

Lab Software for the Macintosh

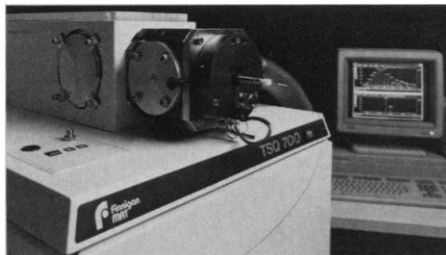
SuperScope is an advanced waveform acquisition, analysis, presentation, and data management software package for Macintosh computers. Superscope provides real-time oscilloscope, x - y recorder, strip-chart recorder, and spectrum analyzer capabilities in one package. Able to generate and display up to 50 waveforms, SuperScope allows users to define their own parameters for specific instruments. It features a spreadsheet and text editor. It complements GW Instruments' MacADIOS family of Macintosh-compatible data acquisition and control hardware for such applications as biomedical research, chromatography, speech research, and product design. GW Instruments. Circle 434.

Column Recycling in DNA Synthesis

The Column Recycling program repacks used controlled pore glass columns for a fraction of the cost of replacing them. The program features rigorous quality checks and rapid turnaround. The service is offered for columns used by most major DNA synthesizer manufacturers. The program allows customers to reuse the most expensive component of the column, the casing, without performing the labor needed to do so. Prime Synthesis Inc. Circle 441.

ESI System for High Mass Analysis

The Electrospray Ionization (ESI) System and innovative data processing combined with high-performance tandem quadrupole mass spectrometry make it possible to obtain both molecular weight and structural information for biological and organic compounds at trace levels. Molecular weights of peptides and proteins can typically be deter-



mined with 0.02% or better accuracy. The ESI System fits directly to the Finnigan MAT TSQ 700 triple-stage quadrupole mass spectrometer and is interchangeable with other ionization modes. Finnigan MAT. Circle 436.

Molecular Modeling Software

ChemDBS-3D is designed to help research chemists identify potentially active compounds in three-dimensional databases of chemical structures. The new module is part of the Chem-X suite of programs for computer-aided molecular modeling. Chem-X enables chemists not only to build complex structures quickly and easily but also to calculate a wide range of molecular properties and identify structure-activity relations. Chemical Design. Circle 440.

Soluble Copolymer for Gel Electrophoresis

Instacryl H Copolymer is the first soluble copolymer for gel electrophoresis. It can reduce experiment time by 65% and increase resolution. The copolymer allows separation of double-stranded DNA in the 10- to 3500-base pair range and eliminates the need for acrylamide when separating in the 10- to 500-base pair range. Instacryl H gels can be formed in less than 10 min, simply by mixing the solution with water and buffer before adding the cross-linker dithiothreitol. International Biotechnologies Inc. Circle 451.

Automated DNA Analysis System

Model 373A is a second-generation, fully automated DNA sequencer. The system is designed with the same laser optics technology as its predecessor, the Model 370A. It offers greater ease of use, faster analysis time and longer runs, and compatibility with all widely used manual DNA sequencing approaches. It features an Apple Macintosh IIcx computer and computerized tutorial; user classes and technical support are avail-

able. Model 373A handles 500 bases per sample and analyzes up to 24 samples in a single run. When electrophoresis is complete, the data can be displayed in real time on the computer screen in a choice of formats. It allows for use of single-stranded, double-stranded, or polymerase chain reaction-generated templates, all of the popular enzymes, and dye-labeled terminators or primers. Applied Biosystems. Circle 437.

DNA Purification Kit

The Prep-A-Gene DNA purification kit is an efficient means for preparing cloning-quality DNA. In less than 20 min, plasmid DNA can be purified from cleared lysates. RNA and protein do not interfere with DNA binding to the Prep-A-Gene matrix, so there is no need for ribonuclease treatment, phenol extraction, and other sample preparation steps. The DNA is eluted in a concentrated form, with no precipitation, desalting, or other treatment required. The kit can also be used in other applications. For example, agarose gels containing single-stranded or double-stranded DNA can be dissolved in the Prep-A-Gene binding buffer, allowing recovery of DNA free of RNA, organic agents, salts, and proteins. Bio-Rad Laboratories. Circle 450.

Literature

Separation, Filtration, and Fluid Handling Equipment is an eight-page guide to a wide range of products and technical services. The brochure also includes an index of literature and technical papers available from the company. Osmonics. Circle 475.

Catalogue 90 describes chemicals related to biologically active carbohydrates. The catalog covers monoclonal antibodies, glycoproteins, synthetic glycoproteins, protein labeling, bacterial lipopolysaccharides, glycolipids, oligosaccharides, glyco-amino acids, and standard mixtures for chromatography. BioCarb Chemicals. Circle 476.

The Guide is Millipore's 1990 product catalog. The 400-page document includes information on products such as compact laboratory water systems, centrifugal filter devices, blotting membranes and transfer systems, and environmental testing products. Millipore. Circle 479.

The 1990 *Janssen Biochimica Catalog* has four sections: immunology, cell biology, biochemistry, and molecular biology. The 58 pages contain nearly 1000 products, many of them new, including monoclonal antibodies, proteins, growth factors, and more. Janssen Biochimica. Circle 480.

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.

New from AAAS

Molecules to Models *Advances in Neuroscience*

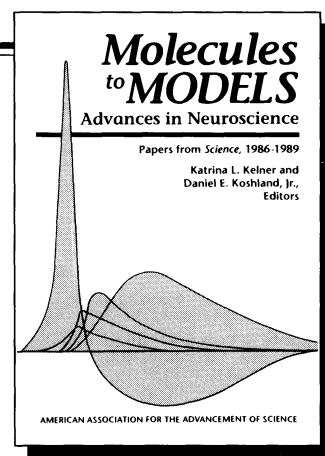
Edited by Katrina L. Kelner and Daniel E. Koshland, Jr.

This collection of current *Science* magazine articles in the neurosciences provides a comprehensive survey of the field. It is especially valuable for graduate students who want to gain a broad understanding of the neurosciences, and for neuroscientists who want to learn more about other areas of the field.

Topics include: Use of molecular biological techniques to elucidate sequences and structure of ion channels; advances in understanding the extracellular signals controlling the growth of neuronal axons; overview of human and animal

memory and its cellular basis; the use of classical and noninvasive brain imaging techniques to understand the function of the cortex; progress in neural modeling of brain function; and application of basic neurobiology to human clinical problems such as alcoholism, drug dependency, and neurological and psychiatric disease.

Contributors include: William A. Catterall, Joseph B. Martin, Corey S. Goodman, Michael I. Posner, Terrence J. Sejnowski, and many other specialists in the field of neuroscience.



1989; 464 pp.; fully indexed and illustrated; color plates
#89-17S - softcover; \$37.50
(AAAS members \$29.95)

Biological Systems

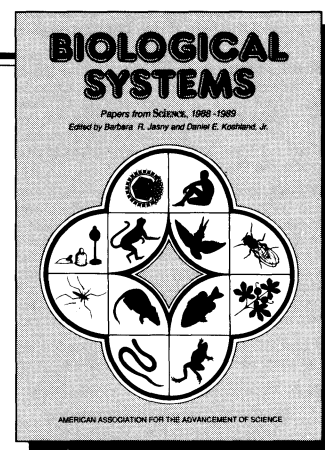
Edited by Barbara R. Jasny and Daniel E. Koshland, Jr.

This collection of *Science* magazine articles explores some of the diverse biological systems used in research today. The authors describe major experimental systems in terms of the state of the art, potential advantages, and possible disadvantages for particular kinds of research.

Organisms explored range from retroviruses to humans, and the aspects of biological processes in which they have

been applied include developmental and molecular biology, genetics, immunology, and behavior. Genetic engineering is also discussed as a means of designing optimal systems for basic research and the biotechnology industry.

The information presented will be especially useful to graduate students and to all researchers interested in learning the limitations and assets of biological systems currently in use.



1990; 288 pp.; fully indexed and illustrated
#89-16S - softcover; \$31.50
(AAAS members \$24.95)

Order from: AAAS Books, Dept. SM, P.O. Box 753, Waldorf, MD 20604 (FAX: 301-843-0159). To order by phone (VISA/MasterCard only), call 301-645-5643 (9am-4pm ET) and ask for AAAS. Individuals must prepay or use VISA/MC. For institutional purchase orders, add \$3.50 postage & handling. Please specify item #, and allow 2-3 weeks for delivery. For shipments to CA, add applicable sales tax.

American Association for the Advancement of Science

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 issue in which ad appears.

CLASSIFICATION: **SCIENCE** publishes line classified ads under the following headings: **Positions Open, Employment Agencies, Fellowships, 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.

RATE: \$41 per line, \$410 minimum, per week. One line equals 52 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 52-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.

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.

SITUATIONS WANTED ADS: As a service to AAAS members in good standing, **SCIENCE** offers free placement of Situations Wanted ads for individuals seeking full-time or part-time employment. A blind box may be used. Ads must be submitted in writing with text of 20 words or less, not including address or box number, and are limited to two insertions per member in each calendar year. Please enclose **SCIENCE** mailing label including AAAS membership number when submitting ad.

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

Address ad copy or requests for information to:

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

MARKETPLACE AND 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

The Department of Pediatrics, University of California San Francisco, is seeking a faculty member at the **ASSISTANT PROFESSOR** in residence level to participate in the activities of the endocrine division. Candidates must be experienced in molecular biology research with established skills in blotting procedures, nuclease protections, and cloning and sequencing DNA from phage and cosmid libraries. A special interest in steroidogenesis and extracellular matrix proteins is sought. Board certification in pediatrics and Board-certified/Board-eligible in pediatric endocrinology required. Please send inquiries, including curriculum vitae and letters of reference, to: **Walter L. Miller, M.D., Department of Pediatrics, University of California San Francisco, San Francisco, CA 94143-0978. Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

The Departments of Oncology and Neurological Sciences, University of Western Ontario, seek an individual with interest in molecular genetics of glioma, glial oncogenesis, molecular or cellular biology of glia, or related fields, for **ASSISTANT PROFESSOR** faculty position. Applicants must have a Ph.D. or M.D. degree, postdoctoral experience, and the ability to establish an independent research program. Environment includes modern laboratories in a new cancer centre, research programs in aspects of molecular and cellular oncology, molecular biology core facility, major clinical neuroscience centre, and academic clinical brain tumor program with interests in glioma and investigational treatments. Send curriculum vitae, description of research interests, and three references to: **Dr. J. Gregory Cairncross, London Regional Cancer Centre, 790 Commissioners Road, East, London, Ontario, Canada N6A 4L6.**

The University of Western Ontario and affiliated institutions are Affirmative Action/Equal Opportunity Employers. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

ACADEMIC HEMATOPATHOLOGIST/HEMOSTASIS THE UNIVERSITY OF VERMONT

ASSISTANT PROFESSOR, full-time faculty position in the Department of Pathology, in conjunction with the Vermont Specialized Center of Research in Thrombosis. Candidates must be M.D., AP/CP Board-certified or -eligible, or have comparable or complementary training. They should have documented research background in hemostasis and thrombosis with evidence of a productive research program and the potential for independent support. Some teaching and clinical responsibility. Salary will be consistent with the applicant's qualifications. *Women and minorities are encouraged to apply.* Send curriculum vitae and three references to:

John E. Craighead, M.D., Chairman
Department of Pathology
University of Vermont
Burlington, VT 05405

Applications will be accepted until the position is filled. *The University of Vermont is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR

One individual is being sought for an assistant professor position on probationary tenure track in the Department of Urologic Surgery at the University of Minnesota. Individual must have demonstrated involvement in quality research accepted or published in peer-reviewed journals and have competence in communication and in the teaching of students. Requirements include: Board-certified/Board-eligible in urologic surgery (or equivalent) and completion of residency. Other requirements include: experience in urology oncology, prostate cancer, research, and treatment. Individual should have particular experience in infertility, specifically with spinal cord injury patients or with ejaculatory dysfunctions. Duties include teaching, research, and patient care in the above areas. Submit curriculum vitae and bibliography by 30 June 1990 to:

Dr. John Hulbert
Department of Urologic Surgery
University of Minnesota
Box 394 UMHC
Minneapolis, MN 55455

The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

POSITIONS OPEN

ASSISTANT PROFESSOR (SOIL AND WATER), 12-month, tenure-track, agricultural engineering, University of Minnesota. Ph.D. with specialization in soil and water engineering or related field at time of appointment is required. Send letter of application, curriculum vitae, one-page summary of career goals in context of position, college transcripts, and names, addresses, and telephone numbers of three references by 30 June 1990 to: **Dr. G. R. Foster, Department of Agricultural Engineering, University of Minnesota, St. Paul, MN 55108. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.**

FOOD ANALYSIS, ASSISTANT PROFESSOR. The Department of Food Science, University of Massachusetts/Amherst, invites applications for qualified individuals to fill a tenure-track position, approximately two-thirds research, one-third teaching, in the area of food analysis. Incumbent will teach undergraduate and graduate courses in food analysis, advise students, and develop a research program in an area related to food analysis. A Ph.D. in food science, chemistry, biochemistry, or closely related area is required; postdoctoral experience desirable. Salary is competitive and commensurate with qualifications and experience. Applications are requested by 15 July 1990, but the search will remain open until the position is filled. Applicants should submit transcripts and résumé and have four letters of reference sent to: **Dr. H. O. Hultin, Chair, Search Committee, Department of Food Science, University of Massachusetts, Amherst, MA 10002. The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.**

THE UNIVERSITY OF TEXAS AT DALLAS VISITING ASSISTANT PROFESSOR

Part/full-time visiting assistant professors for 1990-1991 academic year to teach undergraduate and graduate day/evening classes in biochemistry, cell biology, and related topics in the molecular and cell biology program. Ph.D. or M.D. required. Laboratory space and research support can be provided. Send curriculum vitae and names and telephone numbers of three references by 30 June 1990 (indication of sex and ethnicity for Affirmative Action statistical purposes is requested but not required) to:

Academic Search #296
The University of Texas at Dallas
P.O. Box 830688
Richardson, TX 75083-0688

The University of Texas at Dallas is an Affirmative Action/Equal Opportunity Employer.

PARASITOLOGY DEPARTMENT HEAD

A senior level scientist is being sought as head of the Department of Parasitology. The candidate should have experience in parasitic diseases preferably in the fields of malaria and/or filariasis. Backgrounds in molecular biology, immunology, nonhuman primate research, and overseas experience are most desirable. Send curriculum vitae and three references by 1 June 1990 to: **Chairman, Parasitology Search Committee, Tulane University, Delta Regional Primate Research Center, 18703 Three Rivers Road, Covington, LA 70433. Tulane is an Affirmative Action/Equal Opportunity Employer.**

STATE GEOLOGIST AND DIRECTOR WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY

The state geologist/director establishes policy, directs planning, and has general supervisory and budgetary responsibilities for all survey functions. Qualifications: (i) Doctorate in geology or related field with tenure credentials; (ii) proven leadership in program, budget, and personnel; and (iii) strong communication and interpersonal skills.

