

### Scientific Word Processing Software

EXP: The Scientific Word Processor, Version 2.0, allows users to display multiple test fonts, technical characters, formulas, and graphics on the same screen with material being edited. It allows users to import



graphics stored in either PCX or TIFF graphics files and provides a 100,000-word spelling checker with the option of American or British spellings. Wadsworth, Inc. Circle 570.

### Magnetic Isolation of DNA

BioMag products for the isolation of DNA and RNA are available from Advanced Magnetics. Oligo(dT), streptavidin, biotin, and avidin have been conjugated to the 1- $\mu$ m BioMag Superparamagnetic Particle, allowing quick, safe separations of labeled DNA or RNA. The products are suitable for use in DNA probe assays, in hybridization reactions as an alternative to nitrocellulose, and in purifications of DNA-binding proteins. Advanced Magnetics. Circle 562.

### Programmable Wavelength HPLC Detector

The SM4000 ultraviolet/visible light detector is equipped with features that simplify high-performance liquid chromatography (HPLC) analyses. Timed wavelength and

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.

absorbance range changes maximize detection sensitivity. The fraction collector feature collects sample fractions based on absorbance units rather than time alone. The unit has a variety of optional flow cells for versatility when a change in methods is required. It can be used in microbore, semi-preparative, preparative, and biotechnological liquid chromatography techniques. LDC Analytical. Circle 563.

### Fourier Transform Mass Spectrometer

The Bruker CMS-47X is the first commercially available Fourier transform (FT) mass spectrometer with a differentially pumped conventional medium-pressure ion source capable of laser desorption-slash ionization, fast atom bombardment ionization, field desorption, and gas chromatography coupling. The addition of a differentially pumped ion source external to the mass analyzer of the FT mass spectrometer produces an instrument configuration more familiar to mass spectroscopists than previous FT mass spectrometer configurations. This configuration offers the operational ease of quadrupole mass spectrometers, the high mass range and resolution of double-focusing mass spectrometers, and the ability to perform tandem experiments. Bruker Instruments. Circle 446.

### Top-Loading Balances

The Ohaus GT Series precision balances feature an electronic filling aid, the FillGuide. The FillGuide is a bright, horizontal display field that assists the balance user with various weighing processes. When weighing unknowns, the FillGuide displays just how much of the balance's capacity has been used. For weighing-in, it becomes a dynamic filling guide. For check-weighing, it turns into a plus/minus indicator or over/under scale. Ohaus Corp. Circle 447.

### Automated Biopurification

The QuantaSep-750 is the first computer-controlled, low-pressure system for large quantity bioseparations. The menu-driven system can perform chromatographic separations up to 750 ml/min on columns from 50 ml to 20 liters. It performs automated multisolvent selection, multicolumn selection, and fraction collection. Different separation menus, including gradients and step elutions, are available, and specific separation protocols may be created, stored, and

used as required. The system can be programmed to run specific protocols for multiple cycles, thereby eliminating the labor involved in repetitive processing. The QuantaSep-750 is biocompatible and has standard flow, ultraviolet, and conductivity detection. Sepragen Corp. Circle 450.

### Microscope Stage Warming Plate

Kitizato Microwarm Plate is a transparent, thin glass plate with a built-in heating element and separate control unit that fits on a microscope stage. It facilitates examination, preparation, and holding of specimens at optimum temperatures. Models are available for most upright and inverted microscopes and for stereomicroscopes. Applications include studies of sperm culture, fertilized ova, cells and tissues in culture, and pharmacological action and induced phenomena in living cells. Temperatures are set manually and can be displayed digitally with display to 0.1°C and accuracy of  $\pm 0.5^\circ\text{C}$  with ranges from ambient to 50° or 100°C. Schlueter Instruments Corp. Circle 452.

### Literature

The *Personal Chromatography Diskette* (PCD) allows users to do a library search of high-performance liquid chromatography and thin-layer chromatography applications at their own personal computers. It contains titles, authors, journals, and key words to more than 4000 references from 1988 through 1990. The PCD and its search program are designed to be used with dBase III+. It is available only on 5¼-inch 1.2-megabyte AT format and 3½-inch 1.44-megabyte PS/2 format diskettes. Chrom-HELP. Circle 443.

