names of three references to: **Dr. Charles O. Rock, Biochemistry Department, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. An Equal Opportunity/Affirmative Action Employer.**

**RESEARCH ASSOCIATE POSITION.** Ph.D. in molecular biology or related field. Two years of postdoctoral experience in biotechnology and cell biology. Will use specialized molecular biology techniques involving P1 large insert library construction from somatic cell hybrid DNA, pulse field gel electrophoresis, linking libraries, DNA sequencing and polymerase chain reaction analysis. Clones obtained will be used to physically map human chromosome 19. *Applicants who are not U.S. citizens must indicate basis for work authorization in the United States.* Salary is \$23,000 per year; 40 hours per week, 8:30 a.m. to 5:00 p.m. Contact: **Employment Security Commission of North Carolina, 516 North Mangum Street, Durham, NC 27702** or your nearest Job Service Office. Refer to Job Order No. 3011281, DOT code 090.227-010.



University of Basel  
Department of Zoology

## ACADEMIC POSITION IN CELL BIOLOGY

This is a non-renewable academic position available for up to 5 years. We require a cell biologist to join a group investigating an in vitro transdifferentiation and regeneration system based entirely on striated muscle cells of jellyfish.

The candidate should have a Ph.D. and a good background in biochemistry. His/her work will focus on the mechanisms which stabilize cells in the differentiated state. It will include biochemical analysis of extracellular matrix components and application of mAb and standard cell biological techniques to early trans-differentiating cells. Some teaching duties are included. The salary will be in the range Sfr. 50'000-70'000 per year and will depend on experience and qualifications. Habilitation will be possible. Starting date: 1.4.92 or by arrangement.

Applications including a c.v. and the names of two referees should be sent to:

**Prof. Dr. V. Schmid**  
**Zoologisches Institut**  
**Rheinsprung 9**  
**CH-4051 Basel**  
**Switzerland**

ImmunoGen is a rapidly growing biotechnology company dedicated to the development of immunotoxins and other cancer therapeutics. Three of the company's products are in Phase II or Phase I/II clinical trials. We are seeking a talented scientist to join us in exploring new approaches to treating human disease.

## Process Development Scientist Hybridoma Cell Culture

The successful candidate should have a degree in biological sciences or engineering, five years' experience in the development and scale-up of cell culture processes, including cell line optimization, media formulation, bioreactor technologies, GMP. The individual will initiate a new program leading to pilot production of therapeutic antibodies for clinical trials and support future manufacturing-scale operations.

ImmunoGen offers an excellent salary and benefits package including 100% paid Health and Dental Insurance and Tuition Assistance.

Please send a detailed resume including three references and a statement describing your scientific interests and career goals to: **Jeanne Horgan, Personnel Department, ImmunoGen, Inc., 148 Sidney Street, Cambridge, MA 02139.** An Equal Opportunity Employer.

# IMMUNOGEN, INC.

Institute of Biomedical Sciences, Academia Sinica

## POSTDOCTORAL POSITIONS

The Institute of Biomedical Sciences (IBMS), Academia Sinica has postdoctoral positions available in the following areas:

- A. Molecular and Cellular Mechanisms in Cardiovascular Disease and Circulatory Biophysics**
- B. Cancer Research**  
Cell Biology, virology, drug action, immunology, toxicology, and etiology
- C. Neuroscience, Molecular and Cellular Neurobiology**  
Central cardiovascular regulation  
Neurodegenerative diseases, learning and memory  
Neuronal differentiation  
Receptor and signal transduction  
Pain
- D. Molecular Parasitology**  
Studies on the molecular biology of *Angiostrongylus cantonensis*, *Trichomonas vaginalis*, and *Leishmania* sp.
- E. Epidemiology**  
Cardiovascular, nutritional, and infectious disease epidemiology  
Diet, virus and cancer.
- F. NMR Imaging and Spectroscopy**  
Macromolecular structure and dynamics  
*In vivo* NMR spectroscopy, MRI

The Institute is recently established, with excellent facilities and stable funding. Positions are available for 1-3 years, starting A.S.A.P. with annual salary in the range of NT\$480,000 (US\$18,000 or £10,500) to NT\$624,000 (US\$24,000 or £13,500). Applications, with area of interest, including curriculum vitae, reprints, names, addresses, phone numbers of three individuals able to provide recommendation, should be sent to: Recruitment Committee, Institute of Biomedical Sciences, Academia Sinica, Taipei 11529, Taiwan, ROC. FAX: 886-2-782-5573.

## R & D POSITIONS with MEDIMMUNE, INC.

MedImmune Inc. is committed to the discovery and application of novel molecular and immunologic approaches toward the development of vaccines and therapeutic agents for human infectious diseases. We are expanding our research and development activities and have several openings for creative, hardworking individuals with records of demonstrable productivity in the following areas.

**IMMUNOLOGY**, Scientist level—The individual should have a PhD degree and the research experience to evaluate humoral and cellular responses to candidate vaccines in small animal models.

**ANIMAL CELL CULTURE/FERMENTATION**, Scientist level—The individual should have an MS or PhD degree in Biochemical Engineering/Chemical Engineering and significant experience in microbial fermentation and animal cell culture for production of recombinant proteins, large scale bioreactor design/operation, process development, and GMPs.

**PROTEIN PURIFICATION**, Scientist level—The individual should have a PhD degree in Biochemistry/Chemistry and a record of achievement in purification of recombinant proteins from microbial and animal cell culture systems. Experience in bioseparations process equipment design/operation, process development, large scale protein purification, and GMPs is required.

**ANALYTICAL BIOCHEMISTRY**, Scientist level—The individual should have a PhD degree in Analytical Chemistry/Biochemistry; and experience in analytical methods development and characterization of recombinant proteins to support clinical studies. Experience in HPLC, ELISA, gel electrophoresis, spectroscopy, laboratory automation, and GMPs is required.

**PLASMA SCREENING**, Scientist level—The individual should have an MS or PhD degree and laboratory experience in cell culture, preparation of viral antigens, virus neutralization assays, ELISA methods, laboratory automation and GMPs. Screening will support immunoglobulin product development.