Applications must be postmarked no later than 10 August 1990. Submit letter of application, résumé, and names, addresses, and telephone numbers of three references to: **Professor Stephen Born, Chair, Search and Screen Committee, University of Wisconsin-Extension, 619 Extension Building, 432 North Lake Street, Madison, WI 53706. For more information, please call: 608-263-1945.**

University of Wisconsin-Extension, Cooperative Extension, is an Equal Opportunity Employer.

POSITIONS OPEN

ACADEMIC ADMINISTRATOR, BIOLOGY

Manage daily operation of dynamic, multidisciplinary university department. Requires knowledge of financial management, budgeting, computers, undergraduate and graduate academic programs, and an understanding of the needs of laboratory research, including the management of research grants and laboratory facilities and operations. Prefer person with experience in research and teaching.

Please send résumé, three references, and salary requirements to:

Dr. K. C. Hayes, Biology Department
Brandeis University, P.O. Box 9110
Waltham, MA 02254

An Equal Opportunity/Affirmative Action Employer.

BIOLOGIST/ENVIRONMENTAL CHEMIST.

The U.S. Geological Survey in Lakewood, Colorado, seeks a biologist/environmental chemist for investigation of carbon-isotope transfer among soil, water, air, vascular plants, and other biota. Knowledge of multidiscipline approaches to ecology, environmental chemistry, and hydrology is important. Experience in isolation of carbon transfer processes, gas chromatography, and ^{14}C counting is desirable. Candidates should have a Ph.D. or equivalent research experience in a related field. The appointment is for a 2-year term with the possibility of conversion to a permanent position. Salary is at the GS 11/12/13 level (\$29,891 to \$55,381) depending on the candidate's background. Please submit by 10 June 1990 curriculum vitae, three letters of reference, and a statement of research interests to: **Robert Striegl, U.S. Geological Survey, MS 413, Box 25046, Denver, CO 80225-0046.** U.S. citizenship is required. U.S. Geological Survey is an Equal Opportunity/Affirmative Action Employer.

CHAIRMAN

DEPARTMENT OF CLINICAL DENTISTRY

Nominations and applications are invited for the position of chairman of clinical dentistry at the University of Rochester. We seek an academican with proven administrative abilities to provide innovative leadership for an established department with an excellent reputation for clinical care, postgraduate medical education, and research. The department, currently composed of six full- and seven part-time faculty members, includes a residency program in general dentistry having eight residents and a residency program in oral surgery having four residents. The clinical service involves approximately 9000 clinic visits and 250 inpatient consultations annually. There are abundant opportunities for collaborating in basic and clinical research with faculties of the Department of Dental Research at the University of Rochester and the Eastman Dental Center. Please send nominations and applications to:

Ronald A. Gabel, M.D., Chairman
Clinical Dentistry Survey/Search Committee
University of Rochester School of
Medicine and Dentistry
601 Elmwood Avenue, Box 604
Rochester, NY 14642

The University of Rochester is an Equal Opportunity Employer.

ENGINEER IN ORTHODONTICS

Ph.D. engineer, biomechanics. A full-time tenure-track position, available 1 July 1990, involves research collaboration with an active clinically oriented musculoskeletal physiology group. Teaching responsibilities include biomechanics at the undergraduate and graduate levels. The primary appointment will be at Indiana University School of Dentistry (IUSD) with an adjunct appointment in the Department of Mechanical Engineering, Purdue University School of Engineering and Technology at Indianapolis. The research focus of the department is dental implants, temporomandibular joint physiology, and gravitational biology. The faculty member is expected to develop and sustain external research funding. Salary and rank commensurate with experience. Review of applications will begin 15 May 1990, and continue until the position is filled. Send a letter of application, current curriculum vitae, and three references to: **Dr. W. Eugene Roberts, Chairman, Department of Orthodontics, IUSD, 1121 West Michigan Street, Indianapolis, IN 46202.**

Pharmaceutical Discovery Molecular Biology

The Du Pont Pharmaceuticals Division of the Medical Products Department is expanding its programs in Applied Molecular Biology and has immediate openings for two Principal Investigators. At Du Pont, we believe that innovative molecular biology research will provide new approaches, tools and targets, that when combined with our strong conventional drug discovery programs, will lead to the therapeutics of the future. The new positions offer exciting opportunities for Ph.D. scientists with strong molecular biology backgrounds to work as part of interdisciplinary research groups with pharmacologists and medicinal chemists in a highly team-oriented environment. Successful candidates should have at least two years of post-doctoral experience. Du Pont wishes to hire scientists with expertise in:

Mammalian Expression Systems Demonstrated experience in the expression of recombinant genes in mammalian tissue culture systems is essential. Design and utilization of a variety of vector systems and host cells is preferred. A background in the development of engineered mammalian cell lines for pharmaceutical screening is desirable.

Receptor Cloning Experience in cDNA cloning and a strong background in recombinant DNA technology is required. Preference will be given to candidates with experience in the molecular biology of receptors or membrane proteins. A background in expression cloning, subtractive hybridization, cell sorting or neuroscience would be advantageous.

You will find a highly stimulating scientific environment in a modern research facility located near Wilmington, Delaware. We offer excellent compensation and benefits. Our mid-Atlantic location offers an attractive life-style with easy access to a wide range of academic, cultural and recreational activities. Interested candidates should send their resume and references to Employee Relations Department, Room PSS-0010, Du Pont Company, Wilmington, DE 19898



An Equal Opportunity Employer

Molecular and Cell Biologists

The Procter & Gamble Company has immediate entry-level openings in the Corporate Research Division at the Miami Valley Laboratories in Cincinnati, Ohio. The positions are in a drug discovery group studying connective tissue diseases. These positions require a Ph.D. (with or without postdoctoral training) and must include experience in one or more of the following: eukaryote molecular biology, cytokine or growth factor research, and biology of bone or cartilage.

Procter & Gamble is a world leader in the research, development and manufacture of consumer products in the pharmaceutical, health and beauty aid, food and beverage, paper, soaps and detergents areas with sales of \$21.4 billion and an R&D budget of \$628 million. We are the 14th

largest U.S.-based corporation and were recently named as the 4th most admired corporation by *Fortune* magazine. Recent emphasis and growth in the health, beauty aid, and pharmaceutical areas provide unusually good opportunities for personal and professional growth for successful applicants in these positions.

Candidates must be presently authorized to work in the U.S. on a full-time basis and should send their resumes and publication lists to:

Dr. T. J. Logan, Manager
Ph.D. Recruiting, Box CRD
The Procter & Gamble Company
Miami Valley Laboratories
P.O. Box 398707
Cincinnati, Ohio 45239-8707

An EQUAL OPPORTUNITY Employer

Procter & Gamble

POSITIONS OPEN

CHAIRMAN, DEPARTMENT OF PHARMACOLOGY AND THERAPEUTICS UNIVERSITY OF FLORIDA COLLEGE OF MEDICINE GAINESVILLE, FLORIDA

Nominations and applications are requested for the position of professor and chairman of the Department of Pharmacology and Therapeutics of the University of Florida College of Medicine. The college seeks an individual who possesses and has demonstrated strong leadership abilities. The candidate should have an established and continuing record of major research productivity. The candidate should have a commitment to the further development and strengthening of the research and teaching programs of the department. Applications and nominations are invited at this time. Outstanding candidates with M.D. and/or Ph.D. degree will be considered. Applications including curriculum vitae, bibliography, and the names and addresses of at least three references should be sent by 1 September 1990 to:

James E. McGuigan, M.D., Chairman
Search Committee for
Pharmacology and Therapeutics
Chairman, Department of Medicine
University of Florida College of Medicine, J-277
Gainesville, FL 32610

An Equal Opportunity/Affirmative Action Employer.

MANAGER, SCIENTIFIC AFFAIRS

Microbiological Associates, Inc., is the world's leading contract laboratory for the safety evaluation of biopharmaceuticals. Our modern facilities in Rockville, Maryland, and Stirling, Scotland, serve the testing needs of the European, Japanese, and U.S. pharmaceutical and biotechnology industries.

Due to continued expansion we are seeking a manager, scientific affairs, for our Biotechnology Division. The person appointed will have 8+ years of postdoctoral experience and a global scientific reputation in virology and molecular biology, coupled with substantial management experience in the commercial side of the biopharmaceutical industry.

The position will provide a significant degree of scientific and entrepreneurial independence. Business development will be an important component of the job. In addition, this position will carry overall responsibility for the quality of the scientific work performed. The appointee will have the support of 40 graduate and postgraduate scientists.

Salary and benefits will reflect the importance of this position. You are invited to apply for this position by forwarding your curriculum vitae to:

Microbiological Associates, Inc.
Life Sciences Center
9900 Blackwell Road
Rockville, MD 20850

Equal Opportunity Employer, M/F/H/V.

FACULTY POSITIONS DEPARTMENT OF PHARMACOLOGY FOX CHASE CANCER CENTER

The Department of Pharmacology is seeking to fill tenure-track faculty positions within the next 2 years. The opening of a new research facility building in the fall of 1990 has made available space for independent investigators with developing or ongoing research efforts in basic or clinical aspects of anticancer drug pharmacology. Outstanding researchers with either Ph.D. or M.D. degree and interests in cellular, molecular, or biochemical mechanisms of drug action will be considered. This would include those trained primarily in cell or molecular biology with an applied interest in cancer drugs. Rank, salary, and laboratory start-up funds will be competitive. Pharmacology is one of seven medical science departments and provides an ideal environment for interaction with other basic scientists and clinicians at Fox Chase Cancer Center. Applicants should forward their curriculum vitae together with research interests and names of potential references to:

Dr. Kenneth D. Tew
Chairman
Pharmacology Search Committee
Fox Chase Cancer Center
Department of Pharmacology
7701 Burholme Avenue
Philadelphia, PA 19111
Equal Opportunity Employer.

POSITIONS OPEN

DIRECTOR, ACADEMIC BIOTECHNOLOGY SUPPORT FACILITY. The University of Kansas Medical Center (KUMC) is seeking a **DIRECTOR/RESEARCH ASSISTANT OR ASSOCIATE PROFESSOR** for its new research support facility. This unclassified professional staff position is funded by the state of Kansas. Up to 25% time will be available for independent and/or collaborative research. The facility contains state-of-the-art instrumentation relating to amino acid analysis, peptide and protein microsequencing, solid-phase peptide synthesis, oligonucleotide synthesis, and high-performance liquid chromatography. Candidates for the position should have earned the Ph.D., have at least 3 years of postdoctoral training, and will be expected to have experience in the operation of such instrumentation as well as demonstrated research productivity. Individuals with supervisory experience will be preferred. Applicants should submit curriculum vitae, names of three references, and a description of research experience in this area to: **Dr. A. B. Rawitch, Chair, Biotechnology Support Committee, Department of Biochemistry/Molecular Biology, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103.** KUMC is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR BIODIVERSITY SUPPORT PROGRAM

World Wildlife Fund (WWF), in a joint venture with World Resources Institute's Center for International Development and Environment and The Nature Conservancy, is recruiting for a Director, Biodiversity Support Program. Funded by USAID, the program seeks to conserve biological diversity and promote sustainable economic growth in selected developing countries through improved conservation and use of biological resources. Technical assistance, research grants, training, information networking, and pilot demonstration projects are major program components.

Interested candidates must possess: (i) significant reputation, training and experience in the fields of conservation and development issues of less-developed countries, (ii) an advanced degree in environmental science or international development, (iii) knowledge of AID administrative procedures and regulations, (iv) excellent communication skills in both English and French or Spanish, and (v) strong managerial capabilities.

Send letter of application, résumé, and three references to: **Human Resource Department 24F, WWF, 1250 24th Street, N.W., Washington, DC 20037.** Salary and benefits appropriate to U.S. nonprofit sector. Available immediately. *Equal Opportunity Employer.*

FACULTY POSITIONS. The Pulmonary and Critical Care Medicine Division of the Department of Medicine of New York University (NYU) School of Medicine is seeking to fill several tenure-track positions. We are particularly interested in attracting outstanding researchers with M.D. or Ph.D. degrees working in the fields of growth factors and their receptors, oncogenes, signal transduction, and inflammation. Applicants should send their curriculum vitae to: **Dr. William N. Rom, Professor and Chief, Division of Pulmonary and Critical Care Medicine, NYU Medical Center, Bellevue 7N24, 550 First Avenue, New York, NY 10016.** *An Equal Opportunity Employer, M/F.*

EXPERIMENTAL RADIATION PHYSICIST FACULTY POSITION

The Department of Radiation Science invites applications for a tenure-track faculty position available 1 July 1990. The department includes an M.S. degree graduate program in health physics or radiation biology.

Applicants must have an earned Ph.D. in physics or health physics and at least 4 years of experimental research experience. Applicant must present evidence of excellent verbal and written communication skills. Strong evidence of the ability to obtain research funding is required. The applicant will be responsible for research, teaching, and service.

Applications are to be submitted by 1 June 1990. Applicants should provide curriculum vitae, the names and addresses of three references, and a statement of research interests and professional goals to: **James E. Rodgers, Ph.D., Department of Radiation Science, Georgetown University, 3800 Reservoir Road, N.W., Washington, DC 20007.** Georgetown University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITIONS FOR VIROLOGISTS, IMMUNOLOGISTS, AND PROTEIN/PEPTIDE CHEMISTS

Faculty positions are available at the rank of **ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR, and PROFESSOR** due to significant expansion of the Department of Microbiology and Immunology at Vanderbilt University School of Medicine. We seek scientists or physician-scientists holding Ph.D., M.D., or M.D./Ph.D. degrees in the fields of virology (retroviruses or herpesviruses), immunology (cytotoxic T lymphocytes), and protein/peptide chemistry (isolation, sequencing, characterization, and synthesis of peptides).