The *Wyatt/Optilab 903* brochure describes an interferometric refractometer for macromolecular characterization. Wyatt Technology Corp. Circle 445.

The *Spring 1990 Catalog* from the Clearinghouse for Academic Software describes 16 new software packages. The programs include multivariable economic geography problems, analysis of fates of pollutants, instructional programs in computer science, and more. Clearinghouse for Academic Software. Circle 488.

*Fiber-Lite* is a 40-page catalog with specifications and drawings for fiber optic illumination systems and accessories. The catalog features applications and extensive technical details on fiber optic illumination and a complete range of illuminators, light guides, and systems. Dolan-Jenner. Circle 489.

# Personnel Placement

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

## LINE CLASSIFIED ADVERTISEMENTS

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

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

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

**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.)

**CREDIT CARDS:** **SCIENCE** accepts MasterCard and VISA.

**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

## DISPLAY PERSONNEL ADVERTISEMENTS

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

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

## RESPONSES TO EMPLOYMENT ADS

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

To reply to a blind box ad, address correspondence to:

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

## POSITIONS OPEN

**ASSISTANT PROFESSOR, NEUROPHARMACOLOGY/NEUROTOXICOLOGY.** The Department of Pharmacology, Toxicology, and Therapeutics at the University of Kansas Medical Center invites applications for a tenure-track position for a neuropharmacologist, neurochemist, or neurotoxicologist. The applicant must have an appropriate Ph.D. or M.D. degree, with two or more years of relevant postdoctoral experience. The successful candidate will be expected to establish an independent research program and contribute to graduate and medical teaching. Research interest is open but targeted areas include drug abuse, developmental and behavioral pharmacology/toxicology, and mechanisms of brain damage. Primary appointment will be in this department but will include an affiliation with the Mental Retardation Research Center. A further affiliation with the Center for Environmental and Occupational Health is possible. Applications, including curriculum vitae, a short summary of research plans, and the names of three references, should be received by 1 November 1990, but the search will remain open until the position is filled. Send applications to: **Dr. Richard H. Alper, Department of Pharmacology, Toxicology, and Therapeutics, University of Kansas Medical Center, Kansas City, KS 66103.** The University of Kansas is an Affirmative Action/Equal Opportunity Employer.

Yale University: The Department of Chemistry invites applications for an anticipated position at the **ASSISTANT PROFESSOR** level in the area of organic chemistry, effective the academic year 1991. We seek talented teacher-scholars who show promise for developing outstanding research programs.

Applicants should send curriculum vitae, a statement of research interests and plans, and should arrange for the submission of three letters of recommendation. All materials should be received by 31 October 1990. Send applications to: **Professor Frederick E. Ziegler, Chairman, Department of Chemistry, 225 Prospect Street, Box 6666, Yale University, New Haven, CT 06511-8118.** Yale University is an Equal Opportunity/Affirmative Action Employer.

## ASSISTANT PROFESSOR INTERNATIONAL HEALTH/NUTRITION INFECTIOUS DISEASES

Tenure-track assistant professor position for an individual with research interests in international health, particularly infectious diseases and nutrition. We are looking for a highly motivated individual with field experience and well-developed ideas for pursuing his or her own independent research program. The Division of International Health and Public Health Nutrition has opportunities for field research in Latin America and the Caribbean. Individuals with strong laboratory backgrounds and an interest in international work are also encouraged to apply. The successful applicant will have a Ph.D. or M.D. degree with postdoctoral research experience and good potential for supporting his or her research via extramural grant support. Send curriculum vitae and three letters of reference by 15 October 1990 to: **Dr. Jose O. Alvarez, Search Committee, 303 Tidwell Hall, School of Public Health, University of Alabama at Birmingham (UAB), Birmingham, AL 35294.** Telephone: 205-934-1732.

UAB is an Equal Opportunity/Affirmative Action Employer.