We are an equal opportunity employer and offer competitive salaries and benefits, and a unique opportunity for professional growth. Please submit your resume for prompt, confidential consideration to: **MedImmune, Inc. Human Resources, 35 West Watkins Mill Road, Gaithersburg, MD 20878.**





## Research Scientist/ Sr. Research Scientist

# A BOND THAT'S GROWING.

Almost one year old, Du Pont Merck, the joint venture between Du Pont and Merck & Co., Inc., is growing by leaps and bounds. And everyone involved from Corporate to R&D is growing with us.

Our R&D Drug Metabolism Division currently has an opening for a Research Scientist/Sr. Research Scientist. In this role, you will develop specific, sensitive and reproducible bioanalytical assays for pre-development compounds and their metabolites to support discovery research projects.

The ideal candidate will have a PhD in Analytical Chemistry/Pharmaceutics or equivalent with 0-4 years industrial experience in bioanalytical assay development/metabolism studies.

Our location, near Wilmington, DE, offers an attractive lifestyle with easy access to all the cultural, academic and recreational activities of the Eastern Seaboard. The Du Pont Merck Pharmaceutical Company can also offer you an excellent compensation and benefits package. To be considered, please forward your resume to: Employment Office, Dept. SCI-124, The Du Pont Merck Pharmaceutical Company, Du Pont Experimental Station E400/6220,

**DU PONT**  
**MERCK**

Wilmington,  
DE 19880-  
0400. An Equal  
Opportunity  
Employer.

**The Du Pont Merck Pharmaceutical Company**  
Merging Strengths . . . Emerging Opportunities.

# MAKING THE GOOD THINGS IN LIFE BETTER.

At the NutraSweet Company, our widely-accepted technological breakthroughs allow us to make today's world a better place for health-conscious consumers. Two outstanding opportunities exist in our FERMENTATION GROUP for individuals looking to join a global leader, committed to the development of improved consumer food choices through the application of advanced technologies.

## SR. RESEARCH SCIENTIST

As a key member of the Fermentation Group, the candidate will be responsible for management of the strain evaluation program, as well as, the formulation of strategies for improvement of fermentation processes. Areas of research will focus on understanding the metabolism/physiology of microorganisms and maximizing the metabolic potential of targeted strains for the commercialization of new fermentation products.

\*The candidate should have a Ph.D in Microbiology or Biochemical Engineering with 3 to 4 years of industrial experience. Knowledge of microbial physiology and thorough understanding of fermentation processes is essential. Hands on experience with lab and pilot scale fermentation equipment, as well as, computer control systems is expected. Excellent communication skills and supervisory experience are required.

## RESEARCH SCIENTIST

The Fermentation Group also has an immediate opening for an Analytical Biochemist. Responsibilities include metabolite identification and pathway analysis using a multi-disciplinary team approach as it pertains to strain improvement. Excellent communication and interpersonal skills are required and knowledge of microbial physiology is a plus.

This position requires a Ph.D or MS with 5+ years experience in Biochemistry or Microbiology. This scientist should have a strong background in analytical characterization of fermentation products using such techniques as HPLC, GC, TLC and electrophoresis. Knowledge of assay development is also required.

The NutraSweet Company offers an excellent compensation and benefits package, career opportunities and more. For immediate consideration, forward your resume, including salary history, to: **The NutraSweet Company, Attn: Human Resources, Beth Levine, 601 E. Kensington Road, Mt. Prospect, IL 60056.** eoe m/f/h

**The NutraSweet Company**

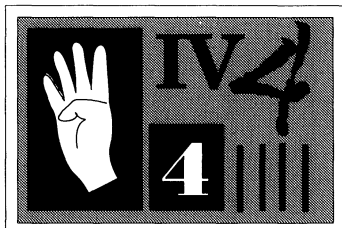


## Postdoctoral Researchers

Genentech, a leader in the biotechnology industry, has two exceptional opportunities for Postdoctoral Researchers to study the molecular interactions of cytokines with their receptors and mechanisms of cytokine signal transduction. Experience in molecular biology and/or protein biochemistry required; experience in cell biology and/or immunology is desirable. This project is interdisciplinary and the research environment is both exciting and productive. (See *Proc. Natl. Acad. Sci. USA*, 88, pp. 10535-10539, 1991)

Please send your curriculum vitae and three letters of recommendation before February 29th, 1992 to Genentech, Inc., Human Resources Dept. YS/SC, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal employment opportunity.

**Genentech, Inc.**



## THE SCIENCE RECRUITMENT "FOUR-DAY CLOSE"

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

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

Film (right-reading, emulsion face down) or full camera-ready art and insertion order must reach:

**SCIENCE**, Attention: Daniel Moran, 1333 H Street, N.W., Washington, DC 20005 by NOON Mondays (except for legal holidays when material must reach **SCIENCE** by NOON Fridays). Because space is limited, the four-day close page will be reserved on a first-come, first-served basis, at a 15% premium. 1/4, 1/2 or full page only.

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

You can call it "INSTANT RECRUITMENT."

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

# SCIENCE

Advertising Department,  
1333 H Street, N.W.,  
Washington, DC 20005

**CURRENT DISTRIBUTION 160,000**

## THOMAS JEFFERSON UNIVERSITY

### College of Graduate Studies

offers Ph.D. training in  
**Biochemistry and Molecular Biology,  
Molecular Genetics, Immunology,  
Microbiology and Molecular Virology,  
Molecular Pharmacology and  
Structural Biology, Pathology and Cell Biology**

Jefferson Cancer Institute,  
Carlo M. Croce, M.D., Director;  
Jefferson Institute of Molecular Medicine,  
Darwin J. Prockop, M.D., Ph.D., Director;  
Alcohol Research Center,  
Emanuel Rubin, M.D., Director

Thomas Jefferson University has established a flexible entry program for graduate studies in biochemistry and molecular biology, molecular genetics, immunology, microbiology and molecular virology, molecular pharmacology and structural biology, and pathology and cell biology through several departmental and interdepartmental programs. In the first year, students will take a common core curriculum consisting of courses in biochemistry, molecular biology and cell biology, followed by specialized courses in their particular area of concentration. After performing research rotations in three laboratories, students will choose their thesis advisor and the discipline for the Ph.D. degree. The faculty of the Departments of Biochemistry and Molecular Biology, Microbiology and Immunology, Pathology and Cell Biology, Pharmacology and the Jefferson Cancer Institute and Jefferson Institute of Molecular Medicine have a long standing record of graduate training; currently, there are 116 Ph.D. and M.D.-Ph.D. students in these programs.