Vanderbilt University School of Medicine is a research-oriented institution with a tradition of excellence in basic and clinical sciences. Persons interested in these positions are invited to submit curriculum vitae with a synopsis of their ongoing research and three names of references to:

Dr. Jacek Hawiger
Oswald T. Avery Professor and Chairman
Department of Microbiology and Immunology
Vanderbilt University School of Medicine
Nashville, TN 37232-2363

SEARCH REOPENED FACULTY POSITION AVAILABLE IN MOLECULAR CELL BIOLOGY AND IMMUNOLOGY

The Division of Life Sciences, The University of Texas at San Antonio, invites applications at the rank of **ASSOCIATE PROFESSOR** in molecular cell biology and immunology. Candidates must have proven teaching abilities as well as administrative and leadership abilities in research and have demonstrated excellence in basic research as evidenced by meaningful, independently funded projects. A Ph.D. and postdoctoral experience is required. Submit curriculum vitae, names of three professional references, and representative publications to: **Director, Division of Life Sciences, The University of Texas at San Antonio, San Antonio, TX 78285-0662.** Closing date to receive applications is 15 June 1990. The University of Texas at San Antonio is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN CHILD PSYCHIATRY RESEARCH

The Department of Psychiatry of the School of Medicine, University of California, San Francisco (UCSF), is seeking applicants for its child and adolescent psychiatry program who have records of research in developmental neurobiology and demonstrated expertise in molecular biology. In addition to a basic research role, the incumbent will be expected to participate in core teaching of child and adult residents as well as medical students and to supervise trainees on research electives. The position will be at the **ASSISTANT PROFESSOR** level in a tenure-track appointment. Candidates must be Board-eligible or Board-certified in child psychiatry; those who also have received formal training in a laboratory science will be preferred. Laboratory space and start-up funds will be provided, and a joint appointment in a relevant basic science department will be offered if appropriate. The position will be available on or before 1 July 1991, and applications must be received by 1 July 1990. Please send résumé to: **David Cox, M.D., Ph.D., Search Committee Chair, University of California, San Francisco, 401 Parnassus Avenue, Box NGL Research, San Francisco, CA 94143-0984.** UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

Applications are invited for a nontenure-track **INSTRUCTOR** position starting 18 May 1990. Applicants should have a Ph.D. in pharmacology or a related discipline with a minimum of 2 years of postdoctoral experience in bile acid and steroid hormone metabolism, cDNA cloning and expression, membrane protein purification, and immunochemistry. The successful applicant will join a team of individuals working in the above areas and in addition be responsible for the training of incoming students and postdoctoral fellows. Reply with curriculum vitae and three letters of reference to: **D. W. Russell, Ph.D., Department of Molecular Genetics, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235.** *Equal Opportunity Employer.*

Cardiovascular Pharmacology

Parke-Davis Pharmaceutical Research Division has immediate openings for Scientists in Cardiovascular Pharmacology. Successful candidates will join an experienced and interactive team of dedicated researchers working in the areas of hypertension and heart failure.

Biochemical Pharmacological

The successful candidate will be an experienced cardiovascular scientist with a strong background in Biochemistry and Pharmacology. The candidate will direct a group of senior and assistant-level scientists involved in drug discovery and novel mechanistic approaches to cardiovascular diseases. Experience desired in enzyme isolation and analysis, receptor binding and signal transduction, tissue culture and tissue bioassays. Qualifications include: a Ph.D. in Pharmacology, Biochemistry or Physiology, 6-8 years' experience or an M.D. degree, with related research experience. A documented record of scientific achievement and demonstrated management skills is required. (Job #90153)

Cardiovascular Cell Biologist

A group leader position is available for an individual with expertise in cardiovascular cell biology. The work will be applied to our current drug discovery strategies as well as toward the devising of new discovery strategies for hypertension, heart failure or myocardial ischemia. The successful candidate will have conducted research in one or more of the following; growth factors, protein processing, vasoactive factors, signal transduction, cell cloning. Qualifications include: Ph.D. in Pharmacology, Physiology, Biology or Biochemistry with a minimum of 2 years' postdoctoral experience. (Job #90110)

Cardiovascular Pharmacologist/Physiologist

A group leader position is available for an individual to direct a laboratory involved in the discovery of novel antihypertensive drugs. The qualified candidate will have experience in developing small animal models of hypertension and a strong background in the measurement of hemodynamic parameters in conscious and anesthetized animals. Individuals having worked with transgenic mouse models would be considered a plus. Qualifications include: a Ph.D. in Pharmacology or Physiology and 5-6 years' experience, supported by a significant publication record. (Job #90106)

Renal Pharmacologist

The successful candidate will be an individual with expertise in renal function, with a strong interest in applying state-of-the-art techniques to whole animal models of cardiovascular disease. The candidate will direct an independent laboratory and will be part of a multidisciplinary group of cardiovascular scientists. Familiarity with animal models of renal and cardiac failure is desirable, as well as use of computer-based data acquisition and analysis systems. Qualifications include: a Ph.D. in Pharmacology, Physiology or related discipline plus 3-4 years' experience and a solid publication record. (Job #90107)

Cardiovascular Safety Evaluation

A general Pharmacologist/Physiologist is sought to conduct cardiovascular tests on novel compounds from a number of therapeutic disciplines. Ingenuity and technical experience is required in designing and implementing specialized tests required to define cardiovascular activity and mechanism. This position requires an overall grasp of CV Pharmacology/Physiology, ability to effectively interact with other therapeutic areas, and excellent writing and communication skills. Qualifications include: a Ph.D. in Pharmacology or Pharm. D., 2-4 years' experience and a solid publication record. (Job #90076)

The Parke-Davis Research Division is located in Ann Arbor, Michigan, adjacent to the University of Michigan campus. Our scientific staff enjoys excellent compensation and benefits, a modern laboratory work setting and an exceptional living environment with excellent schools, diverse social activities and cultural activities associated with a major university.

Interested, qualified applicants should send their resume indicating the correspondence job number, list of references and salary requirements in confidence to **Mr. B. Burmeister, Human Resources Representative, Parke-Davis, 2800 Plymouth Road, Ann Arbor, Michigan 48105.** "Smoke-Free Work Environment"



PARKE-DAVIS

"Equal Opportunity In Action"

A DIVISION OF

WARNER LAMBERT

Discover What It's Like To Discover.

Discover a bright future at Sterling Research Group, the worldwide pharmaceutical research and development organization of Sterling Drug Inc. As a subsidiary of Eastman Kodak, what makes Sterling outshine the rest is the unbeatable combination of a small, friendly company environment and the depth, resources, and growth potential of a large multinational corporation. We have an immediate opening for a Research Biological Chemist in the Natural Products Biology Department at our laboratories in Great Valley, Pennsylvania.

NATURAL PRODUCTS BIOLOGY DEPARTMENT

RESEARCH BIOLOGICAL CHEMIST

We are searching for a highly motivated individual who is interested in the discovery of biologically active agents from natural product sources. The successful candidate will be responsible for the development of analytical methods and characterization, evaluation and isolation of unknown natural products.

This position requires a B.S./M.S. in biochemistry or chemistry. The successful candidate will have experience in enzymology, analytical biochemistry, protein chemistry, protein purification and chromatography. In addition, we are seeking an individual who is familiar with computer-assisted data analysis and database management.

In exchange for your talents, we offer competitive salaries and a comprehensive benefits program along with outstanding career opportunities for personal and professional growth. For confidential consideration, please refer to position code GV-43-90, and forward your resume with salary history/requirements and the names of three professional references to: Sterling Research Group, 9 Great Valley Parkway, Malvern, PA 19355. An Equal Opportunity Employer M/F/H/V.



A Division of Sterling Drug Inc.
A Subsidiary of Eastman
Kodak Company

Build a Future With Sterling.

POSITIONS OPEN

Oregon State University (OSU) announces a 3-year, fixed-term **FACULTY POSITION** in silviculture. This position is with the 8-year Coastal Oregon Productivity Enhancement (COPE) research and development program. The position is available 1 October 1990 and will be located in Newport, Oregon. Responsibilities are to develop and conduct reforestation-related research and continuing education programs in Oregon's Coast Range in managed forests as part of a four-person interdisciplinary team. The position is **ASSISTANT PROFESSOR**: 12-month, fixed-term appointment with annual reappointment potential for the duration of this program after the first 3 years.

Ph.D. in silviculture or a closely related field; experience in reforestation research and Pacific Northwest conditions desirable. Salary: \$31,000 to \$36,000 per annum dependent upon qualifications. Application closing date: 15 August 1990. A more detailed position description is available. Send inquiries or letter of application, résumé, three letters of recommendation, and transcripts to: **COPE Search Committee, Department of Forest Science, College of Forestry, Oregon State University, Corvallis, OR 97331. An Affirmative Action/Equal Opportunity Employer. Complies with Section 504, Rehabilitation Act of 1973. OSU is responsive to dual-career couples.**

MEDICAL PHYSICIST

The Department of Radiology of The George Washington University Medical Center has a non tenure-track position at the **ASSISTANT PROFESSOR** level for a medical physicist beginning in October 1990. This is a full-time position from October 1990 through September 1991. Beginning October 1991 it becomes a half-time position with the remainder of the position funding dependent upon the candidate's research support. The successful applicant will work in the Division of Radiation Oncology and Biophysics to complete the development and clinical implementation of a program in stereotactic radiosurgery and will also assist two faculty medical physicists in ongoing programs in clinical treatment planning, linac calibration, and quality assurance. A M.S. in medical or health physics, 3 years of clinical experience in radiation oncology physics, computer programming skills, and a good working knowledge of computer systems are necessary. American Board of Radiology certification in therapeutic medical physics is desirable. Applicants should send their curriculum vitae to: **Barry Wessels, Ph.D., Division of Radiation Oncology and Biophysics, The George Washington University Medical Center, 901 23rd Street, N.W., Washington, DC 20037.** Applications will be accepted through 16 July 1990. *The George Washington University is an Affirmative Action/Equal Opportunity Employer.*

PHARMACOLOGIST/PHYSIOLOGIST. Monsanto Company is expanding exploratory pharmaceutical research and we are seeking a pharmacologist/physiologist. This position requires a Ph.D. in pharmacology or physiology with experience in isolated smooth muscle, cellular, and whole-animal assay techniques. A working understanding of biochemistry and cell and molecular biology will facilitate collaborative research. This is an excellent opportunity to apply your skills to new discoveries and challenges. Please send your curriculum vitae and names of three references to: **Philip Needleman, Ph.D., Vice President, Research and Development, Monsanto Company, AA4-PN, 700 Chesterfield Village Parkway, St. Louis, MO 63198. Equal Opportunity Employer, M/F/H/V.**

POSTDOCTORAL POSITION FRED HUTCHINSON CANCER RESEARCH CENTER

A position is available immediately to study the cell and molecular biology of B cell differentiation. Research in progress includes determining the usage immunoglobulin variable region genes during ontogeny, especially of CD5 (Leu-1) positive B cells. Experience in molecular biology or immunology is necessary. Please submit a letter describing current and past research activities, your curriculum vitae, and two letters of recommendation to: **Carol Nottenburg, Ph.D., Division of Clinical Research, Fred Hutchinson Cancer Research Center (FHCRC), 1124 Columbia Street, Seattle, WA 98104. Telephone: 206-467-4555.** Smoke-free environment. *FHCRC is an Affirmative Action/Equal Opportunity Employer, M/F/H/V.*

POSITIONS OPEN

EXPERIMENTAL NEUROPATHOLOGIST DEPARTMENT OF PATHOLOGY THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

The Department of Pathology of The University of Michigan Medical School is searching for an individual with a strong background in experimental neuropathology for a position at the level of **INSTRUCTOR OR ASSISTANT PROFESSOR**. An M.D. degree is required together with certification in anatomic pathology and neuropathology. Candidates will be expected to demonstrate a record of scholarly productivity, clear evidence of independence in research, and the strong likelihood of being able to generate independent research grant support. Training and experience in the area of Alzheimer's disease and related degenerative disorders are highly desirable. Qualified candidates should contact: **Paul E. McKeever, M.D., Ph.D., Professor, Department of Pathology, The University of Michigan Medical School, M3218 Medical Science I, Box 0602, 1301 Catherine Road, Ann Arbor, Michigan 48109-0602.** *The University of Michigan is an Equal Opportunity Employer and specifically encourages applications from women and members of minority groups.*

Agricultural Research Service United States Department of Agriculture **PLANT PATHOLOGIST NATURAL PRODUCT CHEMIST**

U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Northern Regional Research Center, Mycotoxin Research Unit, Peoria, Illinois, is seeking a plant pathologist/natural product chemist. The incumbent will join an ecologically focused research team that investigates integrated approaches to the management of *Aspergillus flavus* and aflatoxin in preharvest maize. Research experience in the chemistry of fungal pathogen-host plant interactions is desirable. Applicants must possess knowledge of and experience in natural product chemistry and the techniques used to isolate, identify, and provide structure determinations of biologically active fungal and plant secondary metabolites. Ph.D. is desirable. *Must be U.S. citizen.* Starting salary for GS-11 is \$29,891; for GS-12 is \$35,825. Salary is commensurate with experience. For information on the research program, contact: **D. T. Wicklow, telephone: 309-685-4011, ext. 394.** For application procedures/forms, contact: **Amy C. Hegarty, telephone: 301-344-1542.** Applications in response to this ad should be marked **ON025**, and must be received by 1 August 1990. *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION. Available 1 July 1990 to study steroid hormone action [see *J. Biol. Chem.* **263**, 3474-3481 (1988); *J. Biol. Chem.* **264**, 13080-13085 (1989)]. Research areas include the mechanism of signal transduction by the glucocorticoid receptor and the mechanism of glucocorticoid-induced lymphocytolysis. Send letter of application, curriculum vitae, and the names and addresses of three references to: **Dr. Clark W. Distelhorst, Department of Medicine, Case Western Reserve University, University Hospitals of Cleveland, Cleveland, OH 44106.**

Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS PLANT CELL AND MOLECULAR BIOLOGY

Postdoctoral positions available to carry out research in gene isolation and transfer methodology. Topics include *Agrobacterium*-, DNA-, and particle bombardment-mediated transformation of monocots, dicots, and *Chlamydomonas*, tissue-specific gene expression, and genetic engineering of resistance to plant viruses and environmental stress. Postdoctorals will have considerable independence in designing and performing relevant projects, under the guidance of one of the collaborating investigators, who include Elizabeth Earle, Maureen Hanson, Andre Jagendorf, Karen Kindle, John Sanford, David Stern, Steven Tanksley, Ray Wu, and Milton Zaitlin. Positions may begin any time after July 1990, for a 2-year period. Applicants should send a cover letter describing research interests, résumé, and three letters of reference to: **Ms. Linda Narde, Biotechnology Program, 139 Biotechnology Building, Cornell University, Ithaca, NY 14853.**

Professional Engineers

The Australian Nuclear Science & Technology Organisation is a research centre of excellence with an active emphasis on technology transfer. We are located 30km from Sydney in bushland surroundings.

If you're dynamic, with energy and enthusiasm and if you're good at your job we are keen to hear from you.

We are interested in self motivated mechanical, electrical and chemical engineers to perform a range of professional nuclear engineering work including reactor operations, documentation, quality assurance, analysis and surveillance. We need people who have reached a level of professional autonomy within their area of expertise.

Remuneration packages for engineers are within the range of \$A51,400 to \$A55,400. As well, we relocate you and there are generous conditions and employment benefits. You must be prepared to become an Australian Citizen after two years (unless you are interested in a term appointment).

To find out just how attractive our offer is, contact Des Davy in Sydney on (02) 543 3702

Fax: (02) 543 6907. Written applications should be addressed to the Recruitment Officer, ANSTO,

Private Mail Bag 1, Menai NSW
2234, Australia and
should reach us
by June 1,
1990.

