

### **Protein Immunoblotting Incubation Rotator**

The Model WB10 simplifies protein immunoblotting by performing all membrane incubation and washing steps with only a few milliliters of antisera in screw-capped glass tubes, instead of using large volumes of reagents in open containers on shakers. The tubes containing membrane and reagent are continuously rotated with a unique tridirectional mechanical motion. As many as 10 large tubes and 20 small tubes, each containing more than one membrane, can be rotated at the same time. Designed to be used at ambient temperature, the WB10 can be operated in cold rooms and in warm rooms up to 37°C. Robbins Scientific Corp. Circle 483.

### **Micromanipulator Table**

Servometer's MT-100 Micromanipulator Table provides the controls for  $x$ ,  $y$ , and  $z$  axes in one plane, which eliminates the need to reach around the table for adjustments. The MT-100 has direct readouts to 10  $\mu\text{m}$  over the entire 25-mm travel range for precise placement and adjustments of micropipettes and probes. A ball-slide with maximum cross-axis tracking deviations at 0.5  $\mu\text{m}$  provides the movement necessary in cellular experiments, injections, or other delicate procedures. Servometer Corp. Circle 486.

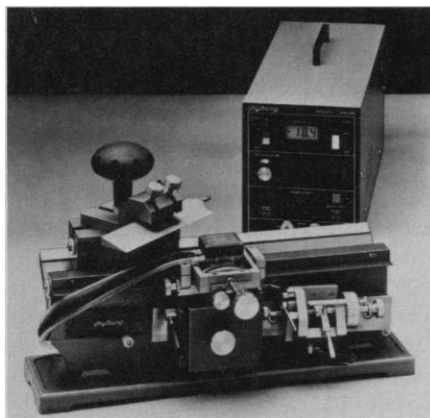
### **Leiden Microincubator**

The LU-CB-1 is a microincubator designed at the University of Leiden that maintains cells at a constant temperature (35°C to 45°C) and pH on the stage of a microscope. A microprocessor-based temperature control supplies the heating current. Cells are contained in a disposable 35-mm petri dish or the reusable Leiden cover slip dish. Medical Systems Corp. Circle 491.

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.

### **Freezing Stage with Microtome**

Tissue specimens can be maintained in a microtome at temperatures as low as  $-40^{\circ}\text{C}$  with Physitemp's new BSF-TC freezing units. Combined with the new freezing radial microtome (FRM), the instruments offer a complete tissue-sectioning system. Tissue sections down to 5  $\mu\text{m}$  can be made



easily, with thickness, angle of cut, and angle of attack readily adjusted. The freezing stages come in several sizes, from small stages for freezing rat and mouse brains to larger ones for cat and monkey brains and other larger organs. The range of the BFS-TC stages is  $-40^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$ , with a control accuracy of 0.1°C. An extended range to  $+100^{\circ}\text{C}$  is also available. The controller can also be used as an independent thermometer, and a needle microprobe is provided for this purpose. Physitemp. Circle 478.

### **Data Analysis for the Macintosh**

WavEdit, World Precision Instruments' program for reviewing and editing Macintosh personal computer files of experimental data, has been combined with WaveMetrics' Igor, a program for interactive graphing and data analysis. WavEdit allows researchers to review data recorded with a variety of Macintosh-based acquisition hardware and software, to identify regions of interest, and then to cut, copy, and paste those selections into new files for display and analysis. A new version of Igor opens WavEdit files directly, so edited waveforms can be analyzed with a broad range of curve-processing operations and a powerful general mathematical expression evaluator. Together, WavEdit and Igor can reduce raw data into meaningful information for technical papers and formal presentations. World Precision Instruments. Circle 487.

### **Monoclonal Antibodies**

A new series of monoclonal antibodies specific for endothelium are supplied as tissue culture supernatant in 1-ml vials suitable for 100 tests in flow cytometry. Serotec. Circle 433.

Path-Mark/COULTER CLONE monoclonal antibodies are a new product line including anti-proliferation cell nuclear antigen (also known as cyclin), anti-leukocyte common antigen, anti-alpha fetoprotein, anti-carcinoembryonic antigen, and anti-prostate specific antigen. They are supplied pre-diluted and color-coded in dropper bottles. Coulter. Circle 434.

A rat monoclonal, classified as a CD16, binds specifically to the human low-affinity Fc receptor (Fc RIII), which is expressed by neutrophils, NK (natural killer) cells, K (killer) cells, and a subpopulation of macrophages. The monoclonal is supplied as a rat tissue culture supernatant and is suitable for use in indirect immunofluorescence and cryostat sections of frozen tissues. Bioproducts for Science. Circle 435.

### **Literature**

*General Products Catalog, 1990-1991*, from Helena Laboratories contains descriptions of more than 1100 products, including the Rapid ElectroPhoresis system with kits for electrophoretic separation of isoenzymes, proteins, cholesterol, glycosylated hemoglobin, isoelectric focusing, and immunofixation. The 160-page catalog also contains sections on automated electrophoresis, conventional electrophoresis, densitometry, stool blood tests, immunology products, hematofluorometry, column chromatography, specimen handling, hemostasis, and educational aids. Helena Laboratories. Circle 512.

The *Aldrich Catalog/Handbook of Fine Chemicals* features 2184 pages of chemicals and laboratory equipment, including organic and inorganic chemicals; biochemicals; stains and dyes; deuterated and radio-labeled compounds; anhydrous, high-performance liquid chromatography and spectrophotometric solvents; polymers; ion-exchange resins; and adsorption media. For more than 19,000 chemical listings, the catalog provides physical properties, structures, Chemical Abstracts Service registry numbers, literature and spectral references, handling precautions, and disposal methods. The catalog also describes 8000 laboratory products. Aldrich Chemical Co. Circle 503.

*Promega 1990-91 Catalog* describes a complete line of molecular biology and cellular reagents. Promega Corp. Circle 465.

# Personnel Placement

**SCIENCE** publishes each Friday, except the last Friday of the year, and is mailed on issue date. Personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference. **SCIENCE** reserves the right, in its discretion, to decline to publish advertisements submitted to it.

## LINE CLASSIFIED ADVERTISEMENTS

**DEADLINE:** Thursday, 10 a.m., 2 weeks prior to issue date. Advertising is accepted only in writing.

**POLICIES:** All classified ads will be edited and typeset according to **SCIENCE** style guidelines. NO ABBREVIATIONS. Any deadline for applications stated in ad must be at least 2 weeks after date of publication.

**CLASSIFICATION:** **SCIENCE** publishes line classified ads under the following headings: **Positions Open, Employment Agencies, Situations Wanted, Courses and Training, Meetings, Announcements, and Marketplace.** Advertisers should specify classification desired; however, **SCIENCE** reserves the right to decline classification requests which it believes may be misleading to readers.

**SUBMISSION:** Prepare double-spaced typewritten ad copy on a separate sheet. On cover sheet, state name and telephone number of contact person, desired date(s) of publication, and billing information, including any special invoicing requests. Mail or FAX to:

**SCIENCE Classified Advertising**  
1333 H Street, NW, Room 940  
Washington, DC 20005  
Telephone: 202-326-6555  
FAX: 202-682-0816

**RATE:** \$41 per line, \$410 minimum, per week. One line equals 32 characters and spaces; centered headings equal 32 characters and spaces per line. No charge for use of blind box number. No agency commission for ads less than 40 lines. To **ESTIMATE** ad cost, structure ad copy on a 32-character line; include any desired heading on 32-character lines. Each line of heading, one line of white space between heading and body of ad, and all partial lines (including centered reply information, if desired) are counted as full lines. Multiply total number of lines x \$41 = approximate cost of ad, per week. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment. **SCIENCE** cannot provide proofs of typeset ads.)

**PREPAYMENT DISCOUNT:** A 3% cash discount is granted to all prepaid line ads. Prepayment in U.S. dollars by checks drawn on U.S. banks is required for all foreign ads.

**CREDIT CARDS:** **SCIENCE** accepts **MasterCard** and **VISA**. Both personal and corporate cards may be used. The prepayment discount does not apply to credit card ads.

**BOXES AND LOGOS:** Any 1-column line classified ad can be boxed and/or published with logo. No extra production charge for use of box or logo. For boxed ads, one line equals 48 characters and spaces; two additional lines will be added to cost of ad to allow for top and bottom rules. Logos are billed according to number of lines needed to accommodate logo.

**CANCELLATIONS:** Deadline for cancellations is 10 a.m. Tuesday, 10 days prior to issue date.

## DISPLAY PERSONNEL ADVERTISEMENTS

For rates, deadlines, and information about fractional display ads (1/6 page and larger) and all **Marketplace** listings of available products and services, contact:

**Scherago Associates, Inc.**  
1515 Broadway  
New York, NY 10036  
Telephone: 212-730-1050  
FAX: 212-382-3725

## RESPONSES TO EMPLOYMENT ADS

Applicants should read Positions Open ads carefully in order to submit all required material when responding, and should especially check for any stated deadline for receipt of applications. **SCIENCE** encourages applicants for positions to investigate employment laws, non-discrimination policies, visa requirements, and cultural differences in the country advertising for employees.

To reply to a blind box ad, address correspondence to

**Box (give number)**  
**SCIENCE Classified Advertising**  
1333 H Street, NW, Room 940  
Washington, DC 20005

## POSITIONS OPEN

**ASSISTANT PROFESSOR.** The Department of Microbiology, University of Pennsylvania School of Dental Medicine, seeks applicants for a tenure-track position with research interests in bacterial pathogenesis. Applicants should possess a Ph.D., M.D., or D.M.D., and have postdoctoral experience. Preference is for expertise in molecular biology, immunology, or genetics of host-parasite interactions. The candidate will be expected to develop an independent research program, participate in departmental teaching to undergraduate and postgraduate dental students, and interact within the graduate program at the university. Send curriculum vitae, relevant reprints, a short summary of present and future research interests, and the names of references to: **Dr. Joseph M. DiRienzo, Department of Microbiology, School of Dental Medicine, University of Pennsylvania, 4001 Spruce Street, Philadelphia, PA 19104. Equal Opportunity Employer.**

The Department of Pharmacology at the University of Iowa College of Medicine is seeking applications from highly qualified individuals for a tenure-track position as **ASSISTANT PROFESSOR.** Applications are encouraged from outstanding candidates with research interests in the molecular/cellular basis of hormone/neurotransmitter/drug action in any area of endocrinology, neuropharmacology, cardiovascular pharmacology, or toxicology. Submit curriculum vitae, a list of publications, a statement of research plans, and the names and addresses of three references to: **Search Committee, Department of Pharmacology, Bowen Science Building, The University of Iowa, Iowa City, IA 52242. Wheelchair accessible campus. Women and minorities are encouraged to apply. The University of Iowa is an Equal Opportunity/Affirmative Action Employer.**

**GENETICS,** tenure-track faculty position at the level of **ASSISTANT PROFESSOR,** Department of Biology, University of Miami. We are looking for either a population geneticist or a molecular/evolutionary geneticist who will develop an active research and teaching program. Send curriculum vitae, a summary of research interests, and the names of three references to: **Dr. Peter Luykx, Genetics Search Committee, Department of Biology, University of Miami, Coral Gables, FL 33124, by 15 January 1991. The University of Miami is an Equal Opportunity/Affirmative Action Employer.**

**ASSISTANT PROFESSOR, MOLECULAR BIOLOGY OF BONE AND CARTILAGE.** University of Rochester School of Medicine and Dentistry, Rochester, New York.

The Department of Orthopaedics invites applications for a tenure-track position. A doctoral degree and at least 3 years of postdoctoral experience in eukaryotic molecular biology is required. Training is skeletal tissue developmental systems is helpful, but not mandatory. Responsibilities would include teaching, interaction with cell biology faculty in the research unit, and the ability to maintain an independently directed research program with the promise of securing extramural funding. Send curriculum vitae and the names of three references to: **J. Edward Puzas, Ph.D., University of Rochester School of Medicine, Department of Orthopaedics, Box 665, Rochester, NY 14642. An Equal Opportunity/Affirmative Action Employer.**

**ASSISTANT PROFESSOR.** Available immediately to participate in the training of Obstetrics/Gynecology residents and medical students in basic research in molecular biology. The successful candidate will be responsible for pursuing her/his own interests in clinical medicine and research involving techniques of molecular biology, performing independent research in molecular endocrinology, assisting other faculty in planning and executing experiments involving molecular biology techniques, and participating in graduate and undergraduate teaching responsibilities in the area of molecular biology/endocrinology. Successful candidate must have Ph.D. and several years of postdoctoral experience in molecular biology and a proven track record of independent research and demonstrated ability to establish an active, independent basic research program. Must also have a strong background in reproductive biology with emphasis in whole animal physiology. Salary is \$40,000 per year for a 40-hour work week. The job order number for this job opportunity is K53301836. Interested persons should apply at: **Wichita Employment and Training Office, 402 East Second, Wichita, KS 67201-0877. Telephone: 316-266-8600. Candidates must have proof of legal authority to work in the United States.**

## POSITIONS OPEN

The Division of Urology, University of California, Los Angeles (UCLA) School of Medicine, is recruiting a urologist to join the faculty as an **ASSISTANT PROFESSOR.** Applicants must be Board-certified or -eligible and skilled in teaching, research, and clinical urology. Activities will be divided between the UCLA Medical and the VA Medical Center, West Los Angeles. Experience in molecular biology research related to prostatic disease is desired. **UCLA and its affiliated institutions are Equal Opportunity and Affirmative Action Employers.** Applicants should submit curriculum vitae to: **Chief, Division of Urology, UCLA School of Medicine, Los Angeles, CA 90024-1738.**

## ASSISTANT PROFESSORSHIP

We are seeking applicants with a D.V.M. degree and a doctorate in a public health/preventive medicine-related area for a tenure-track position in the Department of Veterinary Microbiology, College of Veterinary Medicine, University of Missouri.

The appointee will participate in teaching veterinary public health to professional and graduate students, develop a research program, pursue extramural research support, and perform university and public service.

Applications will be reviewed beginning 15 March 1991 and will be accepted until a suitable person is identified. Salary is dependent upon qualifications.

Send curriculum vitae, statement of career goals, and names and addresses of three references to:

**Dr. James G. Thorne, Chair**  
**Search Committee**  
**Department of Veterinary Microbiology**  
**108 Connaway Hall**  
**University of Missouri-Columbia**  
**Columbia, MO 65211**  
**Telephone: 314-882-6068**

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

## McGILL UNIVERSITY DEPARTMENT OF BIOLOGY

The Department of Biology at McGill University invites applications for three tenure-track positions at the **ASSISTANT PROFESSOR** level in the following areas of research:

- **DEVELOPMENTAL BIOLOGY:** We seek a biologist using molecular and genetic approaches to study developmental processes in a model organism.
- **MARINE ECOSYSTEM ECOLOGY:** We offer the opportunity for an individual to join an active group of marine and freshwater ecologists, and teach in the area of biological oceanography.
- **CELLULAR/MOLECULAR NEUROBIOLOGY:** We seek an individual who uses cellular and molecular approaches to study basic questions in neurobiology.

The successful applicants will join a large (43 full-time faculty) and dynamic department with research strengths in cellular, molecular, and developmental biology; ecology; and neurobiology. The department also has excellent technical facilities, including centres for photography, light and electron microscopy, biotechnology, and field stations.