## POPULATION BIOLOGIST

Applications are invited for a tenure-track **ASSISTANT PROFESSORSHIP** in the Department of Zoology, University of Toronto, beginning 1 July 1991. We are seeking an outstanding and innovative population biologist who has recently received his/her Ph.D. degree (preferably with postdoctoral experience in population genetics and evolutionary ecology of animal populations). The successful candidate will be expected to establish a vigorous, independent research program and to teach at undergraduate and graduate levels. Salary will be commensurate with experience and qualifications. By 1 December 1990, applicants should send current curriculum vitae, a description of their future research plans, and three letters of reference to: **Dr. I. Tallan, Department of Zoology, University of Toronto, Toronto, Canada M5S 1A1.**

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents (landed immigrants) of Canada. Applications are invited from all qualified women and men.

## POSITIONS OPEN

**ASSISTANT PROFESSOR IN RESEARCH PEDIATRICS.** Ph.D. with postdoctoral experience in the application of recombinant DNA and monoclonal antibodies technologies to the detection and diagnosis of cancer. Should have experience of cloned genes in *E. coli* and the use of fusion proteins for immunization, screening, and epitope analysis of monoclonal antibodies. Send résumé to: **Dr. Roger Kennett, University of Pennsylvania, 475 Clinical Research Building, 422 Curie Boulevard, Philadelphia, PA 19104-6145.** Equal Opportunity/Affirmative Action Employer.

## ECOLOGIST

**ASSISTANT PROFESSOR,** tenure-track position at Kenyon College. Candidates should have a Ph.D. degree, evidence of excellence in teaching, and an active research program that will involve undergraduates. Teaching will depend partly on area of expertise, and could include animal behavior or marine biology with introductory biology. A research laboratory and start-up costs will be provided. Kenyon has a biological preserve with access to an excellent small river. Applicants should submit curriculum vitae, graduate and undergraduate transcripts, a description of teaching and research interests, and should arrange to have three letters of reference sent by 9 November 1990 to: **Dr. Raymond Heithaus, Department of Biology, Kenyon College, Gambier, OH 43022.**

An Equal Opportunity Employer.

## VECTOR BIOLOGIST YALE UNIVERSITY SCHOOL OF MEDICINE

The Department of Epidemiology and Public Health invites applications for a position at the **ASSISTANT PROFESSOR** level, available 1 January 1991. Candidates should have a doctorate and postdoctoral training in entomology, insect genetics or physiology, parasitology, population biology, or other appropriate area for the study of arthropod vectors of human disease. The candidate should demonstrate potential to obtain research support, and prior field or overseas experience is desirable. The appointee will be expected to interact with members of the Yale Arbovirus Research Unit and the MacArthur Center for Molecular Parasitology (both of which are housed within the department's facilities), to develop an independent research program, and to participate in teaching graduate students. Send curriculum vitae, a summary of research interests, and names of three references by 1 October 1990 to: **Robert B. Tesh, M.D., Department of Epidemiology and Public Health, Yale University School of Medicine, P.O. Box 3333, New Haven, CT 06510.** Yale University is an Equal Opportunity/Affirmative Action Employer.

**ASSISTANT/ASSOCIATE PROFESSOR.** Rumen microbiologist/molecular biologist, tenure-track, 9-month, research/teaching position. Responsibilities: research in molecular biology, biochemistry, metabolism, and/or genetics of rumen microbes; teach graduate rumen microbiology; advise M.S. and Ph.D. students. Requires Ph.D.; postdoctoral experience and record of quality publications strongly preferred. Send application letter, curriculum vitae, and names of three references by 31 October 1990 to: **Dr. Elton D. Aberle, Department of Animal Science, University of Nebraska-Lincoln, Lincoln, NE 68583-0908.** Telephone: 402-472-3571. Affirmative Action/Equal Opportunity Employer.