Ansto

ANSTO is an equal
opportunity employer
We provide a smoke-free
working environment



Sphinx Biotechnologies Corporation is a rapidly growing company dedicated to the discovery and development of novel therapeutics for human disease based on interactions with key intracellular enzymes involved in signal transduction pathways. We currently have available several positions in our pharmacology and drug development group. The selected individuals will be highly motivated scientists who are capable of working effectively as part of a multidisciplinary team with scientists in both our discovery research/medicinal chemistry and pharmacology/safety evaluation sections.

Pharmacokineticist

Applicant should have a Ph.D. in biopharmaceutics, biochemical pharmacology, or a related field with at least 3 years' postdoctoral experience in pharmacokinetics. The ideal candidate should be familiar with state-of-the-art analytical techniques such as HPLC, GC, and GC/MS and should have good knowledge in pharmacokinetic-pharmacodynamic modelling. **Position 120.**

Cell Biologist/Pharmacologist

Applicant should have a Ph.D. in cell biology, pharmacology, immunology, or a related field and at least 3 years' postdoctoral experience. The successful candidate will be a highly motivated scientist who is capable of conducting a variety of in vitro and in vivo biological assays designed to measure the effects of novel therapeutics on cell activation, growth and differentiation. Experience in working with neutrophils, monocytes/macrophages, and platelets is highly desirable. **Position 122.**

Toxicologist

Applicant should have a Ph.D. in toxicology or a related field with at least 3-5 years' experience in preclinical toxicology studies. Responsibilities will include designing protocols, selecting contract laboratories, evaluating/summarizing ongoing studies, and finalizing reports for regulatory submission. Successful applicant will also be responsible for ADME studies. Applicant should be strongly oriented toward regulatory (FDA) toxicology and scientific evaluation. **Position 121.**

Regulatory Affairs Manager

Applicant should have experience in filing of IND and/or NDA applications to the FDA. Successful candidate will be expected to interact with a multidisciplinary project team consisting of scientists from our drug discovery and safety evaluation groups. The responsibilities of this position will include coordinating a successful dialog between the FDA and our scientists and the preparation of all documentation necessary for the filing of an IND. **Position 124.**

Sphinx Biotechnologies offers career advancement opportunities, competitive compensation, comprehensive benefits and relocation plan, and excellent living conditions in the Research Triangle area of North Carolina. **For confidential consideration, please forward your curriculum vitae and the names of three references, indicating the position number for which you are responding, to: Sphinx Biotechnologies Corporation, P.O. Box 52330, Durham, NC 27717. An Equal Opportunity Employer.**

Sphinx Biotechnologies Corporation

Immunology

Searle is a growing pharmaceutical company with worldwide research and development facilities. To enhance our discovery research capabilities and to facilitate the translation of basic research into therapeutics, we have developed several academic research collaborations.

We are searching for a qualified scientist to fill the position of

Director of Immunology

to head our collaborative research group at the University of Oxford.

Requirements include a Ph.D. or M.D. with a strong record of accomplishment in cellular immunology and immunopharmacology. Candidates should have a proven record in technical leadership and management.

Responsibilities include the direction of a research team located at the University of Oxford, U.K., and focused on selective control of the immune response. The Director will also be responsible for collaboration with the University of Oxford's Glycobiology Institute and for coordination of the team's activities with related research efforts in Searle's U.S. Department of Molecular and Cell Biology and its pre-clinical and Clinical Development Departments. This position is at the interface of Searle's Research and Development Division with Oxford. It requires effective scientific and management skills and an ability to contribute to and act aggressively on new ideas in a collaborative team environment.

Qualified applicants should send curriculum vitae in confidence to: **Joan M. Lineberry - DIR; Searle, BB4E; 700 Chesterfield Village Parkway; St. Louis, MO 63198.** An Equal Opportunity Employer.

SEARLE

Senior Scientist

DNA Sequencing

Pharmacia P-L Biochemicals, Inc. is the international headquarters for research, production and marketing of molecular and cellular biology reagents for Pharmacia LKB Biotechnology. Our research and development department has an immediate opening for a scientist with experience in DNA sequencing.

The successful candidate will possess a Ph.D. in molecular biology or a related field with relevant postdoctoral or industrial experience. The scientist will be expected to maintain a program for the development of methods and products for DNA sequencing. Experience with automated DNA sequencing and one of the following areas is highly desirable: genomic cloning, cDNA cloning, protein expression or protein purification. Supervision of other scientific staff is expected and strong interpersonal skills are required.

Pharmacia offers a competitive salary and benefits package. For immediate consideration please send your resume to:

Pharmacia P-L Biochemicals, Inc.

Attn: Susan E. Hoist

Administrative Assistant

2202 North Bartlett Avenue

Milwaukee, Wisconsin 53202

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



Pharmacia

Pharmacia P-L Biochemicals

Toxicologist/Chemist/ Product Regulations

Hewlett-Packard, a world leader in thermal ink-jet technology, seeks a highly motivated and proficient individual to assume responsibility for EPA and worldwide registration of new chemicals used in ink-jet products, generate MSDSs, supervise toxicity testing through contractors, and set company policies related to use of chemicals in consumer products. Candidate should have 3-5 years' industrial experience in chemical toxicology, familiarity with workings within regulatory agencies, willingness to learn worldwide chemical regulations, flexibility to work on other projects, and possess a Ph.D. or Master's in toxicology with considerable background in chemistry.

Hewlett-Packard, located in the Pacific Northwest, offers an excellent employment and living environment reputed throughout the industry. Please send your resume to: **Janet Flaherty, Personnel, Hewlett-Packard Company, 1000 N.E. Circle Blvd., Corvallis, OR 97330.** Hewlett-Packard Company is an Equal Opportunity/Affirmative Action Employer.

There is a better way.



**HEWLETT
PACKARD**

**University of Basel
Biocenter**

Associate Professor in Pharmacology and Toxicology

The Department of Pharmacology (Medical Faculty) intends to make an appointment at the associate professor level (tenured) effective January 1991 or later. Research in the department covers a wide range of topics in clinical and molecular pharmacology, toxicology, neurobiology and cell biology. We are seeking outstanding candidates in any of these fields. In addition to leading an independent research group at the Biocenter candidates have to be able to teach pharmacology and/or toxicology to medical and pharmacy students. They should be able to teach in German. The position offers significant scholarly and scientific resources and the possibility of clinical research in collaboration with the Department of Research of the Basle University Hospitals.

Applicants should submit curriculum vitae, bibliography, a brief (no more than 500 words) description of research interests and the names of at least three references by June 30, 1990 to:

Dekanat der Medizinischen Fakultät, Hebelstr. 25, 4031 Basel

Further information on this position may be obtained by writing to:

Prof. John G. Nicholls, Ph.D., M.B., B.S.

Department of Pharmacology

Biocenter

CH-4056 Basel / Switzerland

(FAX No. 0041/61 25 67 60)



RESEARCH MANAGER

A dynamic, creative professional with strong management skills is sought for the position of Research Manager for the March of Dimes/California Birth Defects Monitoring Program.

The successful candidate will have primary responsibility for supervising epidemiologists and other senior scientific staff and for coordinating long-range plans for research endeavors.

A minimum of five years experience in managing scientific staff is required. Doctorate-level

training in epidemiology, genetics, reproductive biology or a related field is desirable. Experience with Federal grant applications is preferred.

We offer a competitive salary, benefits and a generous leave policy.

Please send your curriculum vitae including employment and management history and three professional references by June 25, 1990 to:

MARCH OF DIMES
California Birth Defects Monitoring Program
Attn: G. Kelly, Human Resources Manager
Mailstop SCI-0590
5900 Hollis St., Suite A
Emeryville, California 94608

An Equal Opportunity Employer



EXECUTIVE VICE PRESIDENT FOR RESEARCH AND ACADEMIC AFFAIRS

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON invites applications and nominations for the newly created position of Executive Vice President for Research and Academic Affairs.

RESPONSIBILITIES: Reporting to the President of the Health Science Center (HSC), this position represents the needs and interests of the academic community comprised by the schools to the Institution's administration. As such, the incumbent works with the Deans of the schools to facilitate and enhance their efforts in providing leadership in the academic, research, and service activities of their respective faculties and student bodies. Additionally, the incumbent is responsible for managing and coordinating various HSC wide faculty-student support functions. In that role, the incumbent has responsibility for and supervision of: the Office of Scientific Affairs; the Office of Research Services; the Office of Technology Management; the Registrar's Office; the Student Counseling Service; the International Affairs Office; the Program on Humanities and Technology in Health Care; the Office of Institutional Program Evaluation; the Office of Research Support Committees, the Clinical and Laboratory Safety Department; and, the Institute for Technology Development and Assessment.

THE UNIVERSITY: The University of Texas Health Science Center at Houston is one of fifteen institutions within The University of Texas System, and one of the six health components. It is located in the Texas Medical Center, the nation's largest medical center, and includes six schools: Allied Health, Biomedical Sciences, Dentistry, Medicine, Nursing and Public Health. As one of the top free-standing medical/health institutions in the country, it had over \$43.3 million in research and development expenditures during the 1988 fiscal year.

QUALIFICATIONS: The successful candidate will possess a terminal degree in a health-related discipline, a record of academic achievements at a senior level, a national reputation as a scientist, and proven experience in the administration of faculty, a school, or an academic health center.

SALARY: Competitive, commensurate with qualifications and experience.

CLOSING DATE: June 15, 1990

APPLICATION: A letter of interest, resume and list of five references should be mailed or faxed to:

M. David Low, M.D., Ph.D., President
The University of Texas Health Science Center at Houston
Attn: Human Resources & Employee Relations
P.O. Box 20036
Houston, Texas 77225
Fax Number (713) 794-1713

Equal Opportunity Employer. Women and minorities encouraged to apply.

TOXICOLOGY

MAMMALIAN TOXICOLOGIST

FMC Corporation, a Fortune 150 international machinery and chemical corporation has an opening for a Mammalian Toxicologist at our Chemical Research and Development Center located in Princeton, NJ. Responsibilities will include evaluating and interpreting data from mammalian toxicology programs and preparing risk assessments; assisting in the compilation and dissemination of technical information; acting as study director/study monitor for Mammalian Toxicology programs; assisting registration specialists with toxicology studies necessary for registration of industrial and agricultural chemicals; and preparing MSDS's and product literature.

Position requires an MS/PhD degree in Toxicology or related field, and/or up to 2 years industrial experience. FMC offers excellent salary and benefits package. Please send resume with salary requirements to: **FMC CORPORATION, Dept. 89-27, P.O. Box 8, Princeton, NJ 08543. ATTN: Personnel Manager.** Equal Opportunity Employer, M/F.



UNIVERSITY OF KUWAIT FACULTY OF MEDICINE STATE OF KUWAIT

Applications are invited to fill the post of **PROFESSOR AND CHAIRMAN** for the department of Gynaecology and Obstetrics, University of Kuwait, Faculty of Medicine.

REQUIREMENTS FOR APPOINTMENT

Qualifications: Medically qualified with a professional degree (i.e. MD/Ph.D/MRCOG/ FRCOG/ American Board or equivalents. Candidates should have publications in international journals.

Experience: 14 years (4 years as an Associate Professor). Applications should also have teaching experience.

CONDITIONS OF APPOINTMENT:

Salary: Total monthly salary will be:

KD. 1210-1370 (8 increments) according to qualifications and experience, (1 Kuwaiti dinar = 2.3 St. Pound, US\$ 3.5 approx.) Increment per year KD.20/-

OTHER ALLOWANCES: a) Social allowance b) KD. 450/- as clinical allowance from the Ministry of Public Health for 10 months a year.

OTHER BENEFITS: Conference attendance, gratuity, furnished accommodation (electricity and water free of charge), free medical treatment in Kuwait, free annual airtickets to and from country of citizenship or permanent residence for self and family up to 3 dependent children, baggage and freight allowance, maximum 3 children education fees in Kuwait from elementary to 0 level. No taxation and currency is transferable without restriction.

METHOD OF APPLICATION: Curriculum vitae in duplicate which should include the names of 3 referees, personal particulars, relevant copy of information, qualifications with dates, career history, teaching experience, research accomplishments and where appropriate clinical and administrative experience should be sent to: **THE VICE-DEAN ADMINISTRATION (RECRUITMENT), FACULTY OF MEDICINE, UNIVERSITY OF KUWAIT, P.O. BOX NO. 24923 SAFAT, 13110 SAFAT, KUWAIT**-to arrive NO LATER THAN 15th June 1990.

POSITIONS OPEN

POSTDOCTORAL POSITION(S). To investigate the biochemistry and genetics of antibiotic production by *Streptomyces* with the aim of unraveling novel enzymology and producing new drugs. Experience with recombinant DNA methods and bacterial genetics required. Available 1 August 1990. Salary: \$21,000 to \$23,000 per year. Apply to: Dr. C. Richard Hutchinson, University of Wisconsin, 425 North Charter Street, Madison, WI 53706 (telephone: 608-262-7582) with résumé and two references.

POSTDOCTORAL POSITION. Available in cellular neurobiology. Laboratory, which is in the Center for Neurobiology and Behavior, is studying cellular and molecular events underlying promotion of neurite growth by extracellular matrix proteins, as well as role of cytoskeleton in organizing and regulating the growth cone. Video (VEC-DIC, fluorescence, Ca^{2+} /pH imaging) and confocal microscopy, as well as biochemical techniques are used. Send curriculum vitae and names of three references to: Dr. Daniel J. Goldberg, Department of Pharmacology, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Available immediately. To study gene expression in the laboratory mouse. Experience of embryonal stem cells and/or microinjection and/or early development in the mouse will be advantageous. Salary range commensurate with experience. Send curriculum vitae and names of three referees by 15 July 1990, to:

Dr. John Bishop
Department of Biological Sciences
University of Maryland Baltimore County (UMBC)
Baltimore, MD 21228

UMBC is an Equal Opportunity Employer.

ECOLOGICAL POSTDOCTORAL FELLOWSHIPS

Two postdoctoral fellowship positions in aquatic ecology/toxicology and one in agroecosystem or landscape ecology are available August 1990 or later. Compensation includes a salary of \$21,000 plus a full range of fringe benefits valued at 25% of salary. Send transcripts of all academic work, a statement of research interests, a résumé, and three letters of recommendation to: Postdoctoral Fellowships, Zoology Department, Miami University, Oxford, OH 45056. Women and minorities are encouraged to apply.

MOLECULAR NEUROBIOLOGY POSTDOCTORAL POSITION

An NIH-funded postdoctoral position is available starting 1 September 1990 to study the role of specific sites of N-linked glycosylation on the assembly and targeting of ACh receptors using a combination of site-directed mutagenesis and functional expression assays [see *PNAS* 85, 8717-8721 (1988)]. Some experience in molecular biology and/or biochemistry is desired, but not essential. Send curriculum vitae and the names of three references to: Dr. Michael M. White, Department of Pharmacology, University of Pennsylvania, Philadelphia, PA 19104-6084.