Applicants should hold the Ph.D. degree in biology or a related field and have demonstrated a capacity for independent research. Duties will include carrying out research and participation in teaching of undergraduate and/or graduate level courses in the candidates' fields of expertise. Positions are available beginning 1 September 1991, but precise starting dates and salaries are negotiable upon acceptance.

Please send curriculum vitae, a statement of research interests, and representative reprints. Request three letters of reference. All materials should arrive by 28 February 1991. Send to:

**Professor Robert L. Carroll**  
**Chairman, Department of Biology**  
**McGill University**  
**1205 Avenue Docteur Penfield**  
**Montréal, Québec, Canada H3A 1B1**

*In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.*

## POSITIONS OPEN

**TURFGRASS BREEDER.** A 1-year, nontenure-track, **ASSISTANT PROFESSOR** position is available for a turfgrass breeder. Ph.D. and postdoctoral training in plant breeding/genetics with experience in turfgrass science, field plot research, breeding systems, cytogenetics, plant pathology, and stress physiology is required. The successful candidate must have experience in molecular biology and conduct an independent applied and basic research program. Renewal is contingent upon performance and obtaining external funds. Send curriculum vitae statement of research interest, and names of four references before 15 February 1991 to: **Dr. C. R. Funk, Crop Science Department, Cook College, Rutgers University, New Brunswick, NJ 08903-0231.** Rutgers is an Equal Opportunity Employer.

### ASSISTANT/ASSOCIATE PROFESSOR INSTITUTE FOR MOLECULAR GENETICS BAYLOR COLLEGE OF MEDICINE

The Institute for Molecular Genetics has a faculty position open at the assistant or associate professor level. A **YEAST GENETICIST** is sought with strong interest in using molecular genetic approaches to study current problems in genetics and cell biology; for example, cell cycle regulation, chromosome structure, meiosis, gene regulation, etc. Excellent start-up funding and new laboratory space are available. Please send curriculum vitae, brief description of current and future research plans, and three letters of recommendation to: **Search Committee, Institute for Molecular Genetics, Baylor College of Medicine, Houston, TX 77030.**

### CELLULAR/MOLECULAR CARDIOVASCULAR SCIENTISTS

Two tenure-track positions are available at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. Individuals with expertise in cellular/molecular approaches to investigation of vascular biology or CNS regulation of circulation are encouraged to apply. Rank, salary, and space will be commensurate with qualifications. Send curriculum vitae and names and addresses of three references to: **Dr. David Busija, Search Committee, Department of Physiology and Pharmacology, Bowman Gray School of Medicine, Wake Forest University, 300 South Hawthorne Road, Winston-Salem, NC 27103.** Affirmative Action/Equal Opportunity Employer. Respond before 1 March 1991.

### ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF CELL BIOLOGY AND ANATOMY UNIVERSITY OF MIAMI SCHOOL OF MEDICINE

Applications for tenure-track faculty positions are being sought from individuals with an interest and record in cell and molecular biology. Those working in the area of cell surfaces and cell interactions in neurobiology or cancer biology are particularly encouraged to apply. Ample space, start-up funds, and a competitive salary will be provided. Applicants should send curriculum vitae, brief summary of research interests, and names of three persons willing to serve as references to: **Dr. Kermit Carraway, Chairman, Department of Cell Biology and Anatomy, University of Miami School of Medicine, PO Box 016960 (R-124), Miami, FL 33101.** Equal Opportunity/Affirmative Action Employer.

### ASSISTANT/ASSOCIATE PROFESSOR MOLECULAR OR CELLULAR NEUROBIOLOGY

The Department of Cell Biology, University of Alabama at Birmingham (UAB), invites applications for a tenure-track faculty position at the rank of assistant or associate professor. Applicants must be engaged in molecular or cellular neurobiological research, capable of obtaining/maintaining external funding, interested in interacting with the interdisciplinary Neuroscience Research Program on campus, and willing to learn and teach neuroanatomy to health professional students. Send curriculum vitae, outline of proposed research program, and the names and addresses, and telephone numbers of four references, by 1 March 1991 to: **Dr. Dale R. Abrahamson, Faculty Search Committee Chair, Department of Cell Biology, University of Alabama at Birmingham, UAB Station-Box 302, Birmingham, AL 35294.** UAB is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### ASSISTANT OR ASSOCIATE PROFESSOR OF OCEAN STUDIES/CHEMISTRY

Maine Maritime Academy (MMA), Department of Ocean Studies, announces a full-time faculty position beginning the fall of 1991 in the fields of chemistry and/or chemical oceanography. The primary focus of the Department of Ocean Studies is undergraduate teaching. The successful candidate will teach required and elective courses in basic and marine chemistry, coordinate chemistry courses offered for engineering and ocean studies majors, and participate in an active research program that has undergraduate involvement. Minimum requirements are a B.S. or M.S. in chemistry and with a Ph.D. in chemistry, marine chemistry, or chemical oceanography or related field. Undergraduate teaching experience is highly desirable.

Anyone interested in applying for this position please send letter of application and résumé to:

**Director of Human Resources  
Ocean Studies Search  
Box C-3  
Castine, ME 04420**

Letters of application, résumés, and any other relevant material not addressed or delivered to the Maine Maritime Academy Human Resource Offices will not be considered.

*MMA is an Equal Opportunity Employer.*



### PSYCHOPHARMACOLOGIST FOR THE SFVAMC PSYCHIATRIC OUTPATIENT SERVICES

The Department of Psychiatry, University of California, San Francisco (UCSF), is seeking a clinical psychopharmacologist for the Psychiatric Outpatient Services (POS) at the San Francisco Department of Veterans Affairs Medical Center (SFVAMC). The position will be at the **ASSISTANT OR ASSOCIATE PROFESSOR** level and will be available on or before 1 July 1992. The POS at the SFVAMC offers a variety of programs to veterans (for example, mental hygiene clinic, brief psychotherapy program, medication clinic, day treatment center, group and family therapy programs, AIDS program, posttraumatic stress disorder clinic, women's clinic). The incumbent will be responsible for developing a research program in clinical psychopharmacology and will play a role in the educational and clinical activities of the POS at the SFVAMC and the Department of Psychiatry, UCSF.

The ideal candidate would be a Board-certified or Board-eligible psychiatrist with an established record of research in clinical psychopharmacology. Candidates should give evidence of a commitment to excellence in teaching and clinical care. California licensure or eligibility is required.

A letter of interest and curriculum vitae should be sent by 1 April 1991 to: **Nick Kanas, M.D., Search Committee Chair, Psychiatry Service (116A), Department of Veterans Affairs Medical Center, 4150 Clement Street, San Francisco, CA 94121.** UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

### CHILDREN'S HOSPITAL HARVARD MEDICAL SCHOOL PROFESSOR OF NEUROLOGY (NEUROSCIENCE)

Children's Hospital and Harvard Medical School are seeking a professor to develop a major research and training program in developmental neurobiology, and participate in the teaching of medical and graduate students. Candidates should be interested in the training of neurology residents and junior faculty in basic neuroscience and should have demonstrated scholarly achievement and promise of the highest order. *Harvard University is committed to increasing representation of women and minority members among its faculty, and particularly encourages applications from such candidates.* Candidates should send curriculum vitae and a statement of research interests to: **Dr. Joseph Volpe, Chairperson of the Search Committee, Children's Hospital, 300 Longwood Avenue, Boston, MA 02115.**

*Harvard Medical School and Children's Hospital are Affirmative Action/Equal Opportunity Employers.*

## POSITIONS OPEN

**CHAIRPERSON, PHARMACEUTICAL SCIENCES.** Applications are invited for this crucial leadership position. The successful candidate will have: established administrative experience, preferably as a chairperson; proven record of leadership; established record of extramural funding; demonstrated commitment to professional education in pharmacy; commitment to faculty development and affirmative action; commitment to strengthening relations with affiliated programs at Boise Veterans Affairs Medical Center and Idaho National Engineering Laboratories; Ph.D. in pharmaceutical sciences or related discipline with demonstrated willingness to learn about other disciplines; and effective teaching experience.

One of two academic units within the College, the Department comprises twenty faculty. The college offers the Pharm.D. and the Ph.D. with emphases in biological aspects of Pharmaceutics, Pharmacology, and Pharmacy Administration. Class sizes are small; 50 students are admitted to the Pharm.D. program.

Submit curriculum vitae, names, and addresses of five references to: **Dr. Arthur Nelson, Box 8288, Idaho State University, Pocatello, ID 83209.** Applications accepted until filled. Review begins 15 April 1991. There are no in-house candidates. *Equal Opportunity/Affirmative Action Employer.*

### DIRECTOR, PULMONARY RESEARCH UNIT

The University of Miami School of Medicine is seeking a senior physician/scientist with demonstrated leadership qualities and a strong, established research program in any of the basic areas of cell biology, developmental biology, biochemistry, allergy, or immunology of the lung, willing to lead a group of scientists in pulmonary research. Current areas of expertise include host defenses, oxygen toxicity, ARDS, fibrosis, allergy (asthma), and immunology. This position will be supported by funds from a special endowment and by resources from the departments of medicine and pediatrics. Reply to the chair of the search committee: **Bernard A. Roos, M.D., Professor of Medicine, University of Miami School of Medicine, P.O. Box 016960 (D-503), Miami, FL 33101. Telephone: 305-547-6593.** *The University of Miami is an Equal Opportunity/Affirmative Action Institution.*

### CALL FOR APPLICATIONS EDITOR-IN-CHIEF

#### THE JOURNAL OF IMMUNOLOGY

A Search Committee of The American Association of Immunologists (AAI) is seeking applicants for the position of editor-in-chief of *The Journal of Immunology*, the official publication of the AAI. The position is on a part-time basis and spans a 5-year term, effective 1 July 1992. However, the successful applicant will be expected to be available January 1992 to assure a smooth transition of responsibility.

The editor-in-chief serves as an ex officio member of the AAI Council, and is responsible for the selection of deputy editors-in-chief, with the concurrence of the AAI Council; and he or she selects section editors based on expertise in specific areas of immunology; supervises the manuscript review process; manages the manuscript decision-making process; shares responsibility with the managing editor in the supervision of the business operation and the Bethesda editorial office staff, which includes a doctoral-level assistant to the editor-in-chief; and interfaces with Waverly Press, in Baltimore, on matters relating to the semi-monthly production of *The Journal of Immunology*.

The geographic location of the editor-in-chief is not restricted to the Bethesda/Washington Metropolitan Area. The salary is negotiable.

Interested applicants are requested to provide the Search Committee with a brief letter of interest in the position, curriculum vitae, and a statement on the conceptual direction of *The Journal* in pursuit of immunologic excellence; an opinion as to the nature of articles that should be selected for publication; and the innovations, if any, that are recommended.

Applicants must be active members of the American Association of Immunologists. Applications must be received by 31 March 1991 by the:

**Chair  
Editor-In-Chief Search Committee  
The American Association of Immunologists  
9650 Rockville Pike  
Bethesda, MD 20814**

For further information, call 301-530-7178.

## RESEARCH OPPORTUNITIES IN BIOTECHNOLOGY

The Department of Biotechnology research at Pioneer Hi-Bred International, Inc. is seeking applicants for our ongoing program of crop improvement. Pioneer offers competitive salaries, excellent facilities, and a highly cooperative research environment. Successful candidates will be expected to interact extensively with ongoing programs in transformation, gene expression, gene isolation or RFLP programs.

**PROJECT LEADER - CORN TRANSFORMATION BIOLOGY** - This position will complement the maize transformation program with emphasis on the developmental biology of transformation in maize and the incorporation and evaluation of agronomic genes in maize. The successful candidate will be expected to initiate an innovative research program through collaboration with ongoing research in the transformation and gene expression groups. A Ph.D. in cell or molecular biology, or a related field is required with an additional four years of relevant research experience.

**PROJECT LEADER - SPECIALTY OILS BIOCHEMISTRY** - This position will be responsible for initiating an independent research program in the area of plant lipid biosynthesis and/or fatty acid modification. The ultimate research goal will be modification of lipid biosynthesis in the oilseeds to develop new, value added products. The candidate will also be expected to interact with plant breeders developing new oilseed crops and to provide technical support for the Pioneer Specialty Plant Products Division. A Ph.D. in biochemistry or a related field is required with three or more years of relevant research experience desired. More experienced individuals are encouraged to apply.

**SENIOR RESEARCH ASSOCIATE - CALLUS INITIATION AND TRANSFORMATION** - This position will be responsible for initiating callus and/or suspension cultures of maize inbreds and hybrids that are amenable to genetic transformation and for conducting transformation experiments as required. A B.S. or M.S. degree in appropriate science area plus three to five years of experience in culture initiation of maize is required. Laboratory experience with genetic transformation in monocots would be a definite asset.

**APPLIED MOLECULAR BIOLOGY - RFLPS - SENIOR RESEARCH ASSOCIATE** - This position will complement an existing RFLP group that is profiling maize inbreds and hybrids using current probes and technology. The successful candidate will investigate the application of new and developing technologies to provide for the precise and rapid DNA profiling or fingerprinting of individual varieties of maize and other crop species. B.S. or M.S. degree in molecular biology or related area plus three to five years experience is required.

**PROTEIN ASSAY LAB COORDINATOR** - The successful candidate will organize and execute experiments using both antibody-based and enzyme assays as required to meet the department's objectives. These duties will require both developing and adapting assays for specific proteins and/or plant species. Coordination and collaboration with other laboratories or departments in the Plant Breeding Division is essential. B.S. or M.S. degree with three to five years directly related experience with immunoassay experience preferred.

**PROTEIN BIOCHEMISTRY POST-DOCTORAL RESEARCH ASSOCIATE** - A post-doctoral position is available in protein biochemistry to study the structure-function relationship and identify domains in proteins possessing insecticidal activity against insect pests of maize. The successful candidate will have a Ph.D. in biochemistry with experience in protein purification and characterization, chemical modification and analysis.

**GENE ISOLATION POST-DOCTORAL RESEARCH ASSOCIATE** - A post-doctoral position is available to participate in the isolation and characterization of genes which encode the enzymes for gibberellin synthesis in maize. One gene (anther ear, an1) has recently been cloned and a collection of transposon-tagged dwarfs has been generated. Assistance with the effort to tag other genes is expected, and this will include both field genetics and molecular biology. A Ph.D. in genetics, molecular biology, physiology, or a related discipline is required.

**RFLP RESEARCH ASSOCIATE** - This position is part of an existing RFLP group emphasizing gene identification in maize. This group has complementary expertise in molecular biology, plant breeding, genetics and statistics. The research associate will be responsible for conducting RFLP experiments which include DNA extraction, electrophoresis, and Southern hybridization, data recording and computer analysis. A B.S. degree with one to two years directly related experience is required.

**NUCLEIC ACID CHEMISTRY RESEARCH ASSOCIATE** - This position will participate in developing new technologies in nucleic acid chemistry. Synthesis and purification of oligonucleotides using appropriate technology and equipment will be the primary responsibility of the successful candidate. A B.S. degree in biology, biochemistry or chemistry and three years experience is required.