## ASSISTANT/ASSOCIATE PROFESSORS PLANT-MICROBE INTERACTIONS

The Department of Plant Pathology and Microbiology at Texas A&M University seeks two new faculty with active research programs in molecular approaches to plant protection. Research oriented toward plant-microbe interactions and/or fungal molecular biology is particularly desirable, but candidates with other interests will be considered. Successful applicants will be expected to participate in teaching at graduate or undergraduate levels and to establish vigorous research programs funded by extramural sources. Postdoctoral experience or demonstration of independent research capability is required. Appointments are possible as early as 1 January 1991. Apply by sending curriculum vitae, statement of professional goals and research interests, and three letters of reference by 1 October 1990 to: **Dr. Clint Magill, Chair of Search Committee, Department of Plant Pathology and Microbiology, Texas A&M University, College Station, TX 77843.**

## CELLULAR NEUROPHYSIOLOGIST

A tenure-track or permanent position is available for a senior scientist in the Intramural Research Program of the National Institute of Mental Health. U.S. citizens and non-citizens are encouraged to apply. The incumbent should work in the general area of cellular electrophysiology using patch clamp or voltage clamp techniques to study ion channels, receptors and/or second messenger systems. The use of molecular biological techniques to express receptors and/or channels of electrophysiological studies is desirable. The salary will be commensurate with the successful applicant's experience (range of \$42,600 to \$78,200 per year). The person selected may be eligible for a Physician's Comparability Allowance which would increase the above figures as much as \$20,000.

The person chosen for this position will be responsible for the scientific and administrative management of a unit or section, and will be expected to develop an internationally recognized research program. Candidates should have an M.D. and/or Ph.D. degree and at least five years of postdoctoral experience. They should have made significant contributions to our understanding of ion channels, receptors, or second messenger systems.

Interested individuals should submit a C.V. and bibliography, a one-page outline of research interests, and names and telephone numbers of three references to:

**Steven M. Paul, M.D.**  
Director of Intramural Research  
National Institute of  
Mental Health  
Building 10, Room 4N-224  
9000 Rockville Pike  
Bethesda, Maryland 20892  
(301) 496-3501

NIMH is an Equal Opportunity Employer

## POSITIONS OPEN

Indiana University, Bloomington, **BIOCHEMISTRY**. The Department of Chemistry at Indiana University, Bloomington, invites applications from biochemists for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level to begin in the fall of 1991. Applications for more senior level appointments are also welcome. The department is seeking outstanding individuals, preferably with interests in structure-function relationships of proteins, enzyme reaction mechanisms, signal transduction, membrane structure and assembly, protein-nucleic acid interactions, or physical biochemistry. Applicants must show exceptional promise of establishing a vigorous independent research program in an academic setting. To apply, submit curriculum vitae, a publication list, and a short résumé of ideas for the development of research programs. The applicant should also arrange to have three letters of recommendation transmitted. Established investigators should send a letter of application and appropriate supporting materials. The deadline for applications is 1 November 1990. Please apply to:

**Professor Paul A. Grieco, Chairman**  
Department of Chemistry  
Indiana University  
Bloomington, IN 47405

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

**BIOPHYSICAL CHEMIST**, Dartmouth College. Application is invited for a tenure-track position at the **ASSISTANT PROFESSOR** level starting July or September 1991. The Dartmouth Department of Chemistry seeks an individual who will establish a vigorous, productive research program in the area of physical biochemistry and who will excel at teaching in both our undergraduate and Ph.D. programs. This new appointment originates from a Dartmouth initiative in structural biology and preference will be given to applicants with research interests in the structural and chemical properties of biological macromolecules. The new appointee will be expected to teach undergraduate courses in general chemistry and physical biochemistry and graduate level courses in his or her specialty. Applicants should submit curriculum vitae, a description of research projects that would be pursued, a list of start-up requirements, and a brief statement of teaching experience and interests. Applicants also should arrange to have graduate and undergraduate transcripts and three letters of recommendation sent on their behalf. All application materials should be sent to: **Professor Dean Wilcox, Chair, Faculty Search Committee, Department of Chemistry, Dartmouth College, Hanover, NH 03755**, and should be received no later than 15 October 1990. *Dartmouth College is an Equal Opportunity/Affirmative Action Employer.*