POSTDOCTORAL POSITION

The Section of Analytical Chemistry, Laboratory of Clinical Studies, National Institute on Alcohol Abuse and Alcoholism (NIAAA), invites qualified individuals to apply for a postdoctoral fellowship for the study of protein-lipid interactions in biological membranes. The section specializes in the study of polyunsaturated phospholipids in relation to their membrane function and metabolism. A unique opportunity exists for the successful applicant to participate in basic studies involving general elements of biomembrane structure and clinical studies involving the biological basis of alcohol action in conjunction with out interdisciplinary group. A background in either protein or lipid biochemistry is appropriate for this position. Applicants should be less than 5 years past the granting of a professional degree and be U.S. citizens or permanent residents. The salary range is from \$28,000 to \$34,000 depending upon experience, and a relocation reimbursement and travel allowance is also available. Interested candidates should send their curriculum vitae, a one-page description of relevant research interests, and three letters of reference to: Dr. Norman Salem, Jr., NIH/NIAAA, Building 10, Room 3C-102, 9000 Rockville Pike, Bethesda, MD 20892. NIH is an Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION. For research in urologic aspects of infertility and incontinence. Will work in close collaboration with the medical faculty. Training in endocrinology and/or physiology desired. Send curriculum vitae to: Joseph R. Drago, M.D., or M. Guill Wientjes, Ph.D., Division of Urology, Ohio State University, 456 West 10th Avenue, Columbus, OH 43210. Telephone: 614-293-3067.

POSTDOCTORAL POSITION IN MOLECULAR COEVOLUTION. Studies of genetic differentiation and cospeciation in mammals and their ectoparasites. Required: Ph.D. and research interest/experience in molecular systematics/genetics. Send curriculum vitae and three letters of reference to: Mark S. Hafner, Museum of Natural Science, Louisiana State University, Baton Rouge, LA 70803. Telephone: 504-388-2855. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION TOXICOLOGY/PHARMACOKINETICS

Position, funded by U.S. Environmental Protection Agency, will participate in pharmacokinetic studies of environmental chemicals. Experience in computer data analysis, mathematical modeling, and pharmacology desired. Send curriculum vitae to: J. M. Gallo, College of Pharmacy, University of Georgia, Athens, GA 30602. The University of Georgia is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Opening available for **POSTDOCTORAL FELLOW** in a laboratory studying the molecular pathogenesis of virus-induced epithelial cancer. Project involves study of virus-cell interactions, control of viral gene expression, and structure-function analysis. Experience in molecular and cell biology is required. Send curriculum vitae and three references to: Dr. Joel Palefsky, Department of Laboratory Medicine, Box 0100, University of California, San Francisco, San Francisco, CA 94143.

POSTDOCTORAL POSITION. Neurology Department, University of Rochester, Rochester, New York, seeking Ph.D. with experience in molecular biology and biochemistry. Position complements group having basic and clinical research interests in muscular dystrophies and other neuromuscular diseases. Will lend expertise to ongoing projects and will develop independent research program. Please send curriculum vitae and three letters of reference to: Richard Moxley, M.D., Neurology Department, 601 Elmwood Avenue, Box 673, Rochester, NY 14642. The University of Rochester is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION MOLECULAR GENETICS: TRANSCRIPTION AND MUTAGENESIS

Position open for a Ph.D. in biochemistry or molecular biology with experience in DNA footprinting methodology. This will be a collaboration to study the interactions of gene expression and mutagenesis in *E. coli*. Fellowship leading to assistant professor depending on qualifications. Apply with curriculum vitae, one letter of reference from your Ph.D. sponsor, and names of three referees to:

Professor Joshua Lederberg
The Rockefeller University
New York, NY 10021-6399

An Equal Opportunity Employer.

POSTDOCTORAL POSITION IMMUNOTOXICOLOGY

The Immunotoxicology Program at Lovelace Medical Foundation is offering a postdoctoral position for a Ph.D. with experience in immunology. The major emphasis of the research will be on the mechanisms of action of the effects of drugs on the immune system, using both animal and in vitro human models. Projects include using cell culture techniques to elucidate the biochemical defect in lymphocytes exposed to anti-viral agents, the characterization of the effects of nicotine on in vitro immunology assays, and using cytotoxic T cell assays and natural killer cell assays to assess immunotoxic effects after in vivo exposure in the mouse. Salary is \$21,000 including benefits. Available July 1990. Call or write: George Shopp, Ph.D., Lovelace Medical Foundation, 2425 Ridgcrest Drive, Albuquerque, NM 87108. Telephone: 505-262-7155.

POSITIONS OPEN

POSTDOCTORAL POSITION. Available to do research into the structure and mechanics of blood vessels and into the mechanisms of water and solute exchange between blood and tissue. Projects include studies of: (i) structural determinants of capillary hydraulic conductance, (ii) effects of endothelial removal and applied stresses on arterial hydraulic conductance, and (iii) effect of endothelial charge on transvascular molecular transport. Start date: 1 June 1990; applications accepted until position is filled or until 1 December 1990, whichever is earlier. Salary: \$21,000 to \$23,000. Send curriculum vitae and three letters of reference to:

Dr. Ann Baldwin
Department of Physiology
College of Medicine
University of Arizona
Tucson, AZ 85724

The University of Arizona is an Affirmative Action/Equal Opportunity Employer. Women and minorities are urged to apply.

POSTDOCTORAL FELLOWS

Three to four positions available immediately in an exciting new university/laboratory/industry program under the direction of Professor Mark Bednarski (University of California, Berkeley, Chemistry Department, and Lawrence Berkeley Laboratory) to do fundamental scientific research in the development of new bioelectronic materials and devices of potential commercial importance.

Research involves design and synthesis of multifunctional organic molecules for specific molecular recognition and the design and fabrication of sensing devices using these materials.

Disciplines needed include: organic synthesis; bioengineering; protein, lipid, and DNA chemistry; semiconductor technologies; biology; and materials science. Positions are for 1 year with possibility of renewal. Candidates must have a recent Ph.D. with advanced skills and expertise in at least one, and preferably more than one, of the following areas: organic chemistry, biophysics, physics, and/or materials science. At least one position may be reclassified to permanent scientific staff.

Send résumé and three references to: Lawrence Berkeley Laboratory, Employment Office, M/S: 90-1042, #1 Cyclotron Road, Berkeley, CA 94720. Refer to: Job # A/5820. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATES

CryoLife, Inc., has instituted a multidiscipline research program aimed at understanding the basis for cell damage during hypothermia and freeze-thawing. We have positions available for Ph.D. scientists in the following areas: (i) red blood cell preservation, (ii) physical properties of cryoprotectants, (iii) membrane biophysics and ion transport, and (iv) metabolic regulation and enzymology. Suitable experience for these positions would include: assay of smooth muscle function; in vitro and in vivo assessment of red cell quality and stability; calorimetry and cryomicroscopy; determination of phospholipid bilayer fluidity and transition temperature, and of transmembrane ion transport; metabolite assays; and kinetic and structural characterization of regulatory enzymes. Excellent salary and benefit programs accompany these positions at our research facilities located 15 miles north of metropolitan Atlanta. For consideration, please forward a letter of application indicating the position for which you are applying, your curriculum vitae, and reprints of relevant publications to: Dr. John F. Carpenter, CryoLife, Inc., 2211 New Market Parkway, Suite 142, Marietta, GA 30067. CryoLife, Inc., is an Equal Opportunity Employer.

RESEARCH ASSOCIATE, POSTDOCTORAL

Nonprofit public health research organization seeks individual for full-time position beginning 1 October 1990. Experience in monoclonal antibodies desired. The project concerns development of monoclonal antibodies to chemically modified blood proteins. Ph.D. in biochemistry or related field required. Salary is \$2075 per month with an excellent benefits package. Send résumé and the names and phone numbers of three references by 1 July 1990 to: California Public Health Foundation, Department 161, 2001 Addison Street #210, Berkeley, CA 94704-1103. We are proud to be an Equal Opportunity/Affirmative Action Employer.

Molecular and Structural Biology

Toronto • Canada

STAFF AND TRAINEE POSITIONS

A major expansion in the area of Molecular and Structural Biology is being undertaken in Toronto, Canada. These programs are based both at the University of Toronto main campus and at University-associated Hospital Research Institutes. Openings are available for seven new staff positions as well as for graduate students and post-doctoral fellows.

Professor

NSERC Industrial Research Chair in Protein Crystallography

FACULTY OF MEDICINE • UNIVERSITY OF TORONTO



Applications are invited for a Full Professor with tenure in the Department of Biochemistry, with cross-appointment to the Department of Molecular and Medical Genetics. The position is an NSERC Industrial Research Chair and carries with it funds for: an area detector-based diffraction system, graphics hardware, maintenance costs, supercomputer time, research associate salary, start-up and renovation costs. The successful candidate will have demonstrated ability to establish an internationally competitive research program in protein crystallography and to collaborate on a wide variety of crystallographic problems. An interest in sharing facilities with industry-based investigators is necessary. Candidates must have a Ph.D. or equivalent degree. Salary will be commensurate with experience.

Please submit a curriculum vitae and the names of three referees to:
*Dr. Jeremy Carver, Department of Molecular and Medical Genetics, or
Dr. Theo Hofmann, Department of Biochemistry, University of Toronto,
Toronto, Ontario, Canada M5S 1A8.*

The University of Toronto encourages both men and women to apply for positions.

Training Program in Protein Engineering

Protein Engineering Network of Centres of Excellence



P.E.N.C.E.

Toronto is one of the nodes in a Canada-wide Network of Centres of Excellence Program in Protein Engineering: Three-Dimensional Structure, Function and Design. This program is based at the Departments of Molecular and Medical Genetics, Biochemistry and Chemistry on the main campus of the University of Toronto and at the Research Institute of the Hospital for Sick Children. The Toronto node will have available state-of-the-art technology in high resolution Nuclear Magnetic Resonance Spectrometry, Protein X-ray crystallography, Mass Spectrometry and Computer Graphics. Projects will be centred on Protein Design and Folding, Protein Glycosylation, Chemical Synthesis of Oligosaccharides and Glycopeptides, Growth Factors and Receptors and Oxidation-Reduction Enzymes. Applications are invited from potential graduate students and post-doctoral fellows.

Please send a curriculum vitae and the names and addresses of at least three referees to: *Dr. J.P. Carver, Dept. of Molecular and Medical Genetics, Medical Sciences Building, University of Toronto, Toronto, Ont., Canada M5S 1A8. Fax (416) 978-6885.*

The Hospital for Sick Children Research Institute



The Research Institute of the Hospital has openings for two junior staff positions in Protein Structure and Function. The Institute is recognized as one of the leading hospital-based research institutes in the world and has 100 principal investigators working in a broad range of biological disciplines, e.g., the structure and function of the Cystic Fibrosis gene product, of myelin proteins in normal and Multiple Sclerosis brains, and of dystrophin in normal and Muscular Dystrophy muscle. Applicants should have a PhD or MD degree, a proven research record, and 2-5 years of post-doctoral experience. Salaries will be competitive and cross-appointment to a University Department will be arranged.

Please reply in writing with a curriculum vitae, a publication list and the names and addresses of at least three referees to:

*Dr. H. Schachter, Dept. of Biochemistry Research, Research Institute,
The Hospital for Sick Children, 555 University Ave., Toronto, Ont.,
M5G 1X8, Canada.*

The Ontario Cancer Institute Senior Scientist Positions



The Ontario Cancer Institute is one of North America's largest cancer research and treatment centers and houses the Department of Medical Biophysics of the University of Toronto. The institute invites applications for senior scientist positions in its newly formed Molecular and Structural Biology group. Current programs in this group include: electron microscopy of macromolecules, DNA-protein interactions, membrane transport and drug resistance, and the structure-function relationship of biologically active polypeptides. Up to four candidates are sought with expertise in NMR spectroscopy, X-ray crystallography, protein engineering, theoretical molecular modelling, or other biophysical techniques.

New members should be eligible for appointment at the assistant or associate professor level in the Department of Medical Biophysics at the University of Toronto, a graduate department that emphasizes strong multidisciplinary research. Preference will be given to individuals with research interests in structural aspects of molecular recognition, receptor-ligand interactions, the structure of molecules of the immune system or in molecular design aimed at cancer therapy.

Interested persons should send their curriculum vitae, statement of research interests, and names of three references to:

*Dr. Victor Ling, Ontario Cancer Institute, 500 Sherbourne Street,
Toronto, Ontario, Canada, M4X 1K9.*

CONFERENCE ON CHEMICAL RISK ASSESSMENT IN THE DoD: SCIENCE, POLICY, AND PRACTICE

October 16, 17, and 18, 1990
Dayton, Ohio

A conference will be held at the Holiday Inn Conference Center, sponsored by the Air Force Harry G. Armstrong Aerospace Medical Research Laboratory, the Naval Medical Research Institute Detachment (Toxicology), and the Army Biomedical Research and Development Laboratory, with the cooperation of the National Research Council Committee on Toxicology.

The goals of the conference are to promote exchange of information between those who develop risk assessment methodologies and those who perform risk assessment for the DoD. Specifically:

- to acquaint DoD practitioners with the state-of-the-art in chemical risk assessment methodology for occupational, environmental, and emergency planning applications
- to acquaint those who perform chemical risk assessment with the requirements and problems specific to the DoD
- to identify research priorities to improve the application of chemical risk assessment methods to DoD scenarios

The conference will feature invited presentations by noted individuals in the field and a poster session for studies relevant to the conference theme. **Individuals interested in presenting a poster should contact Ms. Lois Doncaster, Conference Coordinator. Abstracts must be received by July 1, 1990.**

To obtain further information, contact Ms. Lois Doncaster, Conference Coordinator, NSI Technology Services Corporation, 101 Woodman Drive, Suite 12, Dayton, Ohio 45431. Phone: (513) 258-1150.

Nova Pharmaceutical Corporation is a rapidly growing pharmaceutical company based in Baltimore, currently establishing comprehensive in-house capabilities for producing materials in compliance with GMP regulations.

Head of GMP Facility

We are seeking an experienced professional with a BS in Pharmacy and a PhD in synthetic organic Chemistry, and experience in the pharmaceutical industry. This position is for a hands-on manager who will start up, operate and maintain a GMP facility designed for small-scale bulk chemical production, as well as the formulation of pre-clinical and clinical supplies. The successful candidate will be an independent leader with strong communication, organizational and motivational skills; strong GMP regulation knowledge is desirable.