Pioneer Hi-Bred International is an Equal Opportunity/Affirmative Action Employer. **Send resume including the names of three references and the position for which you are applying to:**



**PIONEER HI-BRED INTERNATIONAL, INC.**  
7300 N.W. 62nd Avenue • P.O. Box 38  
Johnston, IA 50131  
Attn: Jo Ann Jorgensen

® Registered trademark of Pioneer Hi-Bred International, Inc., Des Moines, Iowa 50309.

**Department of Health and Human Services  
Public Health Service • National Institutes of Health**

## DIRECTOR

**NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES**

**Opening Date:** October 15, 1990 **Closing Date:** February 15, 1991

**(All Applications must be postmarked by the closing date.)**

The National Institutes of Health (NIH) invites nominations and applications for the position of Director, National Institute of Environmental Health Sciences (NIEHS). The Director is responsible for management and direction of one of the preeminent centers for toxicology research in the world, focused on carrying out its research mission: to seek the cause of and ways to prevent environmentally-associated health problems. Programs encompass intramural laboratory research and extramural (contracts and grants) activities on the environmental health sciences. The Director is responsible for the coordination and direction of all programs and activities in the Institute and serves as principal advisor to the Director, NIH, on environmental health-related matters.

The Director, NIEHS also serves in a dual role as the Director, National Toxicology Program (NTP). The NTP is a coordinated effort among DHHS agencies to characterize the toxicity of chemicals.

This is a Civil Service position in the Senior Executive Service (SES), with a base salary from the ES-1 to the ES-5 pay level (currently \$71,200 to \$83,600 per year) depending on qualifications. Proposed pay range to be effective January 1991, pending issuance of an Executive Order, is \$87,000 to \$108,300 (plus up to \$20,000 per annum allowance for physicians only). SES members are eligible for various bonuses and awards, and physicians are eligible for a comparability allowance of up to \$20,000 per year. (Alternatively, applicants may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.) The SES individual selected, if not presently in the Senior Executive Service, must serve a one-year probationary period.

For more information, contact Mr. Alvin L. Wade, Jr. at (919) 541-4318. The following forms are **required**: Application for Federal Employment (SF-171) accompanied by a current curriculum vitae and bibliography. These forms may be submitted to:

**Mr. Alvin L. Wade, Jr.**  
**National Institute of Environmental  
Health Sciences  
Personnel Office (1-01)  
P.O. Box 12233  
Research Triangle Park, North Carolina 27709**



Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, sex, national origin, politics, marital status, physical or mental handicap, age, or membership or non-membership in an employee organization.

**NOTE:** The Search Committee decided to extend the application period. This should not imply any judgement of previous applicants. Those applicants will be automatically considered and need not apply.

## NMR SPECTROSCOPIST

The Laboratory of Cellular and Molecular Biology of the National Institute on Aging, National Institutes of Health, is accepting applications for a spectroscopist for the In-vivo NMR Unit.

Research will include NMR methodologic studies not directly related to aging, studies of the effects of aging on skeletal muscle metabolism in humans, and small animal work oriented towards cardiac, pulmonary, and brain physiology and metabolism.

A Bruker Biospec 1.9T/31 cm spectrometer is available on-site in Baltimore. In addition, a high-field vertical wide-bore instrument is expected to be installed in mid-1991. The NMR facilities of the main NIH campus in Bethesda, as well as instrumentation at Johns Hopkins Medical School will also be available.

The appointment will be as a IRTA or Staff Fellow, and the salary will depend on experience and qualifications.

A position is also available for a technician.

Please send curriculum vitae and bibliography to:

**Dr. Richard Spencer**  
c/o **Dr. Gunther L. Eichhorn**  
Chief, Laboratory of Cellular  
and Molecular Biology  
NIH Gerontology Research Center  
4940 Eastern Avenue  
Baltimore, Maryland 21224



Further information can be obtained by contacting Dr. Eichhorn at (301) 550-1807.

U.S. Citizenship Required  
NIH is an Equal Opportunity Employer

## Ph.D. Soil Ecologist/ Plant Biologist

The Procter & Gamble Company has an immediate opening for a Ph.D. or postdoctoral Soil Ecologist or Plant Biologist/Toxicologist in the Environmental Safety Department, Cincinnati, Ohio. The position offers a unique combination of environmental research, project management, and applied problem solving opportunities. It requires an individual able to develop, apply, and interpret practical test methods to predict the effects of chemicals on the terrestrial environment. These chemicals will reach the soil environment as components of sewage sludge and compost. This scientist will develop programs to assess the impact of consumer product chemicals on terrestrial plants and soil organisms. These programs will be managed through a combination of internal research programs and by coordinating/supervising outside research initiatives. Experience in environmental safety assessments, composting, terrestrial toxicology, or environmental chemistry will be an asset.

Candidates must be presently authorized to work in the U.S. on a full-time basis. Send your resume and publication list to:

**Dr. T. J. Logan, Soil Ecologist Position**  
**THE PROCTER & GAMBLE COMPANY**  
P.O. Box 398707, Cincinnati, Ohio 45239-8707

Allow 6-8 weeks for response

An Equal Opportunity Employer

# Procter & Gamble

## EXPERIMENTAL BIOLOGIST

Wyeth-Ayerst Research, one of the world's largest pharmaceutical research and development groups, has an immediate opportunity for an Experimental Biologist in its Biotechnology and Microbiology Division at Radnor, PA, a Philadelphia suburb.

Candidates for this position should have a MS or BS with a minimum of 3 years relevant experience in Virology, Immunology, Cell Biology or related field. Competence in basic immunological and microbiological techniques such as ELISA. Western blotting, fluorescence microscopy, tissue culture, viral assays and animal handling is required. Experience with the techniques in microinjection and mammalian cytogenetics would be a plus.

Explore your exceptional career advantages with Wyeth-Ayerst. We offer a competitive salary, comprehensive benefits package, and an innovative environment with top professional colleagues.

For confidential consideration, forward your resume with salary requirements to: **Wyeth-Ayerst, Research Personnel, Position #149, P.O. Box 8299, Philadelphia, PA 19101.** Equal Opportunity Employer, M/F/H/V responses encouraged. Principals Only.

**WYETH  
AYERST**

*For more than a century the employees of Burroughs Wellcome Co. have applied their talents to the discovery and development of important new medicines. Their abilities and initiative have brought our company preeminence in both the pharmaceutical industry and the scientific world.*



## GREAT PEOPLE MAKE A GREAT COMPANY Research Biochemist

The Division of Experimental Therapy has an opening for an individual to design and perform laboratory experiments which are directed towards the discovery of useful new therapeutic agents and the elucidation of the transport, metabolism, and mechanism of action of such agents.

A Ph.D. in Biochemistry, Chemistry, or Pharmacology is required with experience in the investigation of purine and/or pyrimidine metabolism, quantitative chemical/biochemical analysis, use of radioisotopes, high performance liquid chromatography, and cell handling procedures especially intestinal cells.

Burroughs Wellcome Co. offers top benefit programs along with very competitive salaries. If you are interested in working for us, submit your resume, indicating position number in your cover letter, by February 18, 1991, to: **Burroughs Wellcome Co., Scientific Recruiting and Staffing, Pos. #61057-5, 3030 Cornwallis Road, Research Triangle Park, NC 27709.**

For information on other job opportunities with Burroughs Wellcome Co., call our Job Information Line at (919)248-8347 in Research Triangle Park, NC or (919)830-2997 in Greenville, NC.



**Burroughs Wellcome**  
An Equal Opportunity Employer

U.S. Army Medical Research Institute  
of Infectious Diseases  
Fort Detrick, Frederick, Maryland

**SCIENTISTS—BIOMEDICAL RESEARCH**

Numerous staff scientist positions exist at the U.S. Army Medical Research Institute of Infectious Diseases, Department of the Army. These openings are competitive Federal Civil Service positions and applicants must be U.S. citizens.

The Institute, which has excellent facilities, is a leading medical research facility engaged in the development of drugs and vaccines against militarily important diseases. All research is unclassified and publication is encouraged. The Institute is located in Frederick, MD in a semi-rural setting, with ready access to the metropolitan areas of Washington, D.C. and Baltimore, MD.

Salary Range (effective 1 Jan 91):

GS-12 — \$37,294 thru \$48,481

GS-13 — \$44,348 thru \$57,650

GS-14 — \$52,406 thru \$59,394 (step 5)

(1) **RESEARCH CHEMIST (GS-13/14):** Selectee will be part of a multidisciplinary team studying bacterial diseases. Research involves the biochemical characterization of bacterial virulence factors including toxins and their mechanism of action. Experience in protein chemistry and purification required. Areas of study include analysis of protein structure/function relationships and the mechanisms of toxin action at a cellular and molecular level.

(2) **IMMUNOLOGIST (GS-12/13):** Selectee will be a part of a multidisciplinary team studying the immunology and pathogenesis of bacterial diseases and toxins. Research involves measuring the cellular and humoral immune response to infections and vaccines, determination of in vitro correlates of immunity, study of antigen processing, adjuvants and other means of enhancing an effective immune response.

(3) **MICROBIOLOGIST (GS-12/13):** Selectee will participate in the development of rapid diagnostic tests for uses on toxins, and viral, rickettsial and bacterial human pathogens. Program emphasis is on development of diagnostic tests which are simple and rapid to perform, and utilize measurement of specific antigen, IgM antibodies, or nucleic acids. Candidates may have background in microbiology, molecular biology, biochemistry or related fields. Experience in diagnostic test development is desirable.

(4) **MICROBIOLOGIST/IMMUNOLOGIST (GS-12/13):** Expertise and interest in the study of microbial toxins. Research will involve (a) the development of protective vaccines against toxins, (b) the development of immunological-based identification systems for toxins, and (c) studies on the mechanisms of action of microbial toxins. Background and experience with protein purification and chemistry and experience with anaerobic bacteria would be positive factors.

(5) **MOLECULAR VIROLOGIST (GS-12/13):** Selectee must have research interests in virology and molecular biology as they apply to the development of antiviral drugs. Research directions may include basic studies on mechanism of drug actions and on design of assays for and approaches to the interruption of specific, functional viral processes, such as proteolytic enzymes or replicases. A close working relationship is expected with scientists in the Institute involved in antiviral drug development as well as with extramural contractors. Candidates should hold a Ph.D. and/or M.D. and should have experience and publications in virology, molecular biology, and research on antiviral drugs.

(6) **MOLECULAR VIROLOGIST (GS-13):** Selectee must have a research interest in modern molecular virology and the

development of virus vaccines. Research involves the cloning and expression of virus genes coding for antigenic determinants important for the induction of immunological protection from disease. Basic investigations employing recombinant DNA technology designed to improve vaccines and vaccination strategies represent a major component of the position. Collaborations include vaccine development scientists and basic researchers within the Institute as well as extramural contractors involved with vaccine production. Candidates should hold a Ph.D. and/or M.D. and should have research experience and publications in virology, molecular biology, and/or immunology.

(7) **IMMUNOLOGIST (GS-13):** Selectee must have a strong research interest in human vaccine development and experience in evaluating the immune response to viral immunogens. Development of animal models and a detailed exploration of both humoral and cellular immune responses to experimental candidate vaccines are important elements of the position. Collaborations are expected with molecular virologists and basic researchers in the vaccine development group as well as with medical personnel involved in testing and evaluation of vaccine candidates in human volunteers. Candidates should hold a Ph.D. and/or M.D. and should have research experience and publications in virology, molecular biology, and/or immunology.

(8) **MOLECULAR GENETICIST (GS-12/13):** Selectee must have experience in molecular genetics especially as applied to immunology. Research involves isolation and analysis of genes responsible for commitment of cells to respiratory mucosal immunity and/or development of mucosal vaccine expression vectors. Collaboration within or outside the Institute is encouraged.

(9) **RESEARCH CHEMIST (GS-12):** Selectee will be a part of a team managing the chemical and biological data for an antiviral drug discovery research program. Research involves the acquisition, identification, and development of potential compounds. Drug discovery is supported by the analysis of structure/activity relationships based on chemical structure, data generated in in vitro and in animal model systems, and design and implementation of computer systems for the retrieval of relevant data. Candidates should hold an M.S. degree or equivalent and experience in the design and principles of computer systems associated with integrated chemical and biological databases for the analysis of structure/activity relationships to support drug development.

(10) **MICROBIOLOGIST (GS-12/13):** Selectee will be part of a group studying the role of cytokines in inflammation, infection, and shock. Emphasis will be on identifying new areas with potential for therapeutic intervention. Work will include both in vitro and in vivo (animal modeling) programs. Close collaboration with a clinical research unit is expected.

(11) **IMMUNOLOGIST (GS-12/13):** Selectee will be a part of a multidisciplinary team studying immunity to protein toxins. Research emphasizes the fields of cellular immunology, protein chemistry and antigen processing. Goal is the development of new vaccines against protein toxins. Studies include the definition of toxin epitopes and basic research into the immune response against proteins.

Application procedures: Candidates should specify position(s) for which they are applying and submit an Application for Federal Employment (SF 171) and/or a Curriculum Vitae. Completed applications should be mailed to:

Mr. Raymond J. Mangold  
Directorate of Civilian Personnel  
Fort Detrick, Frederick, MD 21702-5000  
Telephone: (301) 663-2007

**EQUAL OPPORTUNITY EMPLOYER**



## POSITIONS OPEN

### CHAIRPERSON

Department of Microbiology and Immunology, School of Medicine, West Virginia University (WVU). We invite applications from individuals holding a Ph.D. and/or M.D. degree with an outstanding record of extramurally funded research, a strong teaching record, and enthusiasm for medical and graduate student education. We are seeking candidates from a wide spectrum of disciplines and research areas within microbiology/immunology. The deadline date for receipt of applications is 1 March 1991. Interested applicants should send curriculum vitae, a summary of research goals, and the names of three references to:

**Diana S. Beattie, Ph.D.**  
Microbiology and Immunology  
Search Committee Chair  
Department of Biochemistry  
WVU School of Medicine  
Morgantown, WV 26506

*An Equal Opportunity/Affirmative Action Employer.*

### THE UNIVERSITY OF TULSA DEAN COLLEGE OF ARTS AND SCIENCES

The University of Tulsa is seeking candidates and encouraging nominations for the position of Dean, Henry Kendall College of Arts and Sciences. The dean is the chief academic officer of the college and reports to the provost.

Salary negotiable. Starting date, 1 August 1991.

#### QUALIFICATIONS

- An earned doctorate or equivalent terminal degree with appropriate credentials to qualify the candidate at the rank of full professor with tenure in a department of the College.

- A record of successful and significant administrative experience at the department level or above, having held the position of chair or equivalent.