## ENVIRONMENTAL MICROBIOLOGIST TENURE TRACK

The Department of Biological Sciences, University of Cincinnati, has an opening for an environmental microbiologist at the **ASSISTANT PROFESSOR** level starting 1 September 1991. The university, a comprehensive state university, has an enrollment of about 36,000 students. The department has 30 full-time faculty, and is expanding in the areas of cellular and molecular biology, as well as environmental and evolutionary biology. There are about 70 graduate students, 65% of which are Ph.D. students. We seek a person who is studying the mechanisms of biodegradation of hazardous materials using physiological and/or molecular techniques, as well as having a strong interest in bioremediation and/or fermentation technology. The successful candidate will be expected to develop a vigorous, externally funded research program, train graduate students, and teach graduate as well as undergraduate courses in microbial physiology or applied microbiology. The position requires a Ph.D. and postdoctoral experience is preferred. Applicants should submit a description of their research interests, future research plans, and current curriculum vitae, and arrange to have three letters of evaluation sent to: **Dr. J. Robie Vestal, Environmental Microbiology Search Committee, Department of Biological Sciences, University of Cincinnati, Cincinnati, OH 45221-0008** by 1 November 1990.

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

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

## POSITIONS OPEN

### HARVARD MEDICAL SCHOOL CENTER FOR BLOOD RESEARCH

Applications are invited for **ASSISTANT/ASSOCIATE PROFESSOR** appointments in 1991 and 1992. We are seeking candidates with strong potential for innovative research broadly relevant to the cell and molecular biology of blood cells, the immune system, and associated diseases. Topics of special interest include cell-cell interactions, receptors and signaling pathways, cell activation, migration, and localization, the cytoskeleton, hematopoiesis, inflammation, molecular genetics, and virology.

Successful candidates will receive a faculty appointment in an appropriate Department of Harvard Medical School and will be expected to establish an outstanding research program. The position offers significant scholarly and scientific resources and the opportunity to teach medical and graduate students. The center will soon occupy space in a new building on the medical school campus. Applicants should submit curriculum vitae, reprints of publications, a brief statement of present and future research plans (no more than 500 words), and the names of three references to:

**Professor Timothy Springer, Vice President**  
Center for Blood Research, Box 367  
800 Huntington Avenue  
Boston, MA 02115

### THEORETICAL POPULATION BIOLOGIST

The Department of Biological Sciences, University of California, Santa Barbara, invites applications for a tenure-track position at the **ASSISTANT, ASSOCIATE, OR FULL PROFESSOR** level in theoretical population biology, effective 1 July 1991. Applicants should combine an exceptional and broad background in mathematics appropriate to modeling ecological systems with demonstrated ability to apply these techniques with good biological insight. Ph.D. required by time of appointment. The successful candidate will be expected to establish a strong research program, to develop an undergraduate and a graduate course in theoretical population biology, and to participate where appropriate in other aspects of the department's teaching. The department has a strong and diverse group of population biologists and evidence that the candidate has a desire and ability to interact and collaborate with other faculty will be an advantage. Interested individuals should send a copy of their curriculum vitae, a summary of their research goals, and the names of four references to: **The Chairman, Department of Biological Sciences, University of California, Santa Barbara, CA 93106** by 1 December 1990. *The University of California is an Equal Opportunity/Affirmative Action Employer. Proof of U.S. citizenship or eligibility for U.S. employment will be required prior to employment (Immigration Reform and Control Act of 1986).*

### ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF GENETICS HARVARD MEDICAL SCHOOL

The Department of Genetics invites applicants for the position of assistant/associate professor. While qualifications for the position include a strong potential for imaginative research in contemporary genetics, we especially hope to consider individuals whose scholarship is broadly relevant to human biology and medicine. Individuals with M.D./Ph.D. degrees who are interested in being part of a basic science department, without clinical responsibilities, are encouraged to apply. The successful candidate will be nominated for an appointment with the Howard Hughes Medical Institute Genetics Unit located within the department.

This position offers very significant scholarly and scientific resources as well as the opportunity to teach medical students and fellows with strong interests in genetic research.

Applicants should submit, as soon as possible, but prior to 30 November 1990, curriculum vitae, bibliography, a brief (limit to 500 words) description of research interests, and ask three references to send letters of recommendation. These materials should be directed to:

**Dr. Philip Leder, Chairman**  
Department of Genetics  
Harvard Medical School  
25 Shattuck Street  
Boston, MA 02115

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



**Research  
Center**

**M**iles Inc., a subsidiary of Bayer AG, has two outstanding opportunities in a newly established Research Center headquartered in West Haven, CT.