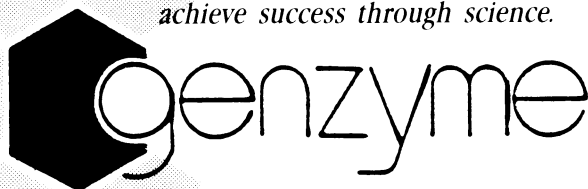
NOVA PHARMACEUTICAL CORPORATION offers exceptional professional growth opportunities and relocation assistance, plus a state-of-the-art facility, excellent salaries and comprehensive benefits including profit sharing and 401(k) plans and 100% tuition reimbursement. Please forward your resume and salary history to: **NOVA PHARMACEUTICAL CORPORATION, Personnel—Response Code #MCD, 6200 Freeport Centre, Baltimore, MD 21224-2788.**

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



SUCCESS THROUGH SCIENCE

Dynamic, rapidly growing, and innovative, Genzyme is quickly realizing its goal of becoming a fully integrated healthcare products company. Our projects are expanding. Our diverse R&D teams are developing extraordinary programs for healthcare. And each of our positions represents an opportunity for growth and future responsibilities – an opportunity to achieve success through science.



Research Scientists

We currently have the following openings in our Cambridge, Massachusetts facility.

Biopolymers

Set up multiple preclinical animal studies for the evaluation of biopolymer devices and help coordinate R&D for new products. Requires a Ph.D. in Bioengineering or Biomaterials, 3-5 yrs.' experience in the development of biomedical devices, and familiarity using animal models for evaluation of biomedical products and in preclinical safety and efficacy studies.

Define and implement programs to develop new materials for medical applications based on modification of biopolymers. Requires a Ph.D. in synthetic organic chemistry and 2-3 yrs.' postdoctoral experience in synthesis and modification of organic compounds.

Cell Biology

A new position requires a Ph.D. in Biology or Biochemistry to conduct applied and basic research in cell biology, including work with glycoproteins, cell differentiation, intracellular protein trafficking, and cellular adhesion and migration. Candidates should have a working knowledge of protein sorting, protein glycosylation, receptor biology, and cell adhesion and differentiation.

Genzyme offers an excellent compensation and benefits package, including equity participation, 3 weeks' vacation, a 401(k) Plan with a company match, extensive insurance benefits. For immediate consideration, please send your resume to: **Director, Human Resources, Dept. S518, Genzyme Corporation, One Mountain Road, Framingham, MA 01701.**

An equal opportunity employer

The Spirit of Innovation

**BASF Bioresearch
Corporation**

When is a start-up not a start-up?

When it's BASF Bioresearch Corporation. You see, we have the stability and resources of a Fortune 100 company... along with the energy and potential of a start-up organization. This start-up could be your start in a new, interesting opportunity.

Protein Chemist

You will be running a protein chemistry laboratory and supervising research assistants. Your primary responsibility is to perform research in immunology in the purification and characterization of lymphokines and growth factors. You will work in a research group together with molecular and cellular immunologists as well as molecular biologists. Your responsibility includes supervision of research collaborations.

A PhD in either Chemistry, Biochemistry or Biology as well as extensive experience in protein purification, protein characterization and/or structural/functional analysis is required. Post-doctoral experience of at least 2 years is preferred.

Sr. Scientist – Pharmacology

We are currently seeking a scientist to join our Oncology group. This individual will direct research on tumor cell differentiation and/or drug resistance.

A PhD in Pharmacology, Molecular Biology or Tumor Biology and at least 2 years' experience in oncology research is required.

Research Assistants

Several positions are available for Research Assistants to work in the following areas: Molecular Immunology, Cellular Immunology, Molecular Biology and Biochemistry. In most positions, you will be maintaining the laboratory and its equipment, conducting in-vivo and in-vitro studies, and conducting standard laboratory testing.

All positions require a BS degree in the appropriate science and experience working in a laboratory. An MS degree is preferred.

We offer an excellent compensation and benefits package. Please send your resume to **Pamela S. Zupfer, Human Resources Department, BASF Bioresearch Corporation, 195 Albany Street, Cambridge, MA 02139.** An Equal Opportunity Employer.

BASF

ENHANCE WORLD VISION.

As one of the world's foremost developers and manufacturers of high quality ophthalmic therapeutics, contact lenses and lens care products, Sola/Barnes-Hind is forging new inroads in treating vision disorders such as glaucoma and cataracts, and developing innovative methods for producing, disinfecting, cleaning and lubricating contact lenses. Join us in one of the following positions where you can make an active contribution to evolving the state of visioncare.

MANAGER, STABILITY & ROUTINE ANALYSIS

Northern California

At our new, fully-equipped R&D lab, located in the heart of Silicon Valley, you'll find professional challenges, state-of-the-art equipment, proximity to a wealth of cultural and environmental attractions and the country's finest educational institutions.

Bring your 5+ years R&D chemistry experience and PhD in Analytical, Bio-Chemistry or related field to our R&D Department to manage all aspects of the stability and analytical activities. Your responsibilities will encompass developing basic chemical information to support all stability functions, analytical methods to monitor new product performance, routine analysis for all R&D activities, and innovative analytical chemistry approaches. You will guide and manage the Analytical Research team members; develop stability protocol for formulations and biological samples to support new and existing products; coordinate stability projects with outside research organizations and identify capital equipment needs. You must possess demonstrated lab management, communication and organizational skills.

QC MICROBIOLOGY MANAGER

Phoenix, Arizona

Take ownership of quality planning and assurance—a core, strategic business value at Sola/Barnes-Hind—at our soon-to-open lens care production plant. Located in northeast Phoenix, this position offers an excellent career path, state-of-the-art equipment, surroundings rich in cultural and recreational activity, and affordable housing.

Use your 5+ years' Micro lab, BS/MS in Microbiology, and minimum two years' management experience to manage all quality aspects of lab procedures, equipment and activities. This includes implementing, applying and maintaining the most advanced procedures and techniques; evaluating and resolving quality challenges; establishing standards for operating procedures; supporting operations proactively and with timeliness; training and developing staff; and ensuring compliance with very high company Quality Standards, as well as GMPs, GLPs, FDA and other regulatory agencies' requirements. A background in sterile solutions processes and validations (ETO, gamma, etc.), clean room technology and environmental monitoring programs is required.

You'll also receive an excellent compensation and benefits package. For immediate consideration, please send your resume, indicating position of interest, to our California Human Resources Department at: **Sola/Barnes-Hind, Human Resources, Dept. SCI518, 895 Kifer Road, Sunnyvale, CA 94086. FAX: (408) 736-0830.** An Equal Opportunity Employer through Affirmative Action. M/F/H/V.

FUTURE OPENINGS

For advanced consideration, we are accepting resumes for anticipated openings at both locations:

**MANAGER,
QC CHEMISTRY
CHEMISTS
MICROBIOLOGISTS**

SOLA/BARNES-HIND
○ A PILKINGTON VISIONCARE COMPANY

POSITIONS OPEN

POSTDOCTORAL FELLOW. Laboratory specialized in the development of gel electrophoretic separation methods for macromolecules and subcellular-sized particles requires two scientists with backgrounds in water-soluble polymers, and physico-chemical approaches to gel electrophoresis, respectively. Write: **A. Chrambach, Section on Macromolecular Analysis, Laboratory of Theoretical and Physical Biology, Room 6C101, Building 10, National Institutes of Health (NIH), 9000 Rockville Pike, Bethesda, MD 20892, or telephone: 301-496-4878. NIH is an Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIP TRANSGENIC APPROACHES TO VIRAL IMMUNOBIOLOGY AND PATHOGENESIS

Position available immediately for M.D. or Ph.D. with experience in cellular immunobiology and T cell cloning to examine mechanisms of immunological tolerance and the role of virus-specific CTL in the development of cellular injury and malignant transformation in hepatitis B virus transgenic mice [see *Science* **248**, 361-364 (1990)]. Send curriculum vitae, bibliography, research objectives, and names of three references to: **Dr. Francis V. Chisari, Department of Molecular and Experimental Medicine, 10666 North Torrey Pines Road, La Jolla, CA 92037. Affirmative Action Employer.**

SENIOR RESEARCH ASSOCIATE II. Duties are characterizing the structure, morphology, and chemistry of materials by analytical electron microscopy and responsibility for day-to-day operation of the analytical electron microscopy laboratory (JEOL 2000FX AEM with STEM and EDS). Research and publication involving the characterization of ion-beam modified metallic, semiconducting and ceramic materials, including rock-forming minerals, and radiation-induced amorphization. Ph.D. in materials science and 4 years of experience required. Salary \$730.77 per week. Forty hours per week. Send résumé to: **New Mexico Department of Labor, Cost Center 1001, 501 Mountain Road N.E., Albuquerque, NM 87102. Job Order Number 276240.**

RESEARCH SCIENTIST

This position is available immediately in an interdisciplinary inflammation department focusing on signal transduction and cell activation, mechanisms of eicosanoid biosynthesis, and lymphokine release from leukocytes. Desirable areas of expertise include radioreceptor binding assays, purification and post-translational modification of proteins, immunoassay development, HPLC and enzymatic measurement of released eicosanoids and cellular mediators, intracellular calcium flux, cell culture, membrane fractionation, and small animal handling and use.

Qualifications include a M.S. or B.S. with at least 3 years experience.

Merck & Co., Inc. is noted for its professional environment, excellent salaries, and outstanding benefits program. To explore these opportunities, please forward credentials with salary history in confidence to: **Susan Glinka, R80M-TL1, Merck & Co., Inc., P.O. Box 2000, Rahway, NJ 07065.**

AN EQUAL OPPORTUNITY EMPLOYER



Merck & Co., Inc.

POSITIONS OPEN

POSTDOCTORAL FELLOW. Two- to four-year position available 1 July 1990 to study plasminogen activator regulation by endothelial cells. M.D. and/or Ph.D. required with experience in molecular biological techniques. Send curriculum vitae and letters of reference to: **Dr. Katherine A. Hajjar, Departments of Medicine/Pediatrics, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. Cornell University is an Equal Opportunity/Affirmative Action Employer.**

CANCER RESEARCH SCIENTIST. Ph.D./M.D. plus 5 years of experience in the area of molecular immunology research. Candidate must have strong potential for imaginative research, as well as the educational background and interest in the relevance of human endogenous retroviral elements in the pathogenesis and diagnostics of human malignancies. Background and experience shown must be evidenced by publications. Salary: \$49,000 per year. Reply to: **Box 42, SCIENCE. Equal Opportunity/Affirmative Action Employer.**

STAFF SCIENTIST. Research and development in thermodynamics and kinetics on high-temperature materials for DNA, pyrometry, emissivity, and thermodynamics of high-temperature liquid metals and binaries. Development of new property measurement techniques for outer-space experimentation. Research and development of container-less environments for high-temperature measurement of materials properties. Research and development of proprietary materials processed at high temperatures. Nine years of college with a Ph.D. in materials science and research and publication in areas of optical, thermophysical, and thermodynamic property measurement of materials at high temperatures and electromagnetic levitation, liquid metal emissivity measurements, and container-less processing technology required for this position; 40 hours per week; 9 a.m. to 5 p.m. Salary: \$44,000 per year. Applicants send résumés to: **Illinois Department of Employment Security, 401 South State Street-3 South, Chicago, IL 60605. Attention: Connie M. Evans, Reference V-IL-1232-E. An Employer-paid ad.**

Position Available Director of Basic Science

**Arizona Cancer Center
The University of Arizona
College of Medicine
Tucson, Arizona**

The Arizona Cancer Center, an NCI-designated Comprehensive Cancer Center is seeking a highly qualified scientist to head its basic cancer research program. The Basic Science Directorship for the Center is associated with a tenure-track faculty appointment in the relevant basic science department. Scientists with a strong background in pharmacology, molecular or cellular biology, immunology, experimental pathology, biochemistry or other relevant disciplines are eligible. The basic science director will also promote cooperative interactions with the Center's clinical and prevention and control research programs and aid in technology-transfer. Evidence of leadership, research productivity and administrative capability should be delineated. Applicants should provide a curriculum vitae, two recent publications, and a description of research goals. The names of three individuals who can serve as references should be supplied with your letter. The search committee will begin reviewing applications on May 3, 1990 and will continue to accept applications until the position is filled.

Submit applications to: **Sydney E. Salmon, M.D. Director, Arizona Cancer Center The University of Arizona Health Sciences Center 1501 North Campbell Avenue Tucson, Arizona 85724**

Phone: (602) 626-7925
Fax: (602) 626-2284

The University of Arizona is an Equal Opportunity/Affirmative Action Employer. Applications from female and minority group members encouraged.

POSITIONS OPEN

IMMUNOLOGIST/ ASSOCIATE RESEARCH SCIENTIST

The Surgical Immunology Research Laboratory at the West Haven Veterans Administration (VA) Medical Center is looking for a Ph.D. **DIRECTOR** to oversee one to three surgical resident trainees and participate in studies of lymphocyte signal transduction, neuroenteric mediators of immune function, and the effect of immunosuppressives on second messengers and activation events. A permanent salary line from Bridgeport Hospital funds this geographic full-time position at West Haven, 5 minutes by shuttle bus to the Yale main campus. *Bridgeport Hospital, Yale University, and the West Haven VA Medical Center are all Equal Opportunity Employers and applications from women and minorities are encouraged.* Send curriculum vitae to: **Marvin A. McMillen, M.D., Director, Surgical Intensive Care Unit, West Haven VA Medical Center, West Spring Street, West Haven, CT 06516.**

RESEARCH ASSOCIATE

Seeking a candidate with at least 7 years of postdoctoral experience and a strong record of scientific achievement in molecular biology, cell biology, and/or biochemistry to develop an independent research program. Children's Hospital Oakland Research Institute is a 15,000-square-foot research facility. It ranks seventh among children's hospitals as a recipient of NIH funds and is an integral part of Children's Hospital Medical Center of Northern California. Investigators with M.D. and/or Ph.D. degree and current federal research support and projects concerned with neuroblastoma, cystic fibrosis, or muscular dystrophy are particularly encouraged to apply. We offer a stimulating scientific environment with minimal teaching and administrative responsibilities, excellent compensation and benefits, combined with an ideal geographic location in proximity to University of California (UC), Berkeley; UC, San Francisco; and Stanford. Qualified candidates please forward your application to: **Children's Hospital Oakland, Human Resources, Department R100, 747 52nd Street, Oakland, CA 94609. Children's Hospital Oakland is an Equal Opportunity/Affirmative Action Employer.**

Drug Abuse Staff Fellows

The Public Health Service, Alcohol, Drug Abuse and Mental Health Administration, National Institute on Drug Abuse located in Rockville, Maryland, is seeking **EXTRAMURAL STAFF FELLOWS** to work in the Institute to develop, direct, and administer grant, contract, and collaborative research programs in the clinical, biomedical, behavioral, psychosocial, and epidemiological sciences. Applicants with M.D. or Ph.D. degrees are preferred, although masters-level are eligible. Applicants from minority and women candidates are encouraged. Salary will be in \$24,000 to \$77,000 range. Relocation expenses available. Start dates are negotiable. Fellows are eligible for full Government benefits and leave. Term of appointment will be at least one year, not to exceed seven years. For more information call or send c.v. and bibliography to Ms. Donna Tolson, National Institute on Drug Abuse, 5600 Fishers Lane, Room 10A-03, Rockville, MD 20857, 301-443-4577. **ADAMHA IS AN EQUAL OPPORTUNITY EMPLOYER.**

Enzytech, Inc., located in Cambridge, Massachusetts, is a rapidly growing biotechnology company engaged in the development of a wide range of delivery systems for biotherapeutics. Enzytech's novel delivery systems are expected to help protein and peptide-based drugs to achieve their full therapeutic and market potential.