State of the art research laboratories are located in the new 11-story Lewis W. Bluemle, Jr. Life Sciences Building and in nearby Jefferson Alumni Hall. Facilities available for research include oligonucleotide synthesis and automated DNA sequencing, peptide synthesis and microsequencing, facilities for cell flow cytometry and transgenic mouse production, digital imaging fluorescence and laser scanning confocal microscopy, scanning and transmission electron microscopy, and strong support for structural biology investigations including two-dimensional nuclear magnetic resonance, X-ray crystal structure analysis, molecular modelling and graphics, and a software development laboratory utilizing high performance Silicon Graphics and Convex computers.

Students accepted into the program will be provided with full financial support including tuition and a competitive stipend. For interested and qualified students, an M.D./Ph.D. program is available.

The 13 acre campus of Thomas Jefferson University is located in the historical downtown area of Philadelphia within walking distance of many places of cultural interest including concert halls, theaters, museums, art galleries and historic sites. There are numerous intercollegiate and professional athletic events. Convenient bus and subway lines connect the University with other local universities and colleges and with several outstanding libraries. The proximity of the New Jersey shore and the Pennsylvania mountains offers year-round recreational opportunities, and New York City and Washington, D.C. are each just a few hours away.

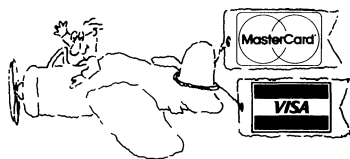
Thomas Jefferson University is a medical university which emphasizes the biological sciences. It evolved from the Jefferson Medical College, which was founded in 1824, and, in addition to the Medical College, includes the College of Graduate Studies, the College of Allied Health Sciences, the University Hospital, and various affiliated hospitals and institutions. The basic medical sciences building houses the Student Commons, study lounges, a swimming pool, a sauna, a gymnasium, and a handball-squash court.

For further information regarding September 1992 entrance call or write:



Thomas  
Jefferson  
University

Ms. Jessie Pervall  
Admissions Coordinator  
College of Graduate Studies  
Thomas Jefferson University  
1020 Locust Street  
Philadelphia, PA 19107-6799  
(215)955-8986



## ANNOUNCING A NEW SERVICE FROM SCIENCE

Now you can pay for your line  
classified ad with a credit card —  
we accept MasterCard and VISA.

Please let us know on your ad  
order that you wish to take  
advantage of this service, or ask  
us for further details.

**SCIENCE Classified Advertising**  
Tel: 202-326-6555  
FAX: 202-682-0816

## 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.

## POSITIONS OPEN

**RESEARCH ASSOCIATE** to study the signal transduction mechanisms by melatonin. Research will involve characterization of novel melatonin receptor subtypes and their receptor-effector coupling mechanisms. Applicants must have a Ph.D. in biochemistry with training in pharmacology and expertise in signal transduction, cell culture, microdialysis and liquid chromatography. Ability to develop independent research also required. Salary commensurate with qualifications. Send curriculum vitae and names of at least three references to: **Dr. Margarita L. Dubocovich, Department of Pharmacology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.**

### RESEARCH ASSOCIATE IN PLANT CELL WALL CARBOHYDRATE BIOCHEMISTRY

The University of Georgia Complex Carbohydrate Research Center seeks a postdoctoral associate interested in research on the structural characterization of plant cell wall polysaccharides. Ph.D. desired in chemistry or biochemistry or an equivalent combination of education and experience. Experience with one or more of the following techniques required: GC, GC-MS, LC, NMR spectroscopy. Salary depends on experience. Position available immediately; applications will be reviewed after 15 February 1992. Please send curriculum vitae and letter of application to: **Drs. Alan Darvill or Peter Albersheim, Complex Carbohydrate Research Center, The University of Georgia, 220 Riverbend Road, Athens, GA 30602.** An Equal Employment Opportunity/Affirmative Action Institution.

**RESEARCH ASSOCIATE** for university in central Ohio. Conducts scholarly research in agricultural science and geochemistry; develops and modifies computer specification models of MINTEQ and GEOCHEM; develops new technologies for in situ lead immobilization in contaminated environment; analyzes data to develop theories controlling lead immobilization processes; publishes scientific manuscripts in refereed literature; attends and presents data at scientific meetings. No experience required in the duties described but applicants will qualify with the following: Ph.D. in agronomy and 2 years of experience in determining activities of heavy metals and mechanisms controlling their activities in contaminated environment; applying and modifying computer models of MINTEQ and GEOCHEM; at least one publication in area of heavy metal chemistry; experience can be gained concurrent with degree. Forty hours per week, 8:00 a.m. to 5:00 p.m., Monday to Friday; \$27,360 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumés in duplicate (no calls) to: **J. Davies, JO#1260355, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

### RESEARCH ASSOCIATE BIOMEDICAL ENGINEERING UNIVERSITY OF TENNESSEE, MEMPHIS

The Department of Biomedical Engineering, University of Tennessee, Memphis, is seeking to fill a research associate position in its Medical Imaging Research Group. The position is funded for 2 years by a research grant from the National Science Foundation aimed at studying the feasibility of performing intravenous coronary angiography using K-emission x-rays. Experiments will be performed at Brookhaven National Laboratory. Applicants must possess a doctoral degree in biomedical or electrical engineering, medical physics, or related fields, and should have experience in experimental digital imaging research. Experience with CCD TV camera systems of high power electron accelerators is desirable. Applications will be received until 29 February 1992.