The positions are in a growing and fully integrated Structural Chemistry group that collaborates in multidisciplinary biotechnology and pharmaceutical research. Structural Chemistry currently incorporates NMR, X-ray, Crystallography and Computational Chemistry to support novel drug design efforts.

### **NMR SPECTROSCOPIST**

A Ph.D. with 3-5 years' postdoctoral experience in the area of protein NMR research and macromolecular structure elucidation is required. Familiarity with NMR theory and instrumentation or molecular modeling methodology is highly desirable.

The NMR laboratory is currently equipped with a research grade GN-Omega-300 MHz NMR, a GN-PSG-Omega 500 MHz NMR spectrometer, and Sun and IRIS workstations.

### **COMPUTATIONAL CHEMIST**

A Ph.D. with 3-5 years' postdoctoral experience in the area of protein and small molecule modeling and computations is required. Knowledge of current drug design methodologies, experience with molecular and quantum mechanics, and software and program development skills are essential.

Structural Chemistry is currently equipped with a dedicated Convex C-220, graphics workstations and access to a CRAY supercomputer.

*These positions offer attractive compensation commensurate with experience, benefits package, relocation assistance and professional growth opportunities. For consideration, please send resumes in confidence to:*

**Department CEC, Miles Inc., 400 Morgan Lane, West Haven, CT 06516.**

An Equal Opportunity Employer M/F/H/V



**Research  
Center**

## **STERLING RESEARCH GROUP**

**D**iscover a bright future at Sterling Research Group, the worldwide pharmaceutical research and development organization of Sterling Drug Inc. As a subsidiary of Eastman Kodak, Sterling outlines the rest with its unbeatable combination of a small, friendly company environment and the depth, resources and growth potential of a large multinational corporation.

Sterling Drug Inc. is expanding their use of computer related technologies in support of its drug discovery and development programs. To facilitate this expansion, Sterling has initiated several new projects such as: the development of automatic code generators for robots, adaptive experimentation, and the development of an advanced QSAR workbench. Our goal is to introduce advanced modeling technology into the day-to-day research and development activities at Sterling Research Group.



### **SENIOR APPLIED MATHEMATICIANS**

We need several Senior Applied Mathematicians who thoroughly understand the theory and practice of advanced software engineering techniques. Those applying should have a Ph.D. or equivalent in Applied Mathematics. Applicants must be accomplished in at least two of the following languages; FORTRAN, C (or C++), PASCAL or LISP.



### **BIOPHYSICIST**

This position offers the challenging objective of introducing advanced modeling and new computer-related technologies into the fabric of Sterling's research and development efforts. Ph.D. or equivalent experience in biophysics with a strong background in applied mathematics is required. 1-5 relevant years' experience in the most recent software engineering technology is preferred.

*These positions will be filled by professionals who can both develop and carry out independent research and also work harmoniously in an interdisciplinary team. Please send resume to:*

**Teri A. Foreman-JE, Sterling Research Group, 9 Great Valley Parkway, Malvern, PA 19355.**  
An Equal Opportunity Employer M/F/H/V.



## **STERLING RESEARCH GROUP**

A Division of Sterling Drug Inc.  
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*Build A Future With Sterling.*

## **Sr. Information Scientist**

R.W. Johnson Pharmaceutical Research Institute integrates worldwide R&D efforts for 5 Johnson & Johnson Pharmaceutical Companies to maximize our traditional R&D efforts and our strengths in biotechnology. Expanding programs have created a significant career opportunity for a Biomedical Scientist with good written and oral communication skills, and demonstrated ability to handle diverse, multiple assignments simultaneously.

To qualify, you must have a PhD or equivalent in the Biological Sciences with extensive publications, or an MS degree with at least 5 years of solid pharmaceutical research experience. You will be responsible for preparing IND brochures, writing clinical summaries for NDAs/product license applications/international registrations; preparing reports summarizing clinical trials and interfacing with regulatory agencies.

We offer a competitive salary and comprehensive benefits as well as an ideal suburban New Jersey location between New York City and Philadelphia. Please submit curriculum vitae with salary requirements to:  
Ms. P. Merski, Dept. 34, R.W. Johnson Pharmaceutical Research Institute,  
P.O. Box 300, Raritan, New Jersey 08869-0602.