Please write or call for a complete job description, qualifications and application procedures. Address all correspondence to:

**Stephen Sumner, Chair**  
Search Committee for the Dean of Arts and Sciences  
Office of the Provost, 205 McClure Hall  
The University of Tulsa  
600 South College Avenue  
Tulsa, OK 74104  
Telephone: 918-631-2202

The committee will begin reviewing applications on 20 January 1991 and will continue to review candidates until the position is filled. *The University of Tulsa is an Equal Opportunity/Affirmative Action Employer.*

**VICE PRESIDENT-BIOMEDICAL ENGINEERING PROGRAMS.** The Whitaker Foundation is seeking a highly qualified candidate to manage existing biomedical engineering grant programs and to design and implement new biomedical engineering programs. At least 7 years of experience in an academic, corporate, or governmental biomedical engineering program required. Applicants from academic institutions must have minimum rank of associate professor or equivalent. Prior administrative experience preferred. Ph.D. in biomedical engineering or other engineering discipline required. Salary will be commensurate with experience. Qualified applicants should submit a cover letter, curriculum vitae and three references no later than 15 February 1991 to: **Mr. Miles J. Gibbons, Jr., President, The Whitaker Foundation, 4718 Old Gettysburg Road, Suite 405, Mechanicsburg, PA 17055-4328.** No phone inquiries. *The Whitaker Foundation is an Equal Opportunity Employer.*

### BONUS CIRCULATION FOR YOUR CLASSIFIED AD AT PITTSBURGH CONFERENCE

Our issue of 22 February 1991 will be distributed to scientists attending the Pittsburgh Conference in Chicago, 4 to 8 March 1991. Deadline for submission of line classified ads: 7 February 1991.

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

## POSITIONS OPEN

### DIRECTOR ARCTIC ENVIRONMENTAL INFORMATION AND DATA CENTER UNIVERSITY OF ALASKA ANCHORAGE

The Center focuses on developing innovative methods of applying science/technological knowledge to examine natural resource and environmental problems, assesses risks and consequences and projects ecological interactions and trade-offs of resource uses important to Alaska and other northern and arctic regions.

Applications are invited from distinguished senior scientists with a Ph.D. or recognized equivalent in training and experience in a natural environmental science; broad interdisciplinary understanding of environmental sciences and interactions between social and natural systems; environmental issue and policy applications experience involving high latitude resource and environments; strong, innovative leadership and entrepreneurial skills; administrative, fiscal and project management experience in a research unit strongly dependent on grants and contracts; experience in teaching natural resource science and environmental studies/policies.

Twelve-month permanent administrative appointment; minimum salary \$70,000 or higher depending on qualifications and experience; excellent benefits.

Send résumé by 18 February 1991, including: education, experience, and publications, letter explaining why specific background would qualify for position and preference for confidentiality until finalists announced; and three personal references to: **Personnel Office, University of Alaska Anchorage, 3890 University Lake Drive, Anchorage, AK 99508. Telephone: 907-786-4608 or FAX: 907-786-4727.** Full position details furnished upon request.

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

### DIRECTOR SCIENCE, TECHNOLOGY AND SOCIETY PROGRAM

The Pennsylvania State University, University Park, is conducting a national search for the position of Director of the Science, Technology and Society Program, a university-wide, interdisciplinary program housed in the College of Engineering.

The Pennsylvania State STS Program, nationally recognized for its leadership in the field, is composed of approximately 30 associated faculty members from agriculture, the natural sciences and engineering, humanities, social sciences, communications, and education. The program offers some 20 courses and the faculty conduct scholarly work and funded research in several STS areas including ethics and human values; technology policy; science and technology education.

Candidates should have an earned doctorate, demonstrated leadership in an STS-related field, scholarly achievement, and ability to administer and further develop a broad interdisciplinary program. They must have qualifications for an appointment to an academic department. Experience with development of proposals for external grants and contracts is preferred. Salary will be commensurate with qualifications and experience.

Qualified candidates should submit a cover letter, curriculum vitae, and the names, addresses, and telephone numbers of three references to: **Dr. Edward H. Klevans, Chairman, STS Program Director Search Committee, The Pennsylvania State University, 231 Sackett Building, Box B, University Park, PA 16802.**

Applications received by 22 February 1991 will be assured of consideration. However, applications will be considered until the position is filled.

*An Affirmative Action/Equal Opportunity Employer.  
Women and minorities are encouraged to apply.*

**MICROBIOLOGY.** Cumberland College, a liberal arts college with around 1800 students, invites applications for a **FACULTY POSITION** in the Department of Biology. Courses taught will include upper division courses in microbiology, immunology, and parasitology and introductory courses in biology for majors and non-majors. This position requires a commitment to teaching undergraduates in a values-oriented, liberal arts setting. Ph.D. required. Send letter of application, curriculum vitae, copies of transcripts, and three letters of reference to: **Dr. Blaine Early, Chairman, Department of Biology, Cumberland College, Williamsburg, KY 40769.** Closing date: 19 February 1990.

## POSITIONS OPEN

### GENETICS PROFESSOR/ASSOCIATE PROFESSOR

Children's Hospital Medical Center and the Department of Pediatrics, University of Cincinnati College of Medicine, are seeking a **DIRECTOR** for the Division of Genetics. Individuals with leadership skills and demonstrated excellence in extramurally funded research will find this an exciting opportunity to develop an academic program in human genetics with emphasis on molecular biology. Newly expanded, well-equipped research facilities available. Thriving midwestern community offers fine arts, professional sports, family recreation, and high quality lifestyle. Competitive salary. Excellent fringe benefits. Contact: **Reginald C. Tsang, M.D., University of Cincinnati College of Medicine, Department of Pediatrics, 231 Bethesda Avenue, Cincinnati, OH 45267-0541.**

### EXECUTIVE VICE PRESIDENT FOR MAIN CAMPUS ACADEMIC AFFAIRS

Georgetown University invites nominations and applications from men and women for the position of executive vice president for main campus academic affairs. Position available 1 July 1991.

This university in the nation's capital is a private, Catholic institution associated with the Jesuits since its founding. It has an enrollment of 11,500. It offers degrees in the usual undergraduate areas, and graduate and professional programs in the arts and sciences, business, law, foreign service, languages and linguistics, nursing, and medicine.

The executive vice president for main campus academic affairs is the chief academic officer of the university and has administrative authority over all academic activities of the main campus. This officer reports directly to the president and is the chief budget officer for those university officials who report to the executive vice president's office. The executive vice president for main campus academic affairs shares with the executive vice presidents of the medical and law campuses the responsibility for the overall implementation of the university's educational philosophy.

Candidates should have an earned doctorate, teaching experience, evidence of scholarly activities, and should have demonstrated successful administrative experience appropriate to the complexity of the position. They should be prepared to support the educational philosophy and the commitment of the university as a Jesuit institution.

Letters of interest or nominations must be received by 1 February 1991 and should be sent to: **Chair of the Search Committee, c/o Virginia M. Keeler, Secretary of the University, Georgetown University, Washington, DC 20057.**

### MENLO COLLEGE BIOTECHNOLOGY MANAGEMENT PROGRAM

Full-time **FACULTY OPENING** to teach interdisciplinary physical science courses, physics and/or other areas related to biotechnology. Ph.D. in a life science, with emphasis or teaching experience in areas related to biotechnology. Experience in biotech industry desirable.

The Program in Biotechnology Management is a new, innovative, and dynamic program developed at Menlo College, in close association with the biotech industry in the Bay Area. The department also offers a variety of courses in support of the general education laboratory science requirements. The ability to teach interdisciplinary undergraduate courses relevant to the biotechnology program and science courses directed toward achieving the "scientific literacy" of a nonscience major will be primary considerations in the selection of a candidate.

Menlo College is an accredited, 4 year, private, non-sectarian, coeducational undergraduate institution with an emphasis on teaching rather than research. It is located in a desirable residential setting on the Peninsula, south of San Francisco. Bachelor's degrees are offered in biotechnology management, business administration, communication, computer information systems, computer science, humanities, and psychology/human resource management. Send letter of application and résumé to: **Dr. B. S. Vasu, Chairman, Program in Biotechnology Management, Menlo College, 1000 El Camino Real, Atherton, CA 94027-4185. Telephone: 415-323-6141 and FAX: 415-324-4937.** *Menlo College is an Equal Opportunity/Affirmative Action Employer.*

National Institutes of Health • Public Health Service  
Department of Health and Human Services

## Deputy Director National Institute of Dental Research

The National Institute of Dental Research (NIDR) invites nominations and applications for the position of Deputy Director, National Institute of Dental Research. This is a Civil Service position in the Senior Executive Service. The salary range is ES-1 to ES-4, currently \$71,200 to \$79,200 per annum. Projected salary range beginning January 1991 is \$87,000 to \$100,500 per annum. The person selected may be eligible for Physicians Comparability pay up to \$20,000 per year. A one-year probationary period must be served by the individual selected if not currently in the Senior Executive Service.

The Deputy Director, NIDR, shares responsibility with the Director, NIDR, for the scientific and administrative management of a national program of basic and clinical research and training directed at the causes, diagnosis, treatment and prevention of oral diseases and disorders. The incumbent has full authority to speak for the Institute and on behalf of the Director.

Applicants must meet the minimum educational requirements (or possess equivalent combination of experience and training) for Dental Officer, GS-680; Medical Officer, GS-602; General Health Science, GS-601; or an allied scientific discipline, as defined by the U.S. Office of Personnel Management Handbook X-118, Qualification Standards for Positions Under the General Schedule, which is available in Federal Personnel Offices and Federal Job Information Centers. Further information about the position and qualification requirements may be obtained by contacting Ms. Carol M. Beasley, (301) 496-6971. An Application for Federal Employment (SF-171), accompanied by a current curriculum vitae and bibliography, should be submitted to:

**Ms. Carol M. Beasley  
Personnel Officer  
National Institute of Dental Research  
National Institutes of Health  
Building 31, Room 2C-23  
9000 Rockville Pike  
Bethesda, MD 20892**



***Applications must be received by  
February 28, 1991***

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, sex, national origin, politics, marital status, physical or mental handicap, age, or membership or non-membership in an employee organization.

*NIH is an Equal Opportunity Employer*

## RESEARCH ASSOCIATE DNA SEQUENCING

**Amgen** has emerged as the recognized leader in the development of innovative human therapeutic products through applications of biotechnology. Our continued commitment to excellence in research has resulted in an environment in which scientists have the resources and support to develop their full potential. As a result of our continued growth, we have an excellent opportunity for a Research Associate in our DNA sequencing group. Responsibilities for this position will include DNA sequencing in support of on-going research and product development programs.

Qualified applicants for this position must have a Bachelor's or Master's degree in Molecular Biology, Biochemistry or a related discipline and a minimum of two years' experience in the di-deoxy chain termination method of DNA sequencing. Basic skills in Molecular Biology are also essential.

**Amgen** offers a stimulating and challenging research environment on the leading edge of biotechnology as well as an excellent compensation and benefits package including comprehensive relocation benefits.

If you have the necessary qualifications and would like the opportunity to develop your skills as a technical expert in an organization that places a high value on its human resources, please send a resume, in confidence, to:

**AMGEN, INC.  
Recruitment, Dept. #565  
Amgen Center  
Thousand Oaks  
CA 91320-1789**

Equal  
Opportunity  
Employer

# AMGEN



# CARDIOVASCULAR RESEARCH

## SENIOR SCIENTIST



Hoffmann-La Roche, one of the world's foremost leaders in the field of pharmaceutical/medical research and development, is seeking a Senior Scientist for Cardiovascular Research.

You will be responsible for supervising 2 or 3 scientists engaged in the development of cardiovascular drugs; developing/utilizing animal models of cardiovascular disease, particularly myocardial ischemia/infarction (MI); and overseeing the evaluation of the cardiovascular effects of drugs in development for other uses. These duties will involve extensive cooperation with both your own department of 25 scientists as well as scientists from other disciplines.

To qualify, you must have a PhD in Pharmacology, Physiology or a relevant discipline and a minimum of 3 years of post-doctoral experience in MI (or a closely related area). An understanding of the biochemical and molecular aspects of MI, supervisory experience, a background in the development and use of *in vivo* models and a publication record in the field are highly desirable.

We offer a competitive salary, a generous benefits package and the resources you'll need to make significant scientific impact. For consideration, please send your resume and present salary to: **Mrs. Eleanor M. Malone, Staffing and Employee Services, Department EM011LB, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.** We are an equal opportunity employer.



### Hoffmann-La Roche

Working Today For A Healthier Tomorrow



## Wayne State University

### CHAIRPERSON

DEPARTMENT OF OCCUPATIONAL AND  
ENVIRONMENTAL HEALTH  
College of Pharmacy and  
Allied Health Professions

Applications or nominations are invited for the position of Professor and Chairperson of the Department of Occupational and Environmental Health in the College of Pharmacy and Allied Health Professions at Wayne State University, Detroit, Michigan. The tenure-track position carries a 12-month academic appointment.

#### ■ Qualifications and Experience:

Candidates should possess a PhD; MD; DVM degree in Toxicology, Pharmacology, Biochemistry or related disciplines. Candidates must have a proven record of accomplishment as a toxicology researcher with an active funded research program.

#### ■ Duties and Responsibilities:

The successful candidate will be responsible for the administration of the Department of Occupational and Environmental Health and will be expected to conduct, stimulate and coordinate research and attain external funding. The individual will collaborate with other members of the academic and industrial community. The candidate will also oversee those aspects of the existing successful graduate program in Industrial Toxicology and Industrial Hygiene.

Curriculum vitae should be submitted by February 1, 1991 to:

Dr. Edward Kerfoot  
Chair Selection Advisory Committee  
Department of Occupational and Environmental Health  
College of Pharmacy and Allied Health Professions  
Wayne State University, Room 428 Shaper Hall  
Detroit, MI 48202

Wayne State University is an Equal Opportunity/  
Affirmative Action Employer

## Aquatic Invertebrate Community Ecologist

Department of Fisheries and Oceans Canada  
Freshwater Institute  
Winnipeg, Manitoba

As the successful candidate you will join a renowned team of limnologists working in a unique and powerful setting - the Experimental Lakes Area (ELA) in northwest Ontario. You will participate in comparative and experimental studies of invertebrate communities to investigate the effects of anthropogenic influences on lakes and watersheds. This will be accomplished by developing and testing models of aquatic invertebrate community structure and function for both natural and perturbed ecosystems. The work will focus on existing long-time series and experimental manipulations of mesocosms and whole lakes. Results will be published in departmental reports and international refereed journals.

You must possess a Doctoral degree in limnology from a recognized university, or a lesser degree and evidence of equivalent research experience. Experience in planning and executing independent field-oriented research, particularly on freshwater ecosystems, is required, as is experience working collaboratively with a multidisciplinary team. Be prepared to conduct studies and live for extended periods at a remote field camp. Proficiency in English is essential.

Salary range: \$34,343 to \$63,880.

Please forward your résumé and/or application form before February 15, 1991, quoting reference number S-90-31-6361-47JG-G35, to: **Joan Girling, Public Service Commission of Canada, 171 Slater Street, Ottawa, Ontario K1A 0M7.**

**We are committed to Employment Equity.**

# Canada

Personal information is protected under the Privacy Act.  
It will be held in Personal Information Bank PSC/P-PU-040.



## SIMON FRASER UNIVERSITY DEPARTMENT OF BIOLOGICAL SCIENCES

### ANIMAL OR CELL PHYSIOLOGIST

The Department of Biological Sciences invites applications for a tenure-track faculty position at the rank of Assistant Professor. We seek a person with postdoctoral experience and a strong record of accomplishment in research. Areas of particular interest to the Department include cellular signalling processes and environmental physiology. The successful applicant will be expected to teach in the area of animal physiology.

Applicants should submit a curriculum vitae, reprints, and a statement of current and future research interests, and should arrange to have three letters of recommendation sent to:

Dr. B. McKeown  
Chairman  
Department of Biological Sciences  
Simon Fraser University  
Burnaby, B.C.  
Canada, V5A 1S6.