The BME Department currently has nine core and joint faculty, three administrative staff, a Bioinstrumentation Division consisting of 18 staff (13 electronic technicians and machinists, and 5 clerical and supervisory staff) and a recently initiated M.S. and Ph.D. graduate program.

Applicants should submit a certification of doctoral degree and request an application for position number 140A from **The University of Tennessee, Memphis, Human Resources Department, 178 Walnut, Memphis, TN 38163.**

*Applications from women and minority candidates are encouraged. The University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer, Rev. 2 (4/91).*

## POSITIONS OPEN

**RESEARCH STAFF ASSOCIATE.** Position available for research into neuronal differentiation and degeneration in *Caenorhabditis elegans*. Must have experience with *C. elegans* genetics and transformation as well as general biology skills. Ph.D. or equivalent. Salary commensurate with experience. Send curriculum vitae and names of references to: **Professor Martin Chalfie, 1018A Fairchild Building, Columbia University, New York, NY 10027.** An Affirmative Action/Equal Opportunity Employer.

**RESEARCH ASSOCIATE** for university in central Ohio. Conducts scholarly research on interactions between soil organic matter and organic and inorganic compounds in relation to their environmental fate (particularly to bioavailability) using various extraction and fractionation techniques, spectroscopic methods such as Fourier transform infrared (FTIR), UV-visible and fluorescence and isotope tracer methodology; presents research findings at national conferences; publishes research articles in scientific journals. No experience required in the duties described but applicants will qualify with the following: Ph.D. in agronomy and 2 years of research experience in soil organic matter using extraction and fractionation techniques and bioavailability studies using isotope tracer methodology; of the 2 years, 1 year of experience with FTIR, UV-visible, fluorescence; one course each in advanced organic chemistry, soil organic matter and tracer methodology; at least two published research articles on soil organic matter in refereed journals. Experience may be gained before, during or after degree. Forty hours per week, 8:00 a.m. to 5:00 p.m., Monday to Friday; \$27,000 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumés in duplicate (no calls) to: **C. Bussard, JO#1260352, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

### EMBRYOLOGIST STAFF SCIENTIST

The H. A. Chapman Research Institute of Medical Genetics is seeking an embryologist with experience in IVF/IVF and micromanipulation to establish a research program in preimplantation genetics. Candidates who could interact with an active cytogenetics and molecular genetics research group and collaborate with reproductive endocrinologist in assisted reproduction technologies are encouraged to apply. Ph.D. degree and 2 years of postdoctoral experience required. Submit curriculum vitae, reprints, statement of research interests and three references to: **Medical Genetics Search Committee, H. A. Chapman Research Institute of Medical Genetics, Children's Medical Center, 5300 East Skelly Drive, Tulsa, OK 74135.**

**MASS SPECTROMETRIST.** The Division of Biochemical Toxicology at DHHS/PHS/FDA's National Center for Toxicological Research (NCTR) has an opening for a mass spectrometrists. The mass spectrometry facility at NCTR includes several quadrupole mass spectrometers (four GC/MS's, a LC/MS, a triple quadrupole MS), an ion-trap GC/MS, and a high-mass instrument configured for FAB. Ongoing research in the division is concentrated on the role of DNA adducts in mutagenesis and carcinogenesis, the importance of genetic heterogeneity in carcinogen activation and deactivation, drug-induced hypersensitivities, and the development of NMR and mass spectral methods to detect toxic responses. NCTR is seeking an individual with a broad background in biomedical mass spectrometry and/or experience in LC/MS, with research interests that complement these areas. The opening is a civil service research scientist position at the GS-12/13 (\$38,861 to \$60,070) level and is dependent upon peer review of qualifications and accomplishments. Please send a résumé including an outline of proposed research and required equipment to: **Frederick A. Beland, Director, Division of Biochemical Toxicology, NCTR, Jefferson, AR 72079.** DHHS/PHS/FDA/NCTR is an Equal Opportunity/Affirmative Action Employer. Qualified women and minority candidates are especially encouraged to apply. U.S. citizenship is required.

**MOLECULAR BIOLOGIST:** We are looking for an individual with experience in molecular biology techniques including in situ hybridization, and Northern blotting. The research involves demonstration of the role of cytokines (IFN-gamma, IL-1, IL-6, TNF- $\alpha$ ) and steroids in human endometrium. Please telephone **Dr. Tabibzadeh** at 813-979-7237 or write **S. Tabibzadeh, M.D., Department of Pathology, Moffitt Cancer Center, 12902 Magnolia Drive, Tampa, FL 33612.**

SCIENCE, VOL. 255

The recent opening of the new Glaxo Inc. Girolami Research Institute, located in Research Triangle Park, NC, represents Glaxo's continued commitment to the discovery and development of drugs for unmet patient needs. We invite you to experience the challenges and accomplishments a future with us holds for you. The following opportunities are now available.

## SENIOR SCIENTIST

The selected candidate will be responsible for conducting independent research programs related to receptor biochemistry. Additionally, individual will assist in preparing short-term plans for the unit.

Background must include a Ph.D. in Life Sciences with 1-3 years of relevant laboratory experience.

Please refer to Job # 9127B145-SC on all resumes.

## RESEARCH SCIENTISTS

The successful candidates will be responsible for the purification, characterization, and biophysical analysis of recombinant proteins for our structure based drug design projects. Individuals should have experience in the refolding of proteins and experience with fusion proteins is preferred. In addition, their experience should include the following techniques: HPLC chromatography, IEF and SDS PAGE, UV, CD, fluorescence, and small-angle light scattering spectroscopy, analytical ultracentrifugation, microcalorimetry, and enzyme and receptor assays. Individuals should also be able to interact with other scientists on collaborative projects involving mutagenesis, peptide/medicinal chemistry, amino acid sequencing and analysis, molecular modeling, mass spectroscopy, NMR, and X-ray crystallography.