Research Scientist

We are seeking a Ph.D. in biochemistry with 1-3 years' experience to study the protein interactions with polymers. The goal of this research will be the long-term stabilization of therapeutic recombinant proteins. Must be experienced in the use of HPLC, GPC, IEF and SDS-PAGE.

Enzytech, Inc. offers excellent salary and benefits including medical, dental, and life insurance; 401(k); and tuition reimbursement. For confidential consideration, please send a resume to: **Human Resources Dept., Enzytech, Inc., 763D Concord Avenue, Cambridge, MA 02138.** An Equal Opportunity Employer.

Enzytech

MEDICINAL CHEMIST SENIOR RESEARCH SCIENTIST

Miles Inc. is a wholly owned subsidiary of BAYER AG of West Germany, an internationally recognized leader in the research and development of pharmaceutical products. Miles Inc. is offering a highly visible and challenging career opportunity for an organic chemist with experience in stereoselective synthesis. The successful candidate will be housed in Miles' recently-opened research center in West Haven, CT where several established research institutes are already engaged in full-scale discovery research. The center is located midway between New York and Boston near New Haven and Yale University.

The Miles Inc. commitment to medicinal chemistry is backed both by Bayer AG's international reputation and research momentum and by the development of significant additional research capacity for chemistry, now under construction in West Haven, CT.

The successful candidate will have a Ph.D. in Organic Chemistry, coupled with 3-5 years experience, a thorough understanding of modern spectroscopy techniques, and drive to participate in a structural chemistry/molecular biology interdisciplinary research project.

This position offers attractive compensation commensurate with qualifications, a benefits package including 401(k) and relocation assistance. The position and the research environment in West Haven allow a professional working environment conducive to career development. For consideration, send resume including salary history, in confidence to: Department CC-CHEM



Miles Inc.
A Bayer USA INC. COMPANY
Pharmaceutical Division
400 Morgan Lane
West Haven, CT 06516

An Equal Opportunity Employer m/f/h/v

University of Massachusetts Medical Center Director of Protein Chemistry Core Facility

Applications are invited to fill the position of Director of Protein Chemistry. Applicants should hold a Ph.D. or equivalent experience in protein chemistry and have at least 3 years of experience in peptide sequencing and synthesis. The successful applicant is expected to supervise, maintain and administrate the University of Massachusetts Medical Center Protein Chemistry Core Facility. This facility was established to serve UMMC faculty who require custom peptide synthesis and peptide sequence analysis as part of their research programs.

Title and salary will be commensurate with experience.

Send curriculum vitae, outline of scientific background and the names of three references to:

Dr. H.M. Goodman
Office of Scientific Affairs
University of Massachusetts
Medical Center
55 Lake Avenue North
Worcester, MA 01655

An equal opportunity/affirmative action employer

Schering

Senior Scientists

*If exploring the frontiers of
Biotechnology is what you have in mind,
come to Schering-Plough Research.*

Here's your opportunity to be part of a creative team working at the forefront of one of the most dynamic areas of medical investigation. You will participate in research projects that could lead to significant pharmaceutical discoveries. To qualify, you must hold a Ph.D. in Biochemistry or a closely related field with 0-3 years' solid hands-on research experience in protein biochemistry. Training in peptide synthesis, peptide/protein purification, production of antibodies, epitope analysis and receptor binding studies would be ideal. Familiarity with biophysical techniques (e.g., NMR studies, molecular modeling) is considered a definite asset.

We offer highly competitive salaries and an excellent benefits package. For immediate, confidential consideration, please forward your resume to: Mr. G. Czuba, Schering-Plough Research, P.O. Box DD-43/81, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

What you have in mind, we put in action.



Schering-Plough

ENTOMOLOGIST

FMC Corporation, a Fortune 150 leader in Agricultural Chemical R&D, is seeking a PhD Entomologist to join the research team in the discovery of insecticides.

Working closely with Chemists and Biologists, the position is responsible for the development and implementation of laboratory testing procedures for screening and evaluation of new insecticide leads. The successful candidate will have the ability to generate new ideas, define projects and to supervise their implementation. Superior written communication and interpersonal skills would be expected.

A PhD in Entomology or Economic Entomology with 3 to 5 years of directly applicable industry experience desirable, including hands-on experience in the evaluation of insecticides in the laboratory. A background in the use of statistical procedures and their application to experimental design and data analysis for agricultural chemicals preferred.

FMC offers a professional environment and state-of-the-art equipment at its Princeton location. Salary commensurate with experience, excellent benefits. Please send resume to **Karla Filson, FMC Corporation, Dept. 90-51, Box 8, Princeton, NJ 08543**. Equal Opportunity Employer, M/F. Females are encouraged to apply.



MOLECULAR BIOLOGIST

Cardiovascular Research

Join Wyeth-Ayerst Laboratories, one of the largest research-based pharmaceutical companies, as a Molecular Biologist in their Cardiovascular Pharmacology Department. Here you will be involved in applying a broad spectrum of techniques in recombinant DNA to isolation, analysis, and expression of genes with potential pharmaceutical interest in Cardiovascular Research.

The successful candidate should possess a BS/MS in Biology with laboratory experience in molecular biology. Experience in performing tissue culture, gene cloning, DNA sequencing, southern/northern blot analysis and gene expression in either prokaryotic or mammalian systems is required.

Wyeth-Ayerst is located in Princeton, NJ, and offers an excellent compensation and benefits package. Candidates should forward their resume to: **Wyeth-Ayerst Research, Personnel Manager, Dept. 2774-LC, CN 8000, Princeton, NJ 08543-8000**. An Equal Opportunity



Cardiovascular Research

Genentech, Inc. is a biotechnology company focused upon the discovery and development of human therapeutic products. We are in the process of enlarging the Cardiovascular Research department in order to expand our position in developing cardiovascular health care products.

Our intent is to establish multi-disciplinary discovery groups that can approach cardiovascular disease processes using state-of-the-art technology. These groups will consist of pharmacologists, molecular biologists and protein chemists working together with the goal to integrate the various technologies in the study of biological systems.

We actively encourage publication, both internal and external research collaborations and have well-established post-doctoral training programs. Our facilities are located in a new research building overlooking the San Francisco Bay and located in close proximity to three major universities.

Pharmacologists, Ph.D.

The successful candidates will be investigators who have a proven record of creative, original research. Two to four years of work beyond a Ph.D. in areas that relate to cardiovascular/renal/pulmonary physiology are desired. Experience in areas related to vascular/blood biology desirable.

Pharmacologists, Research Associates

Individuals who have a Bachelor or Master's degree and are interested in applying and developing their expertise in the above areas are encouraged to apply. Applicants should have some experience with in vivo pharmacology. Successful applicants will be expected to assume the design and implementation of work directed towards on-going projects.

Genentech, Inc. offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. For consideration, please send your resume to Yvonne Davino, Human Resources Dept. SB-0518, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal employment opportunity. Women and minorities are encouraged to apply.

Genentech, Inc.
Genentech, Inc.
Genentech, Inc.
Genentech, Inc.
Genentech, Inc.

FELLOWSHIP AT NIH

National Institutes of Health, Public Health Service, Fellowship in Anatomy, Cell Biology, Molecular Biology, as related to Alzheimer's disease and Down syndrome (trisomy 21). The Laboratory of Neurosciences at the National Institute on Aging, NIH, invites applications for a Staff or other Fellowship position to study gene expression in the nervous in experimental models and in the human brain. Electron microscopic, histological, immunocyto-chemical and in situ methods are employed to examine regional gene expression and local pathological process, in relation to neurodegenerative disorders or aneuploidy. The applicant should be experienced in these methods, in the study of human brain tissue, and possibly in tissue culture and tissue transplantation techniques. Studies are conducted on brain tissue from Alzheimer's disease and Down syndrome patients, and from mouse trisomy 16 (model for human trisomy 21) and other aneuploid mouse preparations. Position is located in Bethesda, Maryland and salary is commensurate with qualifications. Send Curriculum Vitae and 2 letters of reference to:

**Dr. Stanley T. Rapoport, Chief
Laboratory of Neurosciences
Building 10, Room 6C-103
National Institutes of Health
9000 Rockville Pike
Bethesda, Maryland 20892**



NIH is an Equal Opportunity Employer

BIOCHEMIST/PHARMACOLOGIST Research Assistant

The Upjohn Company's commitment to neuroscience research has created an opportunity for a research Biochemist/Pharmacologist in our CNS Research Group. The responsibilities include screening of novel compounds by receptor binding assays and follow-up studies for investigating receptor mediated functions using enzymatic assay, radioimmunoassays, and HPLC. Qualifications include a BS or MS degree in biochemistry or related discipline and experience in pharmacology and neurochemistry of central cholinergic system. A demonstrated ability to work independently and effectively communicate the results of research experiments are necessary. Training and experience in computer sciences would be helpful.

Upjohn offers competitive compensation and benefits programs in addition to a stimulating multi-disciplinary research environment at our modern laboratories located in Kalamazoo, Michigan. For confidential consideration, please forward your CV/resume to THE UPJOHN COMPANY, CORPORATE RECRUITING, KALAMAZOO, MI 49001 or materials may be faxed to 616-329-5525. Refer to Position Number 5688-HA in your correspondence. An Equal Opportunity Employer M/F.

Our Commitment to Scientific Excellence Continues...

Upjohn

ELECTRIC POWER RESEARCH INSTITUTE REQUEST FOR LETTER PROPOSALS **CELLULAR RESPONSES TO LOW FREQUENCY ELECTRIC AND MAGNETIC FIELDS**

The Electric Power Research Institute, Inc. (EPRI) requests letter proposals on the subject, "Cellular Responses to Low Frequency Electric and Magnetic Fields (EMF)." The objective should be to establish and define conditions for reproducible cellular responses to low frequency EMF with an emphasis on quantitative relationships between EMF parameters and biological endpoints. Applicants should briefly describe the proposed research and include both biological and engineering approaches. Novel approaches are welcome but must be well characterized and readily transportable to other laboratories*.

Letter proposals will be reviewed for scientific merit and relevance to EPRI's research program on EMF and health. Successful applicants will be invited to submit detailed proposals in response to a formal Request for Proposals (EPRI RFP2965-14) to be issued in July, 1990. Awards for several research contracts are anticipated. Individual contracts are expected to cover three years and not exceed a total cost of \$450,000.

The Electric Power Research Institute, Inc. is a non-profit organization, formed to conduct research on behalf of member utilities and their customers. The Environment Division at EPRI currently sponsors a wide-ranging research program on 60 Hz EMF and health, consisting of studies in epidemiology, exposure assessment, and basic sciences.

Please address letter proposals to: **Dr. Charles N. Rafferty, Project Manager, Environment Division, Electric Power Research Institute, 3412 Hillview Drive, Palo Alto, CA 94304.** For consideration, all letter proposals must be received by June 18, 1990.



Leadership in Science and Technology

*It is the policy of EPRI not to solicit or accept proposals or other documents that are marked to indicate that they are the confidential or proprietary information of the sender or that restricted handling is required. Normal business propriety will be observed in handling of proposal materials.



OPTICAL MICROSCOPY AND IMAGING IN THE BIOMEDICAL SCIENCES

October 6-12, 1990

This course covers the fundamental techniques of modern optical microscopy and the newest video and photographic imaging and enhancement methods used in biomedical research. Designed for research scientists, physicians, postdoctoral trainees and advanced graduate students.

Through hands-on experience with the latest microscopes (including confocal laser scanning), video cameras, and image processing equipment, students will obtain, interpret, process, record and analyze high quality microscope images. Lectures, demonstrations, and discussions complement the above. Applications of optical methods to live cells, plant and animal, will be emphasized. Students are encouraged to bring their own research specimens. Enrollment limited to 20 students.

Co-Directors: Nina Allen, Wake Forest and Colin Izzard, SUNY, Albany. Faculty: F. Fay, UMASS Med. School; A. Harootunian and R. Tsien, UCSD; K. Jacobson, UNC, Chapel Hill; J. Murray, U. of PA; S. Smith, Stanford U. Med. School; K. Spring, NIH. Guest Lecturers: S. Inoué, MBL; E. Keller, C. Zeiss, Inc.; J. Hinsch, Wild Leitz, Inc.

Cost: \$1400 (includes tuition, materials, room and board)

Application Deadline: August 1, 1990

For further information contact Office of Sponsored Programs, MBL, Woods Hole, MA 02543 (508) 548-3705, Ext. 216.

POSITIONS OPEN

RESEARCH SPECIALIST II. Operation of biopolymers laboratory using two ABI Model 380B oligonucleotide synthesizers, ABI Model 431A peptide synthesizer, and Waters HPLC system. Oversee shared facilities; tissue culture, darkroom, common equipment areas. Ph.D. in chemistry, biochemistry, or related field. Applicants with B.S. or master's degree will be considered. Résumés to: David Ginsburg, M.D., University of Michigan, Howard Hughes Medical Institute, 1150 West Medical Center Drive, 4520 MSRB I, Ann Arbor, MI 48109-0650.

TOXICOLOGISTS

California Department of Food and Agriculture seeks staff toxicologists and associate toxicologists in its pesticide regulatory program. Incumbents will evaluate toxicology studies and/or conduct risk assessments. Positions exist for individuals with master's and/or doctorate degrees in toxicology, pharmacology, biochemistry, or a related field with suitable experience in animal toxicology. Salary range begins at \$4398 per month for staff toxicologists and \$3320 per month for associate toxicologists. Comprehensive benefits package. Continuous testing, oral exam required. Submit résumés to:

Department of Food and Agriculture
Examinations Unit
1220 N Street, Room 154
Sacramento, CA 95814

SENIOR TOXICOLOGIST (Washington, D.C.). Coordination and development of testing procedures, selection of laboratories to conduct such testing. The supervision of scientific research regarding the safety of cosmetic ingredients: responsible for providing membership and standing committees with a detailed analysis of research, and for preparation of reports which will make such research and findings understandable to other scientists and laymen engaged in the manufacture, marketing, and distribution of cosmetic products. This position requires an advanced knowledge of toxicology including metabolism, pharmacokinetics, and classic in vivo safety testing. It also requires extensive scientific research experience specifically in the area of toxicology studies, including experience in evaluating toxicity and epidemiology data and extrapolating from animal to man in determining potential hazard and assessment of risks. Ph.D. in biological chemistry or toxicology and 2 years of postdoctoral research as well as 2 years of experience in position offered are required. Forty-hour week, 9:00 a.m. to 5:00 p.m.; salary: \$53,000 per year. Proof of legal right to work in the United States must be provided. Send résumé in duplicate to: Department of Employment Services, 500 C Street, N.W., Room 325, Washington, DC 20001. Refer to: Job Order #7821.