The deadline date for applications is 1st March 1991.

Simon Fraser University is committed to the principle of equity in employment and offers equal employment opportunities to qualified applicants. While all eligible scientists are encouraged to apply, preference is given to citizens and permanent residents of Canada.

# The Perfect Synthesis

## Post-Doctorate Synthetic Organic Chemists - South East England

We are Glaxo Group Research, part of highly successful and profitable Glaxo, the pharmaceutical company responsible for Zantac, the world's best selling medicine plus a wide range of antibiotics, dermatological, respiratory, cardiovascular and other health care products.

Glaxo's commitment to research is evidenced by our laboratories, which boast the most sophisticated research tools available today. And how many companies - in any sector - can match our spending on R&D, which now amounts to almost £400 million (c.\$780 million) annually?

Our plans for the future are even more ambitious: work is currently progressing on a brand new facility in Hertfordshire, just north of London. And we are confident that when finished, it will be the finest drug research complex in Britain, if not the world.

Right now, we can offer a number of exciting opportunities for Post-Doctorate Synthetic Organic Chemists to join our world-beating teams at Greenford, West London or Ware, Hertfordshire.

At these sites, we are involved in pioneering

research work using biochemical and microbiological approaches to disease treatment.

Here, you'll take your extensive knowledge of chemistry and apply it to complex biological problems. You'll be working within an informal, multidisciplinary environment, making use of the most advanced techniques of synthesis. And as we are committed to developing our people as far as they want to go, you'll have access to training programs designed to improve both your specialist skills and managerial ability.

We'll be looking for relevant original post-doctoral research experience and a dedicated and innovative approach to your work.

Naturally, you can expect an excellent salary and benefits package - including full relocation assistance where appropriate.

If this sounds like a project worth investigating, write or fax to Cathy Woodbine, Human Resources Department, Glaxo Group Research, Greenford, Middx. UB6 OHE, England, with a full career resume. Fax No. 081 422 4205.

# Glaxo Group Research

## POSTDOCTORAL FELLOWSHIPS

for research on

CONSCIOUS AND UNCONSCIOUS PROCESSES IN EMOTIONAL STATES

Two to three year periods of fully funded advanced research training are available, with stipends of up to \$39,000 per annum for qualified applicants within the **PROGRAM ON CONSCIOUS AND UNCONSCIOUS MENTAL PROCESSES** of the **JOHN D. AND CATHERINE T. MACARTHUR FOUNDATION**, directed by **Mardi J. Horowitz**, Professor of Psychiatry at U.C. San Francisco. Program scientists serve as mentors. Topics of study include the interaction of ideas, emotions, personality structure, physiological patterns, stressful social situations, and psychotherapeutic interventions. *NIMH* is a possible joint sponsor of fellowships with a significant component of psychotherapy research.

For complete information, send a curriculum vitae and statement of experience and interest to: Postdoctoral Fellowship, c/o Julio Ruffini, Ph.D., Center for the Study of Neuroses, Langley Porter Psychiatric Institute, Box CSN-0984, University of California, San Francisco, CA 94143. Applications will require, in addition, copies of up to three documents written by the applicant (preferably reprints) and three letters of recommendation. Deadline for receipt of applications is May 15, 1991, and again October 15, 1991. The University of California is an Equal Opportunity/Affirmative Action Employer.

## RESEARCH CHEMIST

Gillette Research Institute, a division of The Gillette Company, has a challenging opportunity for a research scientist with expertise in colloid or polymer chemistry. The successful candidate will have a Ph.D. in chemistry with one to two years post-doctoral or industrial experience.

This entry-level position is in our Biochemistry Department and will be involved in research leading to new personal care products for The Gillette Company.

Gillette Research Institute is located in a new facility, outside of Washington, D.C., in an area rich in government, private, and academic scientific laboratories. We offer an excellent compensation and benefits package. Qualified candidates interested in this opportunity should forward a resume:



Gillette Research Institute  
Personnel Office  
401 Professional Drive  
Gaithersburg, MD 20879

Equal Opportunity Employer

## POSITIONS OPEN

### UNIVERSITY OF CALIFORNIA SANTA BARBARA (UCSB)

Full-time neurohistologist position available 1 March 1991. **MANAGEMENT OF NEUROHISTOLOGY LABORATORY** studying fiber organization along the mammalian retino-fugal pathway. Experience with: preparation of tissue for light and electron microscopy; autoradiography, histochemistry, immunocytochemistry, and fluorescence microscopy; aseptic surgical procedures; standard tissue culture procedures required. B.A./B.S. or equivalent education/experience. Salary: \$28,000 per year. Submit curriculum vitae and three references to: **Nancy Fraser, MSO, Department of Psychology, University of California, Santa Barbara, CA 93106** by 15 February 1991. *UCSB is an Equal Opportunity/Affirmative Action Employer. Proof of U.S. citizenship or eligibility for U.S. employment will be required prior to employment (Immigration Reform and Control Act of 1986).*

### PROGRAM DIRECTOR

A position is available for a Ph.D. virologist to establish a new program at ViroMed Laboratories. The selected candidate will be responsible for establishing and managing studies relating to experimental antiviral compounds during development. Experience with established antiviral susceptibility testing methods and the capability of developing new assay systems are required. Excellent compensation includes participation in the company's ESOP program. ViroMed Laboratories is a rapidly growing private company involved in diagnostic virology, production and national distribution of cell cultures, and specialized testing for national agencies and private industries. Send curriculum vitae to: **Bonita L. Baskin, Ph.D., Laboratory Director, ViroMed Laboratories, Inc., 5500 Feldt Road, Minnetonka, MN 55343.**

*An Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITION IN STATISTICS STATISTICAL GENETICS

With the recent retirement of Professor C. Clark Cockerham, there is a tenure-track position in statistical genetics available in the Department of Statistics at North Carolina State University.

The position will be at the **ASSISTANT PROFESSOR** level and will be filled by a person with advanced training in statistics as well as a demonstrated commitment to working on applications to genetics. Responsibilities will include teaching within the Department of Statistics and conducting research in statistical aspects of population or quantitative genetics. The person will be affiliated with the proposed Center for Genetic Statistics.

The successful candidate will join a large and active group of workers in the fields of statistics and genetics at N.C. State University and at other Research Triangle institutions.

Send letter of application, curriculum vitae and the names of three references to: **Dr. B. S. Weir, Department of Statistics, North Carolina State University, Raleigh, NC 27695-8203.** Consideration of applicants will begin 1 March 1991 and will continue until a suitable applicant is identified.

Proper documentation of identity and employability is required before the hiring process can be finalized. *Equal Opportunity/Affirmative Action Employer.*

### TWO BIOLOGY POSITIONS

(i) Secondary science education with a strong background in biology, preferably field biology. Responsibilities include supervising secondary science student teachers and courses in science education and biology. Active scholarship involving undergraduates is expected. Tenure line position at **INSTRUCTOR TO ASSOCIATE PROFESSOR** level contingent upon anticipated retirement. (ii) **GENETICIST.** Sabbatical replacement for 1991-92 to teach genetics, human genetics, and one elective.

A Ph.D. (or anticipated) required for both positions. Teaching experience preferred. Candidates should submit by 25 February 1991 a statement of teaching and scholarly goals, curriculum vitae, reprints of selected publications, and three letters of recommendation to: **Dr. Diane K. Lavett, Chair, Search Committee, Department of Biological Sciences, State University of New York (SUNY) at Cortland, Cortland, NY 13045.**

*SUNY Cortland is an Equal Opportunity Employer which encourages applications from minorities and women.*

## POSITIONS OPEN

### FACULTY POSITION AVAILABLE

Emory University School of Medicine is seeking a tenure-track faculty member at the rank of **ASSISTANT PROFESSOR** to participate in the activities of the Medical Genetics Division of the Department of Pediatrics. Candidates should have an M.D./Ph.D. or M.D. and be Board-eligible or -certified in clinical genetics, have experience in medical genetics and in molecular genetic research, and have potential to establish and maintain an active research program. Demonstrated teaching skills are also essential. Send current curriculum vitae and three letters of recommendation to:

**Louis J. Elsas, II, M.D.**  
Professor of Pediatrics  
Director, Division of Medical Genetics  
Emory University School of Medicine  
Pediatrics/Medical Genetics  
2040 Ridgewood Drive  
Atlanta, GA 30322

Deadline for submission of applications is 28 February 1991.

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

### ECOLOGY/BOTANY

The Department of Biology at Gettysburg College invites applications for a 1-year sabbatical replacement beginning fall 1991. Candidates must have an earned doctorate by September 1991. The successful candidate will teach ecology, a botany course in his/her specialty, and participate in the introductory biology program. Gettysburg College is a highly selective liberal arts college located 1½ hours north of the Washington/Baltimore area. Submit description of teaching interests, curriculum vitae, and three letters of reference (with recommender's telephone numbers) to: **Biology Search Committee, Department of Biology, Gettysburg College, Gettysburg, PA 17325.** Applications received by 1 March 1991 will receive fullest consideration.

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

### FACULTY POSITIONS BIOCHEMISTRY/MOLECULAR BIOLOGY MEHARRY MEDICAL COLLEGE

Faculty positions are available in 1991 in the Department of Biochemistry at the level of **ASSISTANT OR ASSOCIATE PROFESSOR** for qualified candidates in the following areas: molecular biology of eukaryotic systems, membrane biochemistry or molecular biology of signal transduction, and regulatory aspects of cellular and/or metabolic biochemistry. Successful applicants will be expected to develop and/or maintain a funded research program of high quality, to participate in the graduate and professional (medical, dental, and allied health) school teaching programs of the department, and to interact with institutional programs in neuroscience and cell/molecular biology. Applicants should send curriculum vitae, names of four individuals who may be contacted for reference, and a summary of potential research projects to: **Ifanyi J. Arinze, Ph.D., Chairman, Department of Biochemistry, Meharry Medical College, Nashville, TN 37208.** *Meharry College is an Equal Opportunity/Affirmative Action Employer.*

**FACULTY POSITION.** Cardiology Section, New England Deaconess Hospital and Harvard Medical School. Requires M.D. degree. Position at **ASSOCIATE PROFESSOR** level available for established investigator in basic research on thrombolysis. Individual should also have extensive experience in clinical management of patients with thrombotic disorders and risk factors for coronary artery disease. Contact:

**James E. Muller, M.D.**  
Cardiology Section  
New England Deaconess Hospital  
Boston, MA 02215

**POSTDOCTORAL POSITION.** Available immediately to study intracellular mechanisms of signal transduction following cellular stimulation by human hemopoietic growth factors. Emphasis will be given to phosphorylation-related cytoplasmic and nuclear events. Background in cell biology and biochemistry desirable. Send curriculum vitae and names of three references to: **Dr. Peter Greenberg, Hematology Division, Stanford Medical Center, Stanford, CA 94305.**

## POSITIONS OPEN

**ECOSYSTEM SCIENTIST.** As part of its Global Change Initiative, the University of Colorado at Boulder seeks an ecologist to fill a joint position with the Institute of Arctic and Alpine Research and the Department of Environmental, Population, and Organismic Biology. Candidates must have extensive experience and continuing interest in terrestrial ecosystem science. Responsibilities include both teaching and an active research program that complements an existing long-term ecological research program in the Colorado alpine. **ASSOCIATE PROFESSOR** preferred, but all ranks will be considered. Send résumé, statement of interests, and names of four references before 28 February 1991 to: **Ecosystem Scientist Search, Committee Chair, Department of EPO Biology, Campus Box 334, University of Colorado, Boulder, CO 80309-0334.** *The University of Colorado is an Equal Opportunity/Affirmative Action Employer.*

### CLINICAL CYTOGENETICIST BAYLOR COLLEGE OF MEDICINE

The Institute for Molecular Genetics, Baylor College of Medicine, seeks a Board-certified or Board-eligible clinical cytogeneticist for a **TENURE-TRACK APPOINTMENT** at a junior or senior level. This position will involve a substantial clinical and administrative commitment to the Kleberg Cytogenetics and Prenatal Diagnostic Laboratory. An interest in the development and application of molecular cytogenetic techniques to clinical cytogenetics is highly desired. The human and molecular genetics research environment at Baylor and in the Texas Medical Center is outstanding, offering substantial opportunity for collaborative research activities. Please send curriculum vitae, letter of interest, and names of three references to: **Cytogenetics Search Committee, Institute for Molecular Genetics, Baylor College of Medicine, Houston, TX 77030.**

### FACULTY NEUROSCIENTIST

The Division of Neurosurgery of the University of South Florida College of Medicine is seeking an established neuroscientist for a full-time tenure-earning position with rank and salary commensurate to credentials. Appointment will be in both neurosurgery and appropriate basic science discipline. Duties will include administration and guidance of the division's research laboratories, teaching of postdoctoral M.D. and Ph.D. fellows, and active independent research in coordination with established research programs within the division and within the school. A proven record of successful peer-reviewed publications and in the acquisition of independent funding is mandatory. An interest in neural tissue transplanting is desirable, but not mandatory.

Please contact:

**David W. Cahill, M.D., F.A.C.S.**  
Director  
Division of Neurosurgery  
University of South Florida  
4 Columbia Drive, Suite 730  
Tampa, FL 33606  
Telephone: 813-253-6001

### EARTH AND OCEAN SCIENCES UNIVERSITY OF VICTORIA (UVic) BRITISH COLUMBIA

Applications are invited for at least two new **FACULTY POSITIONS** in a proposed School of Earth and Ocean Sciences. The research focus of the school will be on fundamental, transdisciplinary studies of earth system science; preference will be given to applicants with research interests in processes in modern and ancient earth systems, especially dealing with the lithosphere and hydrosphere. These appointments are part of a multi-year expansion program; rank of positions is open; starting date is July 1991. The school will combine existing faculty in earth/ocean science at UVic with new faculty and with adjuncts from nearby government and industry laboratories.

*In accordance with Canadian Immigration and Employment regulations, this notice is directed in the first instance to Canadian citizens and permanent residents. The University of Victoria is committed to an employment equity program; women especially are encouraged to apply. Send inquiries or applications, with curriculum vitae and names of three referees to: **Dr. Chris R. Barnes, Director, Centre for Earth and Ocean Research, University of Victoria, P.O. Box 3055, Victoria, British Columbia V8W 3P6, Canada.** Deadline for application is 28 February 1991, or until the positions are filled.*

# Therapeutics for the Treatment of Cardiovascular Disease

COR Therapeutics, Inc. is a young, growing biotechnology company located in the San Francisco Bay Area. The company specializes in the development of novel therapeutics for the treatment of atherosclerosis-induced cardiovascular disease. We invite qualified individuals from various scientific disciplines to join our expanded research efforts in the following areas:

## **Protein Chemistry**

We are seeking an individual who is interested in investigating the structure, function and mechanism of action of receptors mediating cellular adhesion. A Ph.D. and successful post-doctoral experience in protein chemistry are essential.

## **Cell Biology**

Highly motivated scientists are sought to contribute to a program investigating mechanisms regulating cellular activation. The ideal candidates will have a Ph.D. and successful post-doctoral experience in cell biology.

## **Molecular Biology**

We are accepting applications from individuals to participate in a program to develop coagulation inhibitors for use as antithrombotics. The successful candidate will have a Ph.D. and post-doctoral experience incorporating protein chemistry and molecular biology techniques.