Positions are available for candidates at the BS/MS level, and/or Ph.D. with at least two years relevant experience. We seek independent, highly motivated individuals who possess good communication skills, and work well with others in a team setting to successfully complete projects. Preference will be given to candidates with extensive experience in developing protein purification, characterization, and analysis methods utilizing progressive technologies.

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

Join Glaxo and enjoy an excellent salary, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction. Equally appealing is our world famous scientific, industrial and academic community in Research Triangle Park, NC. Send your resume, INDICATING THE CORRESPONDING JOB # and salary history, to: **Human Resources Department, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/H/V.

# Glaxo Inc.

## TENURE-TRACK POSITION AT THE NIH

A junior tenure-track position is available in the Genetics and Biochemistry Branch, NIDDK, NIH. Applications are invited from individuals of the highest caliber who will complement the scientific interests of the current staff. The Branch is similar to a small academic department and has excellent laboratory facilities. The intramural program of the NIH offers an outstanding research environment and the primary responsibility of the successful applicant will be to initiate and establish a first-rate research program. The Branch is located on the main intramural campus of the NIH in Bethesda, Maryland, a 20 minute ride from Washington, D.C. The current interests of the faculty-level staff include:

- Eukaryotic DNA repair, molecular mechanisms of toxin action, and mechanisms of nuclear and cytoplasmic localization of proteins and nucleic acids in *Xenopus* (Eric Ackerman)
- Biochemistry and molecular biology of homologous recombination in eukaryotes and prokaryotes, the structure and function of novel triplex DNAs, gene rearrangements in eukaryotes (Dan Camerini-Otero)
- Molecular mechanisms of homologous recombination in higher eukaryotes, functional studies of mammalian DNA ligases and the formation and recognition of DNA mismatches (Peggy Hsieh)
- Molecular basis of mechanisms involved in hormonal and developmental control of gene expression: protein-nucleic acid interactions, trans acting factors of steroid/thyroid hormone receptor gene superfamily (Vera Nikodem)
- Molecular genetics of lysosomal storage diseases, protein trafficking, gene targeting by homologous recombination to produce models of human disease (Rick Proia)
- Control of gene expression in vertebrates (Ed Rall)
- Thyroid hormone-protein interactions and the mechanism of intracellular thyroid hormone transport, genetic factors in thyroid neoplasia, and clinical studies in thyroid cancer (Jacob Robbins)
- Determinants of anteroposterior axis formation and the role of transcription factors in the specification of neuronal phenotypes in early *Xenopus* development (Sheryl Sato)

Interested candidates should send a letter stating their research interests, their curriculum vitae and list of publications, and the names and addresses of three references to:

**Dr. R. Daniel Camerini-Otero, Chief  
Genetics and Biochemistry Branch  
National Institutes of Health  
Building 10, Room 9D-15  
9000 Rockville Pike  
Bethesda, Maryland 20892**



## POSITIONS OPEN

The Marine Life Research Group of Scripps Institution of Oceanography (SIO) at the University of California, San Diego (UCSD), cooperates with federal and state fisheries agencies in the study of the pelagic ecology of the California Current System—the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program. We intend to employ one or more **ASSISTANT RESEARCH BIOLOGISTS/OCEANOGRAPHERS OR PROJECT SCIENTISTS** who have demonstrated the ability to conduct original, independent, and interdisciplinary research relevant to CalCOFI. Areas of particular interest are phytoplankton physiology and/or remote sensing, microzooplankton ecology, and coupled physical-biological modeling. Appointment as project scientist is not a "career" position and may not be renewed beyond 6 years, nor may appointee act as sole principal investigator, but may by exception serve as Co-Pi with regular faculty or research members of SIO. Appointment as assistant research is "career" but does not carry tenure. However, it is our intent to provide at least half salary from state sources for two initial years in recognition of the required commitment to CalCOFI. Salary will be commensurate with University of California pay scales. *UCSD is an Affirmative Action Employer.* The closing date for this position is 28 February 1992. Direct inquiries, or applications with curriculum vitae, statement of research goals, and names of referees, should be made to:

**Professor Michael M. Mullin**  
**Director, Marine Life Research Group**  
**Scripps Institution of Oceanography**  
**University of California, San Diego**  
**9500 Gilman Drive**  
**La Jolla, CA 92093-0227**

### WANTED: MICHAEL JORDAN OF THE LAB BENCH

Young, "upstart" clinical and research laboratory in Houston, Texas, is looking for a star.

Ph.D. preferred, but talent required. We need an individual with a biochemistry background, who is versed in molecular techniques, including PCR, is familiar with interferon and lymphokine biology, and understands flow cytometry. In short, a "Jack of many trades," and one who desires to master them, too. (Can you dance? Can you sing? Can you do all these things?) You must also enjoy performing R&D on a shoestring budget, working in an atmosphere of creativity and enthusiasm, and making a dandy salary all while becoming part of our success. Send your detailed résumé to:

**ONCORE Analytics, Inc.**  
**4900 Fannin, Box CVH**  
**Houston, TX 77004**

### ENGINEER, ENVIRONMENTAL ASSISTANT.

Utilize engineering knowledge and technology to identify/solve or alleviate environmental problems. Apply knowledge of atmospheric science, civil and environmental engineering to correct and remove pollution from air, soil or water. Applying biological techniques, conduct geotechnical and hydrologic analysis to treat or stabilize waste. Measure air emissions and toxic air pollutants. Using computer analysis program (USEPA UNAMAP) conduct sequential air quality dispersion modeling. Interpret model results, including meteorological data processing. Examine industrial source testing, ambient sampling of air pollutants and wastewater analysis results relating to air quality studies. Interpret applicable APC regulations, formulate compliance plans for industrial and commercial sites. Prepare emissions inventory reports regarding air, wastewater and solid waste. Must have 3.0 grade point average and completed at least one semester of coursework in: air pollution meteorology, stable isotope geochemistry, scanning electron microscopy. Forty hours per week. Salary: \$32,205 per year. B.S. in civil or environmental engineering plus 1 year of experience in job or 1 year of experience in air pollution control engineering. *Must have proof of legal authority to work permanently in the United States.* Send résumé to: **Illinois Department of Employment Security, 401 South State Street—3 South, Chicago, IL 60605.** Attention: Annette Fox. Reference #: VL-IL-3560-N. No calls. Two copies of your résumé required. *An employer-paid ad.*