SITUATIONS WANTED

BIOLOGIST. Managerial, supervisory position preferable. Cell biology, microbiology, immunology, bacteriology, biochemistry, molecular biology. Solid funding only. Baltimore/Washington area. Box 41, SCIENCE.

Ph.D. PATHOLOGY (1981). Cell biologist/neurochemist: protein purification, IEF/PAGE, RIA/ELISA, molecular biology experience; microscopy background. Seeks research/industry position. Box 43, SCIENCE.

PLANT PHYSIOLOGIST/AGRONOMIST. Ph.D. (1990), desires position working with research/extension/teaching. Background: environmental physiology, extensive teaching, and overseas experience. C. Meisner, 3111 Miller Plant Science Building, University of Georgia, Athens, GA 30602. Telephone: 404-542-0921.

RETIRED Ph.D. Temporary. Teach genetics, evolution, human biology, etc. Fall of 1990. Jack Bennett, P.O. Box 364, DeKalb, IL 60115. Telephone: 815-756-7712.

VETERINARY IMMUNOLOGIST, Ph.D. (1989); domestic, salmonid. Seeking academic/industrial position, aquatic immunology. Monoclonals, flow cytometry, cytotoxicity, transfection, electron microscopy, ELISAs. Anne Raub Greenlee, Department of Animal Sciences, Washington State University, Pullman, WA 99164-6332. Telephone: 509-335-1002.

POSITIONS OPEN

VIROLOGIST. Monsanto's Corporate Research Glycosciences function has an opening for a virologist to participate in a program on viral glycoproteins. This position requires a Ph.D. in virology or a closely related discipline and postdoctoral experience. Additional experience in an area of glycolysis, such as oligosaccharide characterization, is preferred. Interested candidates should send their résumé and three letters of recommendation to: Monsanto Company, BB5B-GJ, 700 Chesterfield Village Parkway, St. Louis, MO 63198. Equal Opportunity Employer, M/F/H/V.

WATER RESOURCE SCIENCE UNIVERSITY OF CALIFORNIA, DAVIS

The Department of Land, Air and Water Resources seeks applicants for an 11-month teaching and research position in water resource science at the ASSISTANT, ASSOCIATE, OR FULL PROFESSOR level. The appointee will develop a vigorous research program focusing on the interface between scientific hydrology and water resources management and public policy. The work should integrate the latest scientific hydrological techniques into the decision-making and public policy process dealing with water resource development, conservation, and pollution. We seek a strong scientist with a Ph.D. in hydrology, water resources, hydrogeology, engineering, or a closely related field, plus formal background and some training in water resources policy and management. The appointee is expected to teach at least two undergraduate courses in resource science, and will develop a graduate course in water resource science or his or her area of interest. The position is available 1 November 1990. Applicants should submit: résumé, transcripts, research and teaching statements with background in each, copies of relevant publications and manuscripts, and the names and addresses of at least four references to: Professor Graham E. Fogg, Resource Science Search Committee Chair, Department of Land, Air and Water Resources, 113 Veihmeyer Hall, University of California, Davis, CA 95616. Telephone: 916-752-6810. Applications should be postmarked by 1 August 1990. A more detailed job description can be obtained from the above address.

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

COURSES AND TRAINING

POSTDOCTORAL TRAINING PROGRAM BIOLOGY AND CHEMISTRY OF EXTRACELLULAR MATRIX

Postdoctoral traineeships are available in an NIH-supported program which is entering its twelfth year. Trainees will participate in an interdisciplinary program encompassing twelve faculty members in four departments. Trainees are encouraged to select a major preceptor in the areas of interest which include cellular, molecular, and developmental aspects of the extracellular matrix. Please contact:

Dr. Marvin L. Tanzer
Department of BioStructure and Function
University of Connecticut Health Center
Farmington, CT 06032

POSTDOCTORAL TRAINING PROGRAM IN MEDICAL GENETICS

The Interdepartmental Medical Genetics Program at Stanford University School of Medicine provides advanced clinical and/or research training related to human inherited disease. Well-represented areas of the program include: the molecular basis of heritable disorders, including polygenic and multifactorial diseases; chromosome structure and function; genome and gene mapping; the development of methods to manipulate and to study large fragments of DNA; and developing animal models and new treatment modalities of human genetic disease by homologous recombination.

Individuals with an M.D., Ph.D., or equivalent degree are eligible for this 3-year program which includes an extended period of research training with one of 26 training faculty and the opportunity to pursue applied training in clinical genetics, clinical cytogenetics, or molecular genetics in an ABMG-accredited setting. Minority individuals are especially encouraged to apply. For information and application forms, contact: Uta Francke, M.D., Departments of Genetics and Pediatrics, Howard Hughes Medical Institute, Stanford, CA 94305-5428.

MARKETPLACE

NEED DNA FAST?

Custom Sequencing Primers in 26 hours*
Redundancies. Methylphosphonates. Phosphorothioates. 5'-Phosphorylation.
HPLC or Gel purification • High Quality & Low Prices

*1-800-247-8766 The Midland Certified Reagent Co.
FAX 915-694-2387 3112A W. Cuthbert, Midland, TX 79701

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. 8 on Readers' Service Card

FLUORESCENT MICROSPHERES

Distinctive colors for biology, diagnostics, physiology, aerosols, and filter testing. Diameters from 0.025 to 165 µm in red, green, blue fluorescence. Assorted surface properties for protein coupling. Free catalog available. Toll Free 800-334-3883. In Calif. 415-962-1100. FAX 415-962-0718



Duke Scientific Corporation 11350 SAN ANTONIO ROAD
PALO ALTO, CALIF. 94303

Circle No. 193 on Readers' Service Card

DNA SEQUENCING

Definitive Nucleotide Sequence
\$3/base pair (>2kb)—Second Strand Verified
Primer Extension Sequence Reaction—\$150
(Averages 75¢/base or less)

Subcloning, Mapping, In vitro Mutagenesis
Complete Molecular Biology Services
Ambion 1-800-888-8804

Circle No. 142 on Readers' Service Card

OPPORTUNITY

Not for Profit development corporation
affiliated with large NYC Medical Center
to build lab space for entrepreneurial
scientists.

Interested parties contact:

Bioscience

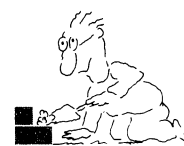
c/o Bruce Bozeman, Esq.

100 First Street

Mount Vernon, New York 10550

Circle No. 117 on Readers' Service Card

We'll Help You Build A New Lab



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

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

SCIENCE Magazine
New Lab Service Department
1515 Broadway
New York, NY 10036

SCIENCE

Science from CALIFORNIA

Lawrence and His Laboratory

A History of the Lawrence Berkeley Laboratory, Volume 1
by J.L. Heilbron & Robert W. Seidel
\$29.95 hardcover

Atoms for Peace and War, 1953-1961

Eisenhower and the Atomic Energy Commission
by Richard G. Hewlett & Jack M. Holl
\$60.00 hardcover

The Nuclear Seduction

Why the Arms Race Doesn't Matter--And What Does
by William A. Schwartz & Charles Derber
\$25.00 hardcover

A Shield in Space?

Technology, Politics and the Strategic Defense Initiative
How the Reagan Administration Set Out to Make Nuclear Weapons "Impotent and Obsolete" and Succumbed to the Fallacy of the Last Move
by Sanford Lakoff & Herbert F. York
\$35.00 hardcover

Radiocarbon Dating

by Sheridan Bowman
\$8.95 paperback

Analogies Between Analogies

The Mathematical Reports of S. M. Ulam and his Los Alamos Collaborators
Edited by A. R. Bednarek & Françoise Ulam
\$60.00 hardcover

Observatory Seismology

A Centennial Symposium for the Berkeley Seismographic Stations
Edited by Joe J. Lithiser
\$48.00 hardcover

The Dinosauria

Edited by David B. Weishampel, Peter Dodson, & Halszka Osmólska
\$85.00 hardcover

The Galileo Affair

A Documentary History
Selected, translated, and edited, with an Introduction & Notes
by Maurice A. Finocchiaro
\$50.00 hardcover, \$12.95 paperback

Evolution

The History of an Idea New, Revised Edition
by Peter J. Bowler
\$50.00 hardcover, \$15.95 paperback

Controlling Life

Jacques Loeb and the Engineering Ideal in Biology
by Philip J. Pauly
\$12.95 paperback

Darwin in Russian Thought

by Alexander Vucinich
\$45.00 hardcover

Prescribed Burning

In California Wildlands Vegetation Management
by Harold Biswell
\$27.50 cloth

Tumors in Domestic Animals

3rd Edition, Revised & Expanded
Edited by Jack E. Moulton
\$125.00 hardcover

The Pinnipeds

Seals, Sea Lions, and Walruses
by Marianne Riedman
\$29.95 hardcover

Animal Liberators

Research and Morality
by Susan Sperling
\$19.95 hardcover

Seeing Voices

A Journey into the World of the Deaf
by Oliver Sacks
\$15.95 hardcover

Heavy Drinking

The Myth of Alcoholism as a Disease
by Herbert Fingarette
\$19.95 hardcover, \$7.95 paperback

AIDS

The Burdens of History
Edited by Elizabeth Fee & Daniel Fox
\$30.00 hardcover, \$12.95 paperback

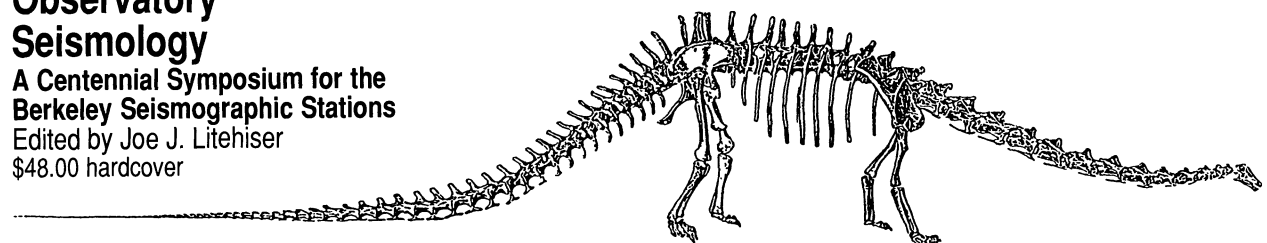
New Transportation Fuels

A Strategic Approach to Technological Change
by Daniel Sperling
\$45.00 hardcover, \$16.95 paperback

Available at bookstores or order toll-free 1-800-822-6657. Visa/MasterCard only.

UNIVERSITY OF CALIFORNIA PRESS

Berkeley 94720



Save hours of time and improve results by automating solid phase extraction with the new ASPEC system

Automate all conditioning, sample application, washing and elution steps

Solid phase extraction is a time-consuming, manually intensive job. Depending on the protocol, it can take several hours a day. By automating the procedure, ASPEC (Automatic Sample Preparation with Extraction Columns) frees you for more productive work. Ideal for most GC and HPLC applications, ASPEC automates sample preparation for GC and both sample preparation and injection for HPLC.

Extraction steps automated by ASPEC

Pre-stored software for...

- three column conditioning steps
- sample application to 108 columns
- washing with up to three solvents
- application of up to three elution solvents
- on-line HPLC injection

Programmable steps for...

- addition of internal standards
- extra column conditioning, washing or elution
- variable drying time
- sample derivatization or dilution

ASPEC treats every column identically to assure reproducible results

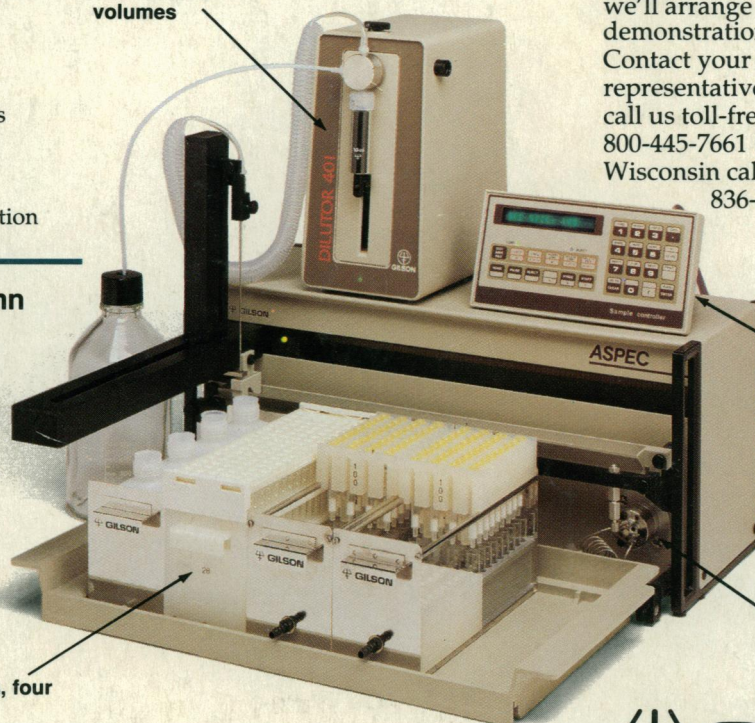
Automation with ASPEC also assures better results. ASPEC treats every column identically—and with accuracy—by eliminating errors that could

occur in manual liquid handling. The ASPEC pipettor/dilutor picks up and delivers sample or solvent with up to 99.5% accuracy and a 0.05% CV.

Built-in software turns programming into an easy step-by-step process

Automation sometimes means complication. But not with ASPEC. Three built-in files prompt you for basic parameters such as column size and liquid volumes. Once the parameters are entered, you can store them for future use. And when you need to change parameters, ASPEC makes that easy, too. You go right to the parameter you need to change without re-entering every one.

Pipettor/dilutor assures accurate liquid volumes



Racks hold up to 108 samples, four solvents and 108 columns

Unmatched value: no costly add-ons or consumables; multiple uses

ASPEC is compatible with all standard syringe barrel disposable extraction columns. So there's no need to pay a premium for special columns. And ASPEC comes complete. So there's no need for special supplies such as vacuum pumps or extra modules. What's more, when you're not performing solid phase extractions, ASPEC works as an auto sampler/injector to perform dilutions, add internal standards, mix reagents and inject samples.

To learn more, write for our free brochure

You can learn more about ASPEC by requesting a free copy of our new brochure. And then, if you'd like, we'll arrange for a no-obligation demonstration.

Contact your Gilson representative. Or call us toll-free at 800-445-7661 (In Wisconsin call 608-836-1551).



Keypad and pre-stored software simplify programming

Injection valve provides for automatic on-line HPLC injection

 **GILSON®**

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

Circle No. 100 on Readers' Service Card