## **Peptide Chemistry**

We have an immediate opening for a peptide chemist to conduct structure/activity studies. Experience in organic synthesis is highly desirable. The appropriate individual will have a Ph.D. and several years of post-doctoral experience.

## ***In Vivo* Studies**

One senior individual is sought to create and direct a research team to develop and characterize *in vivo* models of thrombosis, restenosis and reperfusion injury. This individual will have a Ph.D. or M.D. and over five years experience leading an *in vivo* effort.

## **Post-Doctoral Fellowships**

Two positions exist as post-doctoral fellows, both with the objective of understanding basic cellular mechanisms. The first position involves the molecular biology of platelet membrane glycoproteins and the second will investigate the identification and characterization of novel receptors mediating leukocyte adhesions. COR's post-doctoral program particularly encourages original research and rapid presentation and publication of results.

## **Research Assistants and Associates**

Multiple positions exist for individuals at the BS/MS level in the areas of molecular biology, cell biology, protein chemistry and peptide chemistry. Preference will be given to those candidates with at least two years laboratory experience.

COR Therapeutics seeks dedicated and innovative scientists who are interested in an exciting and interactive research environment. To this end, we provide highly competitive salaries and benefits in addition to attractive equity positions. Please send your curriculum vitae, indicating the position you are applying for, to **COR Therapeutics, Department of Human Resources, 256 East Grand Avenue, Suite 80, South San Francisco, CA 94080**. COR is an equal opportunity employer.

**COR Therapeutics, Inc.**

# Research Professionals

At Genentech, our success as a biotechnology leader is a result of state-of-the-art equipment combined with a progressive environment and, most important, the best people. Currently, we have exceptional opportunities for **Research Professionals** in the following positions:

## Pharmaceutical R&D

Three opportunities exist for Research Associates in our Pharmaceutical R&D department. These positions require performing laboratory studies in support of research and development of dosage forms/delivery systems for protein drugs. These studies will include the physical and chemical characterization of proteins with regard to compatibility with pharmaceutical excipients and delivery systems, as well as the design of manufacturing processes and assessment of dosage form stability.

A BS/MS or equivalent in Physical Chemistry, Biochemistry, Engineering, Pharmaceutical/Polymer Chemistry with physical/analytical emphasis is required. Two years' experience in pharmaceutical formulation or process/manufacturing R&D is also essential.

## Recovery Process R&D

Within this area, we have three excellent opportunities for Research Associates. These positions will involve the development of novel methods to isolate and characterize natural and recombinant proteins, purification of recombinant proteins for clinical studies and scale-up of new and existing processes. Positions will require interaction with Research and Manufacturing departments.

One of these positions will emphasize research and development in the area of recombinant antibody-based therapeutics, immunochemistry, and the development of new immunoaffinity technology.

A BS/MS or equivalent in Biochemistry, Biochemical Engineering or a related discipline is required. An emphasis in protein chemistry with at least two years of experience in protein purification and analysis is essential.

## Engineer

Our Recovery Process department is seeking an Engineer to work on projects in the field of downstream processing of biopolymers. This individual will have an active role in process development, scale-up and system design. To qualify, you must have at least a Bachelor's degree in Chemical or Biochemical Engineering and a minimum of 4 years' in the biotechnology, pharmaceutical or related industry.

Our progressive company offers an extensive benefits package which includes child care facilities, free health club membership, an employee stock purchase plan and fully paid medical/dental/vision coverage. For immediate consideration, please send your resume, indicating dept. of interest, to Laurie Torres, Genentech, Inc., Human Resources Dept. LS191, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal opportunity employment.

# Genentech, Inc.

## ASSISTANT/ASSOCIATE PROFESSORS UNIVERSITY OF ARIZONA HEART CENTER POSITION OPENING EXTENDED

As part of a University-wide expansion of Biological Sciences at the Arizona Health Sciences Center, the newly established University of Arizona Heart Center is seeking two tenure-track faculty members. Preference will be given to applicants with research interests in the cellular or molecular aspects of cardiac development and who are interested in establishing an interactive investigative research team. We prefer candidates at the Assistant or Associate Professor level, but more senior appointments may be made for exceptional individuals. Successful candidates will be expected to establish an excellent research program in cellular, molecular or systems biology and participate in graduate and medical student teaching programs. Salary will be commensurate with experience and rank, and an academic appointment will be granted in an appropriate department in the College of Medicine. Interested individuals should submit a *Curriculum Vitae*, 2 copies of relevant papers, a detailed description of research goals, and arrange to have 3 supporting letters sent to: **Dr. Mary J. C. Hendrix, Chairman of the Heart Center Recruitment Committee, Department of Anatomy, College of Medicine, University of Arizona, 1501 N. Campbell Ave., Tucson, AZ 85724.** To insure consideration, applications should be received by February 1, 1991; however, applications will be accepted until the position is filled. *The University of Arizona is an Equal Opportunity/Affirmative Action Employer and applications from women and minority groups are strongly encouraged.*

## PEPTIDE CHEMISTRY/ BIOCHEMISTRY - Ph.D.

A position is available for an individual with a Ph.D. or the equivalent in Chemistry/Biochemistry or a related discipline in the Department of Cancer Research at the Merck, Sharp & Dohme research facilities in West Point, PA. The successful candidate will join a team of investigators interested in the biological properties and applications of peptide based therapeutics.

In addition to a Ph.D., experience with solid phase peptide synthesis is essential. The peptide/protein chemist should also have experience with peptide analogs and protein biochemistry.

Please send curriculum vitae to:  
**Personnel Manager, Ad# D-39,  
Research Personnel, W42-2,  
Merck Sharp & Dohme  
Research Laboratories, West  
Point, PA 19486.**

EEO/AA/VH/EMPLOYER



Merck & Co., Inc.

## POSITIONS OPEN

### JUNIOR FACULTY POSITIONS UNIVERSITY OF CALIFORNIA SAN FRANCISCO (UCSF) AIDS RESEARCH CENTER AT SAN FRANCISCO GENERAL HOSPITAL

The University of California, San Francisco and the San Francisco General Hospital (SFGH) invite applications for several new faculty research positions at the newly constructed UCSF AIDS Research Center on the SFGH campus. We seek outstanding investigators trained in the disciplines of virology, immunology, molecular biology of eukaryotic cells, and other areas related to the pathogenesis and control of the human immunodeficiency virus. Successful candidates will receive appointments in basic science departments at the UCSF Medical School and in its graduate programs, and their laboratories will be situated within the ca. 20,000 square feet of new facilities to be ready for occupancy in mid-1991. *Minority candidates and women are encouraged to apply.* Applicants should send curriculum vitae, a short statement of research plans, and the names of at least three references to:

Harold Varmus, M.D., Chairman  
AIDS Research Center  
Search Committee  
c/o Diana Naisby  
UCSF Dean's Office  
School of Medicine  
513 Parnassus Avenue, S-224  
San Francisco, CA 94143-0410

**SCHIZOPHRENIA RESEARCHER.** University of California, Irvine (UCI), is seeking a **JUNIOR FACULTY MEMBER OR RESEARCH POSTDOCTORAL FELLOW** to participate in schizophrenia research projects and be associated with UCI Center for Neurosciences and Schizophrenia. Position is for full-time clinical researcher. The research opportunities will include the comprehensive clinical evaluation of the schizophrenic patient from a diagnostic, neurological, neuropsychological, and attentional perspective. The opportunity to work with leading basic scientists and clinical scientists on studies relevant to the neuroanatomy and neurochemistry of D1, D2, D3 receptors, and excitatory amino acids is available. Participation in the development and testing of novel clinical treatments, neuroimaging (MRI and PET), and molecular genetic investigations is also possible. Clinical experience and interest in schizophrenia is essential; research experience preferred. Salary depends on level of training completed. Send curriculum vitae to: **William Bunney, Jr., M.D., Chairman, Department of Psychiatry and Human Behavior, Medical Science I, D 440, UC-Irvine, Irvine, CA 92717.** UCI is an Affirmative Action/Equal Opportunity Employer.

### POSTDOCTORAL POSITIONS

U.S. Environmental Protection Agency, in cooperation with area universities, anticipates several postdoctoral positions in pulmonary toxicology, pharmacokinetics, dosimetry, and immunotoxicology. Send curriculum vitae and letter of interest to: **Dr. Linda S. Birnbaum, Director, Environmental Toxicology Division, Health Effects Research Laboratory, MD-66, Research Triangle Park, NC 27711.**

**POSTDOCTORAL POSITION.** Available to conduct theoretical research on blood flow and oxygen transport in the microcirculation. Send curriculum vitae, a description of career goals, and names of three references to:

Dr. Aleksander S. Popel  
Department of Biomedical Engineering  
The Johns Hopkins University School of Medicine  
Baltimore, MD 21205

**POSTDOCTORAL POSITION.** A position is available immediately in enzymology/molecular biology to study the interrelationship between protein structure and function [see *Science* 241, 699 (1988)]. Molecular biology techniques will be utilized to create altered enzymes to study specific aspects of their catalytic and regulatory mechanisms. Mutant proteins will be characterized by kinetics, NMR, UV, and fluorescence spectroscopy, as well as X-ray diffraction. Candidates should have a Ph.D. degree and experience in at least some of the methods mentioned above. Send curriculum vitae, names, and telephone numbers of three references to: **Dr. Evan R. Kantrowitz, Department of Chemistry, Boston College, Chestnut Hill, MA 02167.**

# Opportunities for Life Scientists in Latin America

Procter & Gamble has entry level openings for the following degrees and disciplines at our technical centers in Mexico City; Caracas, Venezuela; and Sao Paulo, Brazil:

**BS, MS or Ph.D.:**  
Biochemistry, Pharmacy,  
Toxicology, Biology, Chemistry

**MD:**  
Medicine

## THE CANDIDATES

Candidates must be bilingual (Spanish/English or Portuguese/English) with excellent leadership, creative, academic and communication skills. All Latin American nationals may apply.

## THE COMPANY

Procter & Gamble is a multinational, technically based corporation with \$24 billion in worldwide sales in a wide range of household and consumer products including soaps, detergents, pharmaceuticals, diapers, beverages, shampoos, creams, etc. R&D expenditures were \$693 million last year. P&G is the 14th largest U.S.-based corporation and was recently voted the 4th most admired corporation in the U.S. By *Fortune* magazine.

In Latin America, Procter & Gamble has operations in Brazil, Chile, Colombia, Central America, the Caribbean, Mexico, Peru, Puerto Rico, and Venezuela. Technical centers innovate across sixteen different product categories, coordinating efforts with U.S., Europe and Asia/Pacific counterparts and staffed by over 100 Latin American and international professionals.

Besides offering a stimulating international environment for personal and professional growth, we offer highly competitive salaries and benefits in line with the top qualifications we require.

## APPLICATION

Applicants should send their resume (*and publication list for Ph.D.s*) to the address shown below. Allow 6-8 weeks for response.

Dr. T. J. Logan, Manager  
Ph.D. Recruiting  
Latin American Positions, Box S  
THE PROCTER & GAMBLE COMPANY  
P.O. Box 398707  
Cincinnati, Ohio 45239-8707

Procter & Gamble is an equal opportunity employer.

# Procter & Gamble



# RESEARCH OPPORTUNITIES IN NEUROBIOLOGY

**Amgen**, a leader in the discovery and marketing of hematopoietic and tissue repair growth factors, has made a significant commitment to the development of protein therapeutics to treat neurological disorders. We have immediate openings at several career levels for scientists to participate in a multi-disciplinary research program to discover and develop novel neurotrophic factors using *IN VITRO* assays and *IN VIVO* models.

Successful candidates will have experience in one or more of the following: neuronal cell culture, lesion and disease paradigms or nervous system development.

## RESEARCH SCIENTIST POSITIONS.

Candidates should have a Ph.D. or equivalent in a relevant area and 1-3 years of postdoctoral experience. Additional experience as an independent scientist in academic or industry settings is desirable but not essential.

## RESEARCH ASSOCIATE POSITIONS.

A Bachelor's degree or equivalent and relevant work experience in neurobiology, including neuronal cell culture or neurohistochemistry, are necessary.

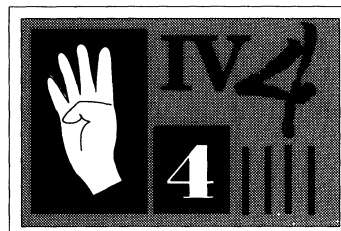
**Amgen** offers a stimulating and challenging research environment on the leading edge of biotechnology. Our need for these positions reflects an ever increasing commitment to the development of significant products for human health care through excellence in research.

If you have the necessary skills and would like to be a part of an organization that places a high priority on its human resources, please send us a complete CV in confidence.

**AMGEN, INC.**  
**Recruitment, Dept. #557**  
**Amgen Center**  
**Thousand Oaks**  
**CA 91320-1789**

Equal  
Opportunity  
Employer

# AMGEN



## THE SCIENCE RECRUITMENT 'FOUR-DAY CLOSE'

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

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

Film (right-reading, emulsion face down) or full camera-ready art and insertion order must reach: **SCIENCE, Short Close Desk, 1515 Broadway, New York, NY 10036** by NOON Mondays (except for legal holidays when material must reach New York by NOON Fridays). Because space is limited, the four-day close page will be reserved on a first-come, first-served basis, at a 15% premium. 1/4, 1/2 or full 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 Ed Keller, Recruitment Advertising Manager, or Gwen Cantor, Advertising Traffic Manager at **SCIENCE**: 212-730-1050, or write to:

**SCIENCE, 1515 Broadway, NY, NY 10036**

**CURRENT DISTRIBUTION 160,000**

## Associate Dean for Student Affairs Mayo Graduate School



Mayo Graduate School is seeking applications for the position of Associate Dean for Student Affairs. The Associate Dean will be responsible for coordinating programs related to recruitment of students to the Graduate School's Ph.D. and M.D.-Ph.D. programs. Other responsibilities include counseling students and coordinating activities with other educational institutions and extramural accrediting boards. Academic appointment and teaching responsibilities will depend on the interests, training and experience of the individual.

Mayo Graduate School is one of four schools associated with Mayo Foundation/Mayo Clinic: Mayo Graduate School, Mayo Medical School, Mayo Graduate School of Medicine and Mayo School of Health-Related Sciences. Mayo Graduate School offers graduate degrees in 7 different areas of basic science. The school has approximately 120 Ph.D. candidates, 36 M.D.-Ph.D. candidates and 35 Master's Degree candidates.

Candidates for this position should have the following attributes: an earned doctorate in a basic science field; a distinguished record of teaching in a basic science field in an undergraduate or graduate environment; a distinguished record of scientific research activity and administrative achievement; a commitment to cultural diversity; effective leadership, communication and interpersonal skills.

Please submit curriculum vitae, a letter describing accomplishments related to the above criteria, and the names of three references by March 15, 1991 to:

Dr. David J. McKean, Dean  
Mayo Graduate School  
200 First Street Southwest  
Rochester, Minnesota 55905

Mayo Foundation is an affirmative action, equal opportunity employer and specifically encourages applications from women and minorities.

## ***It's a New Year of Opportunities at Searle! Research Associate Biologist***

The New Year rings in exciting new opportunities at Searle, a world-wide leader in the pharmaceutical industry. Currently, we are seeking a Research Associate Biologist for work within our CNSDR Department.