## POSITIONS OPEN

### FORENSIC TOXICOLOGIST

The Maryland Office of the Chief Medical Examiner is seeking candidates for the position of Director of the Forensic Toxicology Laboratory. A Ph.D. in a related field of science with 5 years of forensic toxicology experience and ABT-FT certification required. Appointment with affiliated university is available. Applicants should submit cover letter, curriculum vitae and three letters of reference by 21 February 1992 to: **John E. Smialek, M.D., Chief Medical Examiner, State of Maryland, 111 Penn Street, Baltimore, MD 21201; telephone: 410-333-3226. Equal Opportunity Employer/Affirmative Action Employer.**

### MOLECULAR RADIATION BIOLOGIST BIOCHEMIST POSITION

The position is available for a qualified scientist (Ph.D. in biochemistry, biophysics, molecular biology, or physiology) at the level of assistant staff to join an active and expanded program in radiation biology at the Department of Radiation Therapy, Cleveland Clinic Foundation. Current research activities range from cellular DNA, cell cycle-specific and chromosome damage and repair, to tumor physiology, biophysics and blood perfusion as applied to radiation therapy and effective adjuvant therapy. Individuals with at least 3 years of postdoctoral training in related fields, independent research capability and creativity and commitment to research are encouraged to apply. Salary is highly competitive and depends upon qualifications. Qualified applicants are to submit application with curriculum vitae and three letters of reference to: **Dr. Frank Q. H. Ngo, Laboratory of Radiobiology, M3-31, Department of Radiation Therapy, Cleveland Clinic Foundation, Cleveland, OH 44195.**

### RESEARCH SCIENTIST

The Tumor Biology and Biophysics Division of the Department of Radiation Oncology at the Fox Chase Cancer Center requires a research scientist with training in molecular biology techniques to initiate his/her independent research program. Applicants should hold a Ph.D. or M.D./Ph.D. degree from a recognized university and have 3 to 10 additional years of laboratory research experience. Appointments can be made at levels equivalent to assistant or associate professorships in a university setting. Preference will be given to applicants with research experience in molecular mechanisms of (1) radiation sensitive/resistant mutants, (2) radiation induction of DNA lesions, (3) radiation mutagenesis, and/or (4) cellular repair processes. The Tumor Biology and Biophysics Research Program at the Fox Chase Cancer Center is housed within new laboratory space commissioned in 1990. It is well equipped and supported by several core facilities including a macromolecular synthesis and analysis facility, a spectroscopy facility, two cesium-137 irradiators and a state-of-the-art laser light source. The Department of Radiation Oncology has academic affiliation with the University of Pennsylvania. Applications including curriculum vitae and names of three references should be sent to: **Research Scientist Search Committee, c/o Personnel Department, Dr. J. D. Chapman, Director, Tumor Biology and Biophysics, Department of Radiation Oncology, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.**

San Diego Regional Cancer Center, a not-for-profit biomedical research institution located in La Jolla, has a major focus on basic and clinical studies that ultimately will lead to treatments for neoplastic disease. The center is currently recruiting **SCIENTIFIC STAFF AT ALL LEVELS** in the areas of basic immunology and molecular biology. Successful candidates are expected to maintain externally fundable, independent research programs in these two disciplines and to be intellectually involved in the application of basic concepts and strategies for effective immunotherapy and gene therapy for cancer. *Equal Opportunity Employer.*

**Dr. Darcy Wilson**  
**Director of Basic Sciences**  
**San Diego Regional Cancer Center**

Please send documents describing your research program, a curriculum vitae, names and references and funding particulars to:

**Linda Nelson, Personnel**  
**San Diego Regional Cancer Center**  
**3099 Science Park Road, Suite 200**  
**San Diego, CA 92121**

## COURSES AND TRAINING

### HOW TO MAKE MICROCAPSULES A HANDS ON COURSE

A laboratory course designed to teach the art and science of microcapsule making. Suitable for biologists, pharmacists, chemists, life scientists and engineers. Enrollment limited to 12. Lectures and laboratory sessions by Dr. Curt Thies, Professor of Chemical Engineering at Washington University in St. Louis. Spring sessions: 22 to 25 March and 26 to 29 April 1992. For information telephone: 314-935-6066.

## ANNOUNCEMENTS

**GRADUATE ASSISTANTSHIPS IN MOLECULAR BIOLOGY, BIOCHEMISTRY AND BIOPHYSICS.** Several positions are available in the Department of Molecular Biology and Biochemistry, Wesleyan University, Middletown, Connecticut. Departmental research interests emphasize regulation of gene expression in embryogenesis and development; heat-shock response and cellular regulation of iron metabolism; biophysics of protein-nucleic acid interactions; molecular genetics and regulation of protein secretion; DNA replication; structure and function of chromosomal proteins, yeast genes homologous to protein kinase oncogenes; and mechanisms of action of thiamine and ascorbic acid; nuclear magnetic resonance spectroscopy and computer modeling. All students receive 12-month stipends, tuition remission, good fringe benefits and dependency allowance, if applicable. Opportunities to teach. Write: **Director of Graduate Admissions, Department of Molecular Biology and Biochemistry, Wesleyan University, Middletown, CT 06459-0175 or telephone: 203-344-8544, ext. 2796.**

## MARKETPLACE

### DNA SEQUENCING

- Fast. Accurate. Affordable.
- Definitive Nucleotide Sequence
- Subcloning, Mapping, *in vitro* Mutagenesis, Library Construction
- Complete Molecular Biology Services

**Ambion** **1-800-888-8804**  
**1-512-445-7139 FAX**

Circle No. 65 on Readers' Service Card

### ANTI-VIRAL DRUG TESTING

**ADVANCED BIOTECHNOLOGIES INC.** offers *in vitro* testing services, utilizing HIV and human herpes viruses in a variety of protocols (including testing for synergistic/antagonistic interactions) and choice of permanent cell lines or fresh human T-cells and/or human macrophages. ... your integrated technology source™

800-425-0764  
 301-470-3220  
 FAX 301-497-9773

**AB** **ADVANCED BIOTECHNOLOGIES INC.**  
 9108 GUILFORD RD. COLUMBIA MD 21046

Circle No. 81 on Readers' Service Card

### PROFESSIONAL RESUME SERVICES

SUCCESSFULLY SERVING SCIENTISTS & RELATED PROFESSIONALS SINCE 1976 ALL LEVELS/SPECIALTIES EFFECTIVE CONFIDENTIAL IMMEDIATE SERVICE. CURRICULUM VITAE PREPARATION. COVER LETTER DEVELOPMENT. CAREER PLANNING. COMMITMENT TO PRODUCT QUALITY/CLIENT SATISFACTION

**1-800-786-3037 (24 HOURS)**

Circle No. 34 on Readers' Service Card

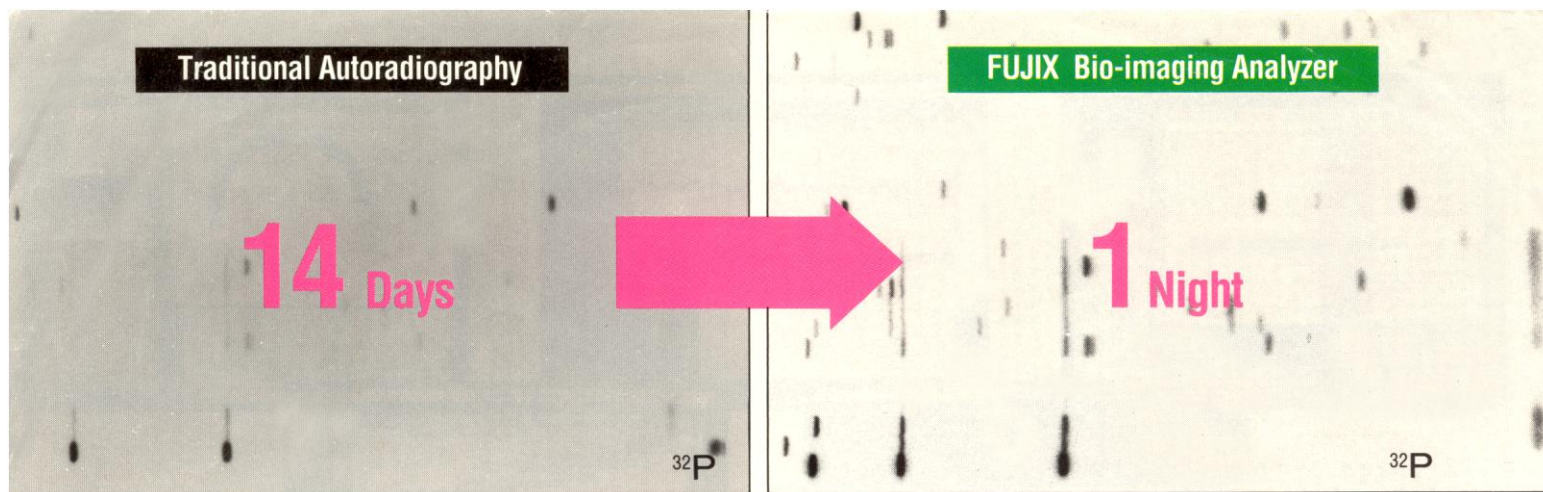
### Custom DNA Purified and Delivered in 48 hours.

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

**Research Genetics**  
**1-800-533-4363**

Circle No. 49 on Readers' Service Card





# Accelerate Your Autoradiography

With the Fujix BAS2000 Bio-imaging Analyzer, autoradiographic exposures that take two weeks can be made overnight. Plus, you'll get high image quality and more accurate quantitation.

## FUJI'S PATENTED IMAGING PLATE

Fuji's patented photostimulable phosphor Imaging Plate (IP) takes the place of traditional x-ray film to expose your radio-labelled sample. Image data exposed on the Imaging Plate is read by a laser and computer processed to detect minute amounts of substances often undetected by traditional autoradiography.

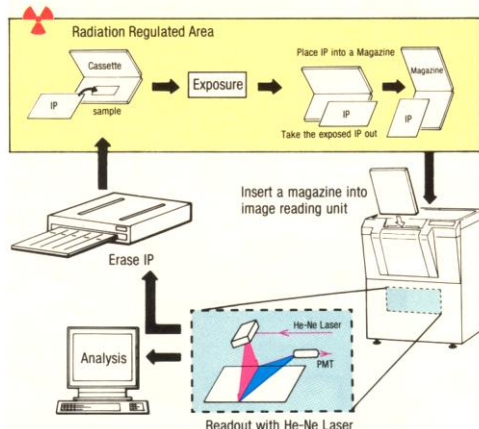
## TODAY'S MOST SENSITIVE TECHNOLOGY

The erasable, reusable Imaging Plates are over 100 times more sensitive to radiation than conventional x-ray film. This greatly reduces exposure time and helps you get your results faster.

The wide dynamic range of the Imaging Plate, which exceeds five orders of magnitude, covers from the faintest to the greatest amount of activity, virtually eliminating re-exposures.

The Imaging Plate allows easy to handle operation and scanning in under three minutes without a darkroom. Because the exposure and reading processes are decoupled, productivity is increased. Bands or spots can be quantitated directly on the display, eliminating the need for liquid scintillation counting.

## The Reusable Imaging Plate (IP)



SPARC is a registered trademark of SPARC International, Inc. Products bearing SPARC trademark are based on an architecture developed by Sun Microsystems, Inc.

SPARCstation is a registered trademark of SPARC International, Inc., licensed exclusively to Sun Microsystems, Inc.