The candidate we select will work independently in designing and implementing site-of-action studies for CNS drugs. This will be accomplished by using neurochemical methods, including neurotransmitter release, changes in second messengers and in vivo dialysis, as well as histochemical methods. Other responsibilities include implanting cannulae and making surgical lesions on areas of the central nervous system.

We require a professional with a BS in Biological Sciences and 5-7 years of laboratory experience focusing on anatomy radioceptor binding or neurotransmitter release. An MS in Anatomy or Biological Sciences with neurochemistry training is preferred.

Start the New Year off right. Contact: **Searle, Human Resources, Dept. PB14, 4901 Searle Parkway, Skokie, IL 60077.** An equal opportunity employer M/F/H.

**SEARLE**

Together, we can do a world of good.



## **RESEARCH SCIENTIST PROTEIN FORMULATION DEVELOPMENT**

**Amgen** is an innovative leader in the discovery and development of human therapeutics through applications of biotechnology. As a result of our continued commitment to research, we have an immediate opportunity for a Research Scientist to participate in on-going programs for formulating and characterizing the stability of Amgen's protein products.

Candidates for this position must have a Ph.D. in Biochemistry or a related discipline and research experience in the characterization and/or stabilization of proteins. Experience with methods for the biophysical characterization of proteins is desirable but not essential.

**Amgen** offers a stimulating and challenging research environment on the leading edge of biotechnology where scientists have the resources necessary to develop to their full potential. Our commitment to leadership in biotechnology allows us to offer an excellent compensation and benefits package including equity opportunities.

If you have the necessary skills and would like to develop your abilities as a scientist in an organization that places its highest priority on its human resources, please send a CV, in confidence, to:

**AMGEN, INC.**  
**Recruitment, Dept. #568**  
**Amgen Center**  
**Thousand Oaks**  
**CA 91320-1789**

Equal  
Opportunity  
Employer

# AMGEN

# LIFE SCIENTIST

## DRUG SAFETY EVALUATION

### AMBOISE FRANCE

Pfizer is a world leader in the field of therapeutic drug research and development. This is an exciting time to join Pfizer as we have a number of new therapeutic agents being launched on world markets and others reaching the final stages of their development. We also have a major expansion of our European research facilities under construction demonstrating our long term commitment to research in Europe. Our European drug safety evaluation research centre is located in Amboise, in the vicinity of the famous Loire Chateaux. In our state-of-the-art facilities, a multinational team of more than 120 scientists and supporting staff are engaged in the Preclinical Safety Evaluation of novel developmental drugs.

The present appointment calls for a Toxicologist with a M. Sc./Ph. D. or comparable degree in toxicology or a related field and at least 2-3 years' research or professional experience.

As a Study Director, you will be responsible for the management and direction of both short and long term studies. A determination to meet the highest quality standards and the ability to work in a multinational and multidisciplinary environment are essential. A working knowledge of French is desirable but not essential.

The position offers an excellent benefit package and, if appropriate, generous assistance with relocation. Salary will be competitive and commensurate with qualifications and experience.

If this advertisement attracts your interest, please write in confidence, giving full details of career to-date to Mr J.L. Dancla - Centre de Recherche PFIZER - B.P. 159 37401 Amboise cedex - France Tél. : 47.57.05.12.



SCIENCE ET PASSION DE LA VIE

MEDIA PA

## POSITIONS OPEN

**POSTDOCTORAL POSITION.** Immediately available in the Laboratory of Molecular Oncology for studying the molecular biology of HIV and malignancies associated with AIDS. Ph.D. degree and training in molecular biology technology and tissue culture required. Experience in handling HIV and knowledge of immunology is preferred. One-year appointment is potentially renewable. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Research Administration, Alton Ochsner Medical Foundation, 1516 Jefferson Highway, New Orleans, LA 70121.** An Equal Opportunity Employer.

**TWO POSTDOCTORAL POSITIONS** presently available at U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS) to study Natural Products. The first position (working with Dr. Horace G. Cutler) will establish a small scale fermentation program using excess agricultural commodities to produce biologically active natural products. The second position (working with Dr. W. David Nes) will involve sterol biosynthesis research. First year is funded, second year depends upon availability of funds. *Minority candidates are strongly encouraged to apply.* Send letter of application and curriculum vitae to: **Dr. Horace G. Cutler, USDA, ARS, Russell Research Center, Natural Products Matrix Team, P.O. Box 5677, Athens, GA 30613.** USDA is an Affirmative Action/Equal Opportunity Employer.

U.S. Department of Agriculture (USDA), Agricultural Research Service, **POSTDOCTORAL POSITION** to study the molecular genetics of insect disease vectors. Research will involve the cloning and characterization of a gene-controlling insect oral susceptibility to bluetongue virus. Requires experience in molecular biology. Salary is at the GS-11 (\$29,000) or GS-12 (\$35,000) based upon qualifications. For information on the position contact: **Dr. Walter J. Tabachnick, Arthropod-borne Animal Disease Research Laboratory, USDA, ARS, P.O. Box 3965, Laramie, WY 82071-3965.** Telephone: 307-721-0313. For information concerning application procedures contact: **Julia Murchison at: 301-344-3138.** An Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL POSITION

Available July 1991 for 2 years to study monoclonal antibody-mediated therapy of leukemia, including detection of minimal residual disease using molecular probes, defining mechanisms of cellular cytotoxicity, and purification of hematopoietic stem cells as well as related studies in myeloid differentiation examining proto-oncogene and surface antigen changes mediated by cytokines and other mediators. Experience in molecular biology is essential. Working environment includes close proximity to numerous basic and clinical researchers in hematology/oncology and the Pittsburgh Cancer Institute Bone Marrow Transplantation Program. Send curriculum vitae with three references to: **Dr. Edward D. Ball, c/o Dr. Alan Winkelstein, Division of Hematology, University of Pittsburgh, Montefiore University Hospital, 3459 Fifth Avenue, Pittsburgh, PA 15213 or call Dr. Ball at: 603-646-7671.**

### HARVARD MEDICAL SCHOOL

Brigham and Women's Hospital Department of Radiology offers an immediately available **POSTDOCTORAL FELLOWSHIP POSITION** to develop and characterize functional and tissue-targeted diagnostic imaging agents. *U.S. citizen or permanent resident.* Contact: **Dr. Steven Seltzer, Department of Radiology, Harvard Medical School, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.** Telephone: 617-732-6301. An Equal Opportunity/Affirmative Action Employer.

### RESEARCH ASSOCIATE

New Mexico Institute of Mining and Technology invites applications for a **RESEARCH ASSOCIATE** in the Department of Materials and Metallurgical Engineering. Successful applicant will fabricate and characterize (microstructural and mechanical) alumina fiber reinforced glass composites. Experience required in the use of SEM, TEM, STEM, x-ray, and mechanical testing techniques. Must have a Ph.D. in materials science and engineering. Send résumé to: **New Mexico Institute of Mining and Technology, Human Resources, Wells Hall Box C-139, Socorro, NM 87801.**

*Affirmative Action/Equal Opportunity Employer.*

# RESEARCH SCIENTISTS

Bristol-Myers Squibb Company, a worldwide leader in the development and marketing of sophisticated pharmaceutical, medical care consumer and nutritional products, has the following exceptional opportunities available at our Wallingford, Connecticut research facility.

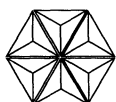
## NMR SPECTROSCOPIST

Join an investigative analytical research group responsible for providing innovative analytic instrumentation and methodology. Position involves collaborative studies with chemists, biologists, and analytical spectroscopists for the characterization and structure elucidation of proteins, peptides, isolated natural products, and novel pharmaceuticals. Requirements include a Ph.D. in Chemistry/Biochemistry with 1-5 years research experience.

## SEPARATION SCIENTIST

This member of an investigative analytical research group will be responsible for developing separations for isolated natural products, chiral molecules, and novel pharmaceuticals. Within this multidisciplinary group the candidate will collaborate with spectroscopists, medicinal chemists, and biologists and apply separation techniques for the efficient and sensitive determination of biologically significant molecules. Requirements include a Ph.D. in Chemistry with 1-5 years research experience.

Bristol-Myers Squibb careers offer the advantages of sustained growth, highly competitive salaries, extensive benefits and professional support in pursuing excellence. Please send resume with salary history to: **BRISTOL-MYERS SQUIBB COMPANY, Pharmaceutical Research Institute, Dept. TZ-SC-1, P.O. Box 5101, Wallingford, CT 06492-7661.** Equal Opportunity Employer, M/F/H/V.



**Bristol-Myers Squibb Company**

## POSITIONS OPEN

### HARVARD SCHOOL OF PUBLIC HEALTH INTERDISCIPLINARY PROGRAMS IN HEALTH POSTDOCTORAL FELLOWSHIPS



The Program in Environmental Health and Public Policy invites applications from promising graduates of advanced degree programs in the natural and social sciences. The program focuses on the scientific and analytic foundations for environmental decisions. Fellows conduct basic scientific research and participate in applied policy projects. Recently the program has emphasized the role of risk analysis in environmental decision making. Topics of special interest include use and validation of scientific judgment in risk assessment, improving estimates of exposure/dose, design and interpretation of bioassays, and use of decision analysis in environmental health.

Fellows will be appointed for a term of 1 year starting 1 September 1991. Awards may be renewed. Application deadline: 15 March 1991.

For information, write to:

Professor John S. Evans  
Attention: IPH Fellowships  
Harvard School of Public Health  
665 Huntington Avenue  
Boston, MA 02115  
Telephone: 617-432-1258

**POSTDOCTORAL FELLOWSHIP.** Available for studies on the molecular basis of cell differentiation. Limited to those with recent Ph.D.'s. Prefer background in molecular biology. *Stanford is an Equal Opportunity Employer through Affirmative Action.* Send curriculum vitae and letters of reference to:

Frank E. Stockdale, M.D., Ph.D.  
Stanford University School of Medicine, M211  
Stanford, CA 94305-5306

## POSTDOCTORAL POSITION

Position immediately available to study the expression and function of structurally-distinct  $\beta$  and  $\tau$  subunits of the signal transducing G proteins. Qualified candidates for this position will receive a highly competitive stipend with excellent benefits, and the opportunity to develop their own research ideas, working in a well-equipped facility in a semi-rural environment. Some familiarity with expression of recombinant protein and protein purification is desirable, but not required. Send curriculum vitae and names of three references to:

Dr. Janet D. Robishaw  
Weis Center for Research  
Geisinger Clinic  
Danville, PA 17822.

*Equal Opportunity Employer M/F/H/V*

**Geisinger**



### NATIONAL UNIVERSITY OF SINGAPORE INSTITUTE OF MOLECULAR AND CELL BIOLOGY RESEARCH APPOINTMENTS IN THE PROTEIN STRUCTURAL GROUP

The Institute of Molecular and Cell Biology will be establishing a protein structural group. Applications are invited from suitably qualified and experienced candidates to perform either of the following functions:

- to establish and lead an X-ray crystallography and/or NMR spectroscopy group; or
- to establish the computing facilities within the group

The Institute has a good record of creative basic research in select areas of biological sciences. The active research groups already established include: human papillomavirus, stress response, signal transduction, protein engineering, plant genetic engineering, molecular neurobiology, DNA repair, molecular immunology of cancer, tyrosine phosphatases and cell regulation, membrane biogenesis and protein translocation. The research groups are supported by an excellent computer infrastructure.

Applicants should send their curriculum vitae together with the names and addresses of at least three referees to:

Prof Y H Tan  
The Director  
Institute of Molecular and Cell Biology  
National University of Singapore  
10 Kent Ridge Crescent  
Singapore 0511

Enquiries may also be sent through BITNET to: SIMCB@NUS3090 or through the FAX at (65)7770402.

## Postdoctoral Scientists

The Medical Research Division of American Cyanamid Company is recognized internationally as a leader in the research and development of therapeutic compounds. We currently have two immediate openings for postdoctoral scientists.

In our Molecular Biology Section, we seek a postdoctoral fellow to work on the normal physiological role and interaction with virus of a recently-cloned retroviral receptor. The protein, GLVR1 (Cell Growth and Differentiation 3;119-127), is an integral-membrane protein with multiple potential transmembrane domains. Because diverse aspects of the protein are being studied, candidates from a wide variety of backgrounds will be considered. (Dept. B.O.)

Another position is available within the expanding department of Oncology and Immunology to study the molecular basis of multiple drug resistance (MDR) in tumor cells. Investigations will focus on the identification of the drug binding sites in a drug efflux pump, P-glycoprotein, as well as the regulation of expression of P-glycoprotein. This program is part of a group effort to develop reversal agents for MDR. Prospective candidates should have a Ph.D. and experience with molecular biological and/or protein chemistry methods. (Dept. L.G.)

These positions are located at the Lederle Laboratories campus of American Cyanamid in Pearl River, New York, just twenty-five miles north of New York City. We offer competitive starting salaries and excellent benefits. Please send your resume indicating the department code for the position of your choice and the names of three references to:

Professional Employment Representative, Lederle Laboratories,  
401 N. Middletown Road, Pearl River, New York 10965. An Equal Opportunity Employer M/F.



**Dedicated People Dedicated To People Since 1906.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION.** In biochemistry, available 1 March 1991. Our laboratory is studying the plasma membrane of ocular lens cells with the hope of understanding the etiology of cataracts. The emphasis of our current work is on protein interaction with membranes. A background in protein chemistry and practical experience in recombinant DNA technology is desirable. The position offers training in lipid biochemistry. The stipend ranges from \$22,080 plus fringe benefits, with consideration for prior relative postdoctoral experience. Please send curriculum vitae, a brief description of your research background, and the names of three references to:

**Richard J. Cenedella, Ph.D.**  
Chairman, Department of Biochemistry  
Kirksville College of Osteopathic Medicine  
Kirksville, MO 63501

*An Equal Opportunity/Affirmative Action Employer.*

## POSTDOCTORAL RESEARCH FELLOWSHIP MOLECULAR BIOLOGY INFORMATICS

The Yale Center for Medical Informatics offers a post-doctoral research fellowship at the intersection of molecular biology and computer science, sponsored by the National Library of Medicine. Projects include parallelization of biological algorithms (e.g., sequence analysis, genetic linkage analysis, molecular dynamics), an "intelligent" object-oriented database for physical gene mapping data, and computer modeling of gene regulation. Applicants should have a Ph.D. in an area of biology/molecular biology, considerable computer experience, and a desire to pursue a research career in biological informatics. Positions available 1 July 1991. Contact: **Professor Perry Miller, Yale Center for Medical Informatics, c/o Department of Anesthesiology, Yale School of Medicine, New Haven, CT 06510.** Telephone: 203-785-2802; [pmiller@yalemed.bitnet](mailto:pmiller@yalemed.bitnet), or **Professor Kenneth Kidd, Department of Human Genetics.** *An Affirmative Action/Equal Opportunity Employer.*

## UNIVERSITY OF CALIFORNIA LOS ANGELES (UCLA) DEPARTMENT OF PHYSIOLOGY POSTDOCTORAL FELLOW ASSISTANT RESEARCH PHYSIOLOGIST

Two positions are available to study the molecular biology of the cardiac sodium/calcium exchange system. Research in progress involves the expression, regulation, biochemistry, and mutagenesis of this important transporter. Laboratory is part of a diverse, interdisciplinary group located in modern new facilities. Experience in biochemistry or molecular biology is desirable. Send curriculum vitae and names of three references to:

**Dr. Kenneth D. Philipson**  
Cardiovascular Research Laboratory, A3-381 CHS  
UCLA School of Medicine  
Los Angeles, CA 90024-1760

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

**CARBOHYDRATE CHEMIST-RESEARCH SCIENTIST** for small start-up company in California developing novel oligosaccharide sequencing technology. Ph.D. or equivalent experience, knowledge of glycoconjugate structure and conventional sequencing technology required. Competitive industrial salary and fringe benefits offered. Job requires staffing and laboratory supervisory skills. Résumés to: **Glyko, Inc., 81 Digital Drive, Novato, CA 94949.**

## RETROVIROLOGIST

A virologist with Ph.D., D.V.M., or M.D. and experience in retrovirology is sought to join studies of SIV and HIV-2 in primates. Candidates should have an interest in AIDS pathogenesis and skills in virus isolation, cultivation, quantitation and characterization, experimental design and scientific writing; experience in molecular biology and laboratory supervision desirable. Opportunity for collaborative efforts with HIV/SIV research groups at several major universities.