## FAST AND EASY TO USE

The powerful SPARCstation™ 2 provides high performance not only in overall speed but also in the display of detailed images on its high resolution monitor. The mouse-controlled image analysis software offers many functions including quantitation, molecular weight determination, contrast setting, magnification, and superimposition. Images are stored in the workstation's fixed storage or in a removable 150MB cartridge for later analysis.

## SUPERIOR PUBLICATION QUALITY HARD COPY

The Fujix photographic quality BAS HG Printer provides publication quality continuous tone black and white or color, prints or transparencies, without chemicals, darkroom, or plumbing.

## EVALUATE FUJIX BAS2000 WITH YOUR OWN SAMPLES!

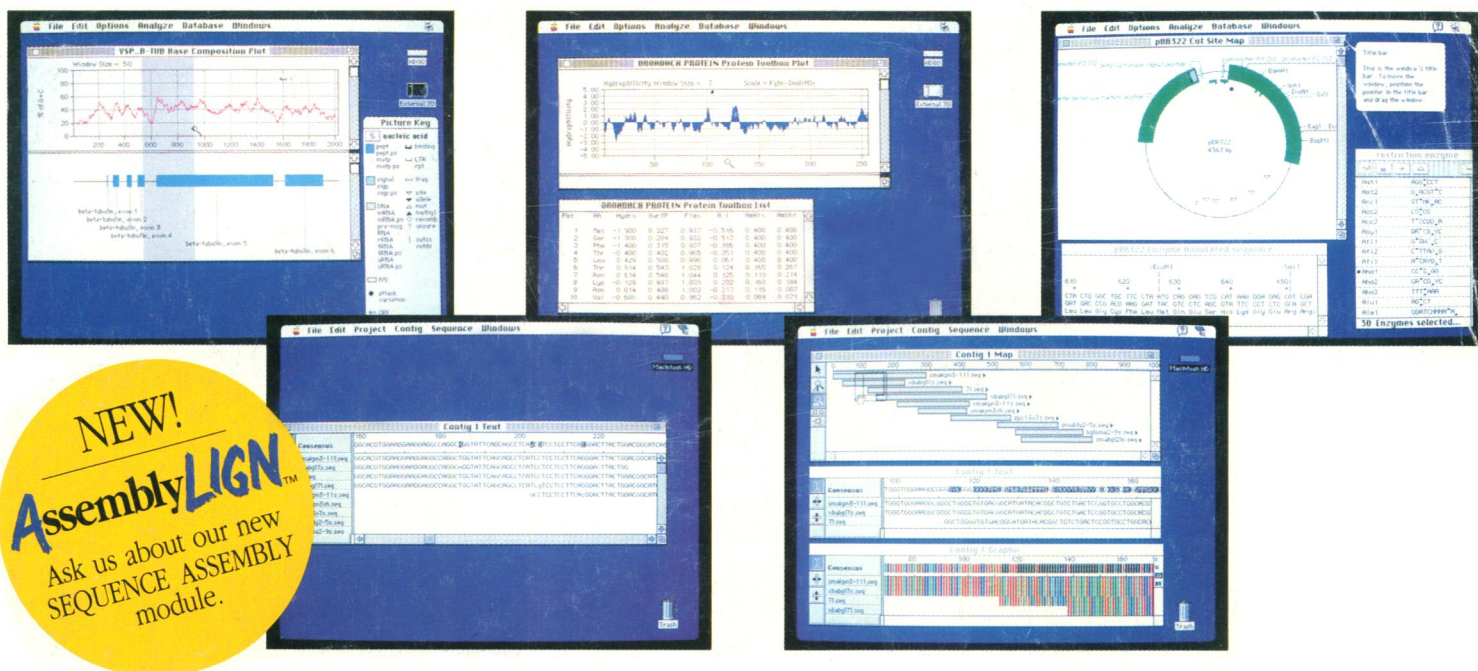
To learn more about how Fuji can accelerate your autoradiography or to arrange to evaluate the Fujix BAS2000 with your own samples, call Fuji Medical Systems—Biomedical Department toll-free 800-431-1850, (in CT 203-353-0300) or write: Fuji Medical Systems U.S.A., Inc., P.O. Box 4960, Stamford, CT 06907-0960.



A new way of seeing things.

Circle No. 18 on Readers' Service Card



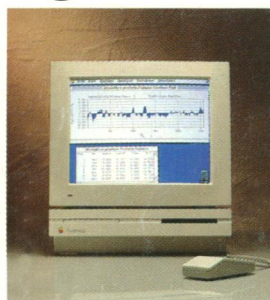


# All This Without Opening A Manual.

Why wait for mainframe access or learn complicated commands to perform sequence assembly and analysis? With MacVector™ and IBI's new AssemblyLIGN™ module you get the most comprehensive sequence assembly and analysis capabilities ever put on a desktop. All with the most Mac-like interface in the industry.

With MacVector, you follow common-sense menus to open a full range of DNA and protein analyses -- from sequence comparisons and restriction analyses, to secondary structure predictions, NBRF and GenBank™ data bank searches. For sequence assembly, AssemblyLIGN lets you establish a consensus sequence and edit sequence fragments with unmatched power and ease.

And you always see exactly what you get, with full System 7.0 Balloon Help and



warning screens to prevent costly mistakes. As a result, anyone in your lab can learn to perform serious investigations without special training or complex instructions. **Take 30 days to discover what software experts already know.**

If you don't agree that MacVector and AssemblyLIGN are the most comprehensive and easy-to-use desktop sequence analysis and assembly programs you can buy, simply return them for a full refund. To order, or for more information, call toll-free: **1-800-243-2555**. (Outside the U.S., 203-786-5600.)

**MacVector.**

*Serious Molecular Biology For Your Mac.*



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

MacVector and IBI are trademarks of International Biotechnologies, Inc. Macintosh is a trademark of Apple Computer, Inc. GenBank is a trademark of the National Institutes of Health. ©1992 International Biotechnologies, Inc.

**Circle No. 110 on Readers' Service Card**