Submit curriculum vitae and three references by 18 February 1991 to: **Dr. W. R. Morton, Regional Primate Research Center SJ-50, University of Washington, Seattle, WA 98195.** Telephone: 206-543-0909. FAX: 206-685-0305. *An Equal Opportunity/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

### POSTDOCTORAL RESEARCH ASSOCIATE

Position available in ongoing project to study the molecular mechanisms and biological implications of RNA virus persistent infections. Candidates should have a Ph.D. in molecular biology and at least 3 years of experience in RNA virology including viral genetics, cloning and expression of recombinant viral cDNAs, and development and analysis of transgenic animal models. Practical experience with arenaviruses or retroviruses is preferred. Salary: \$35,000 per year.

Send curriculum vitae, summary of research activities, and three letters of reference to:

**G. Schilling**  
Immunology Building, Mail Drop IMM-6  
Scripps Clinic and Research Foundation  
10666 North Torrey Pines Road  
La Jolla, CA 92037

*An Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT MEMBER** (molecular virologist). Sought by medical research organization in southwestern Ohio. Perform independent research/analysis of development of infectious viruses such as hepatitis C, herpes, and human immunodeficiency (AIDS) virus using recombinant DNA technology; synthesize, sequence, purify, and characterize peptides, proteins for diagnostic and vaccines, using polymerase chain reaction; perform molecular cloning; express proteins using vaccinia virus expression system; manage sequence information using computers; supervise research technician, junior research associate; utilize thermal cycler, oligonucleotide, protein synthesizers, sequencers, and fast pressure liquid chromatography; competent in Biotechnology Lab-3. Experience: 2 years of experience in the job described or 2 years of experience in research/analysis of development of infectious viruses, including hepatitis and AIDS viruses, using recombinant DNA technology (including expression of proteins utilizing vaccinia virus expression systems), including 1 year utilizing thermal cycler, oligonucleotide and protein synthesizers and sequencers; fast pressure liquid chromatography; polymerase chain reaction; and 1 year of experience in Biotechnology Lab-3. Ph.D. in biochemistry; \$43,500 per year; 8:30 a.m. to 5:00 p.m., 40 hours per week, Monday to Friday. *Must have proof of legal authority to work permanently in the United States.* Send résumé in duplicate (no calls) to: **J. Davies, J.O. #1099751, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

## MEETINGS

### SCIENTIFIC MISCONDUCT LIVING WITH THE NEW REGULATIONS: THE FIRST YEAR

The Office of Scientific Integrity at the National Institutes of Health will hold three regional symposia to share experiences related to implementing the new regulations dealing with the Final Rule on "Responsibilities of Awardee and Applicant Institutions for Dealing with and Reporting Possible Misconduct in Science" (42 CFR Part 50, Subpart A). The symposia will feature open discussion of problems and solutions associated with implementing and operating under the new regulations. They will include sessions on assurance and reporting requirements, conduct of inquiries and investigations from development of the issues to resolution, jurisdictional issues, and due process issues. The symposia are intended to be of special interest to institutional officials responsible for instituting and overseeing the university's response to allegations of scientific misconduct.

The symposia will be held in: Washington, D.C. on 14 to 15 March; Seattle, Washington on 25 to 26 March; and New Orleans, Louisiana on 15 to 16 April. Attendance will be limited to no more than two representatives from each institution and will be on a first come first served basis. There will be a \$50 registration fee. To attend, please provide your name, institution or company, and payment to: **Ms. Peggy Van Ness, Social and Scientific Systems, 7101 Wisconsin Avenue, Suite 610, Bethesda, MD 20814-4805,** or to: **Dr. Clyde A. Watkins, Senior Scientist, Office of Scientific Integrity, National Institutes of Health, Building 31, Room B1C39, 9000 Rockville Pike, Bethesda, MD 20892.** Make checks payable to: Social and Scientific Systems. Additional information will be sent upon request or upon receipt of reservation.

## POSITIONS OPEN

**POSTDOCTORAL POSITION IN IN VIVO NMR SPECTROSCOPY.** Available immediately to study the effects of chronic ethanol consumption and oxygen tension on hepatic energy metabolism. These investigations will be coordinated with other studies on the effects of chronic ethanol consumption on periportal and pericentral energy metabolism. The major emphases in the laboratory are on hepatic energy metabolism, mitochondrial biogenesis, and ATP synthase-phospholipid interactions. Send curriculum vitae and names of three references to: **Dr. Carol Cunningham, Department of Biochemistry, Wake Forest University Medical Center, Winston-Salem, NC 27103.** Telephone: 919-748-4254. *Equal Opportunity/Affirmative Action Employer.*

**RESEARCH ASSOCIATE.** The Wistar Institute is seeking a molecular biologist to join a research team studying the immune response to the envelope of the AIDS virus. Qualified candidate should have a Ph.D. in molecular biology, biochemistry, virology, or related discipline. Three years of experience in molecular biology and/or biochemistry techniques, including gene cloning and sequencing required. Also require experience with protein chemistry.

Submit curriculum vitae to: **Dr. Warren B. Cheston, Associate Director, The Wistar Institute, 36th and Spruce Streets, Philadelphia, PA 19104.** *Equal Opportunity Employer, M/F.*

**RESEARCH ASSOCIATE POSITION.** To conduct theoretical physics studies in the many body physics of electrons in strong magnetic fields, focusing on multiple-quantum-well systems; granular metals; and high temperature superconductivity. The knowledge of Monte Carlo simulations and optimized parallel and vector computations, including experience on CRAY machine, are required, with emphasis on the code development for variational and Greens function Monte Carlo simulation with Jastrow-Laughlin-type wave functions for studying the fractional quantum Hall effect and Wigner transition in heterojunctions and multilayer structures and anyon superconductivity. Candidates are expected to have a Ph.D. degree in physics; 40 hours per week; \$28,000 per year. Send applications to: **Job # 804127, Division of Employment and Training, Department of Labor, 3301 Lancaster Avenue, P.O. Box 2168, Wilmington, DE 19805.** Deadline for application: 15 February 1991. For local posting, send applications to: **Ms. Debbie Booth, Bartol Research Institute, University of Delaware, Newark, DE 19716.**

## 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: 17 to 20 March and 7 to 10 April 1991. For information: telephone: 314-889-6066 or FAX: 314-726-4434.

## MARKETPLACE

**Custom DNA**  
Best quality and value  
*Call Midland*  
1-800-247-8766

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

\$10.00 a base for the first 15 bases, \$7.50 for each additional base. No additional charges.

**Research Genetics**

1-800-533-4363

Circle No. 44 on Readers' Service Card

**STAFF SCIENTIST**  
**Immunologist**

**Position #051**

Extensive experience in production and purification of recombinant proteins and monoclonal antibodies required. Successful candidate will have shown creativity in practical problem solving in these areas. Basic knowledge of molecular biology desirable. Doctoral degree and 3-5 yrs.' professional experience is required. Experience in a commercial firm a plus.

**STAFF SCIENTIST**  
**Cell Biologist**

**Position #052**

The growth of mammalian cells in culture often depends on poorly defined serum factors. The successful candidate will be asked to lead a research and development program to engineer cell lines to be less dependent on growth factors. Experience with oncogenes, transfection and the regulation of cell proliferation is desired. A doctoral degree and at least 4 yrs. of postdoctoral experience is required.

**STAFF SCIENTIST**  
**Molecular Biologist**

**Position #055**

Exciting position to lead a group responsible for developing new cloning and expression vectors. A doctoral degree and at least 3 yrs'. postdoctoral experience with lambda and plasmid vectors, prokaryotic/eukaryotic expression, in vitro mutagenesis, and PCR is necessary. The candidate should have working knowledge of bacterial and phage genetics, transposition, origins of replication, site-specific recombination, and mammalian promoters/enhancers. Because of Stratagene's high standards of excellence in vector design, the successful candidate should demonstrate exceptional creativity and success in vector development.

**STAFF SCIENTIST**  
**Cell Biologist/Biochemist**

**Position #056**

Exciting position to lead a group responsible for developing and producing a cytokine/

lymphokine product line. A doctoral degree and at least 3 years' postdoctoral experience purifying proteins, preferably growth factors, is desired. Experience with expression and purification of recombinant proteins is also desired.

**R&D SCIENTIST**

**Position #059**

Seeking a scientist for position in transgenic animal R&D group. 3-5 years' experience in Toxicology testing/dose regimens required. Must be familiar with SOP/GLP protocols. Knowledge of molecular biology techniques helpful.

**STAFF SCIENTIST**  
**Molecular Immunologist**

**Position #060**

Extensive experience in recombinant DNA technology required. Previous work with lambda bacteriophage a plus. The successful candidate will exhibit exceptional intelligence and creativity in vector development. Basic immunology knowledge and previous experience in development of therapeutic antibodies is highly desirable. Doctoral degree and 3-5 years' professional experience is required.

**RESEARCH ASSOCIATE** **Position #062**  
**Molecular Biology**

Lab experience in recombinant DNA technology required. Basic immunology knowledge and/or animal handling highly desirable. B.S. or M.S. degree and 1-3 years' professional experience is required.

Postdoctoral positions also available for exceptional candidates to assist our expanding scientific team in the development of therapeutic and research antibodies.

Stratagene offers a productive working environment and an excellent salary and benefits package which includes a 401(k) Retirement Savings Plan. **Please direct all inquiries to: Stratagene, Attn: Human Resources, Job # (listed above), 11099 N. Torrey Pines Rd., La Jolla, CA 92037**



**STRATAGENE**



## Important News for Chromatographers

# Gilson's new software has more of the capabilities you've been asking for

Gilson's new 715 HPLC System Controller Software offers the versatility to meet virtually any gradient system control requirement. The 715 Software controls other Gilson system components – up to four pumps, collects data from up to four detector signals and offers four data analysis methods. But beyond these basic capabilities, 715 has more of the features you've always wanted in HPLC software.

### Allows manual adjustment of baselines to optimize peak integration

You can remove baselines from unwanted peaks, add baselines to previously non-integrated peaks and move baselines on integrated peaks. With manual baseline adjustment you can use your own method for peak integration and easily analyze abnormalities to optimize integration. All manual changes are automatically tracked according to GLP.

### Builds and stores calibration curves; saves hours of time

Creating calibration curves demands a lot of time. In fact, on a simple five-point curve with three repeats per level and each run taking 20 minutes, it could take up to five hours. But with 715 you can build a curve, store it and use it to calibrate unknown sample data at any time. Depending on your application, that could save you hours of tedious work daily.

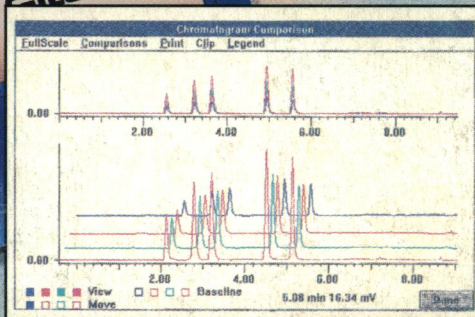
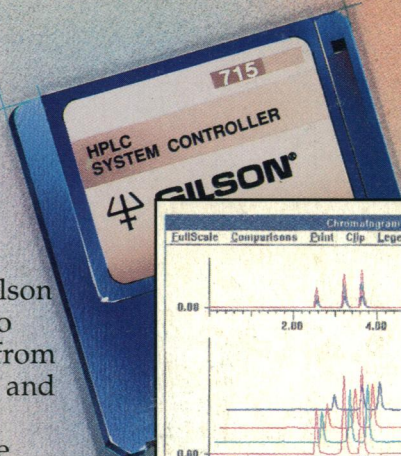
### Compares up to four chromatograms quickly and easily

If you need to check and compare data files from run to run, 715 Software lets you do it quickly and easily. You simply move and overlay chromatograms to check peak shape, size and retention time. You can also subtract and ratio chromatograms and reduce non-peak

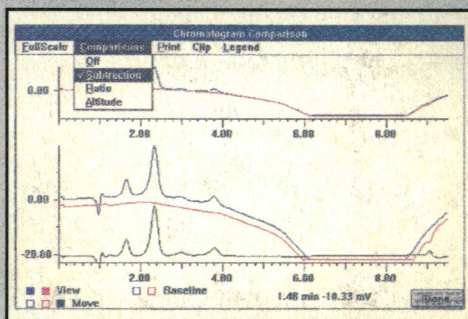
heights to zero to simplify comparison of chromatograms with shifting baselines.

### Plus, HPLC software has never been so easy to use

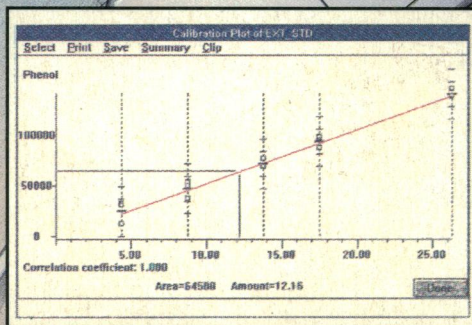
Communication commands have been simplified. Descriptive names can be entered for all samples. You can copy data files directly to a diskette. Or transfer data to word processing or spreadsheet programs. It all adds up to a versatile, easy-to-use controller for Gilson HPLC systems. Why not find out for yourself if 715 has everything you've always wanted in HPLC software? Mark the numbers below for free literature or a demonstration. Or call us toll-free.



Compare chromatograms from run to run.



Subtract chromatograms to compensate for shifting baselines.



Build, store and recall calibration curves.

**GILSON**

Call 800-445-7661



Gilson Medical Electronics, Inc., Box 27, 3000 W. Beltline Hwy., Middleton, WI 53562 USA, Tel: 608-836-1551, TLX: 26-5478, FAX: 608-831-4451  
Gilson Medical Electronics (France) S.A., 72 rue Gambetta, B.P. No. 45, 95400 Villiers-le-Bel, France, Tel: (33) 1 34.29.50.00, TLX: 606682, FAX: (33) 1 34.29.50.80

For a demonstration mark 70

For free literature mark 71