An Equal Opportunity Employer M/F



R.W. JOHNSON

**PHARMACEUTICAL RESEARCH INSTITUTE**

*A Johnson & Johnson Company*

## POSITIONS OPEN

### ASSISTANT OR ASSOCIATE PROFESSOR PHYSIOLOGY AND BIOPHYSICS

The Department of Physiology and Biophysics in the College of Medicine at the University of Nebraska Medical Center invites applications for two tenure-leading faculty positions at the assistant or associate professor levels. Applicants should hold a doctoral degree and have completed at least 2 years of postdoctoral training. The department seeks individuals in the areas of neural control of the circulation and/or microcirculatory control. The successful candidate should provide evidence of a strong, extramurally funded research program in either of these areas. In addition, a commitment to teaching medical students, allied health students, and graduate students is required. The department will offer competitive salary commensurate with experience and rank. Substantial set-up funds are also available. Applicants should send curriculum vitae with the names of three references by 30 September 1990, to:

Irving H. Zucker, Ph.D.  
Professor and Chairman

Department of Physiology and Biophysics  
University of Nebraska College of Medicine  
600 South 42nd Street  
Omaha, NE 68198-4575

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

**CELL, DEVELOPMENTAL, OR NEUROBIOLOGY.** A tenure-track position at the ASSISTANT, ASSOCIATE, OR FULL PROFESSOR level is open in the Department of Anatomy and Cell Biology at the University of Kansas Medical Center (KUMC). Applicants must have a Ph.D. and/or M.D. and a minimum of 2 years of postdoctoral research experience. Depending on academic level, candidates should have or will be expected to develop an externally funded research program. Applicants with molecular approaches to problems in the fields of cell, developmental, or neurobiology are encouraged to apply. Applicants will be reviewed beginning September 1990. The successful candidate will be expected to teach in one of the basic medical courses offered by the department and participate in the graduate program. Applicants should provide a résumé, including a summary of present and future research interests, and three references to: Dr. Joseph C. Besharse, Chairman, Department of Anatomy and Cell Biology, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103. KUMC is an Equal Opportunity Employer.

### FIELD STATION MANAGER RESEARCH ASSOCIATE SEARCH REOPENED CENTER FOR WATER AND THE ENVIRONMENT

The University of Minnesota seeks a Stream Ecologist to manage and develop a research program at the Monticello Ecological Research Station. The facility consists of eight experimental streams adjacent to the Mississippi River, approximately 50 miles northwest of the Twin Cities metropolitan area. The position is a joint appointment in the Natural Resources Research Institute and the Department of Forest Resources of the University of Minnesota.

Qualifications of the position include a Ph.D. in ecology or closely related field, postdoctoral experience desired, a demonstrated record of peer-reviewed publications, and the ability to obtain extramural grant support. Special consideration will be given to individuals with experience in stream ecosystem modeling or experimental design and statistics.

The duties of the position will include (i) management of the facility, (ii) coordination and promotion of research activity with scientists interested in using the facility, and (iii) development of a research program using the facility through externally funded grants.

Interested individuals should call Dr. Gerald J. Niemi of the Natural Resources Research Institute, 218-720-4279, for more information.

To apply, send a current résumé and names, addresses, and telephone numbers of three references. Applications must be postmarked by 30 September 1990. Send application to: Research Associate Search Committee, Natural Resources Research Institute, University of Minnesota, Duluth, 5013 Miller Trunk Highway, Duluth, MN 55811.

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

## POSITIONS OPEN

### CHIEF, PERINATAL TOXICOLOGY

The U.S. Environmental Protection Agency (EPA) is seeking candidates for the position of chief, Perinatal Toxicology Branch of the Developmental Toxicology Division, Health Effects Research Laboratory. This is a permanent full-time position located in Research Triangle Park, North Carolina (salary: \$50,342 to \$76,982 per year). The 12 principal investigators in the branch conduct research on the potential developmental toxicity of environmental agents. Major emphasis is on developing methodologies for assessing embryo/fetal toxicity, postnatal functional deficits, and biologically based quantitative dose-response models. The incumbent coordinates and directs research activities, serves as a scientific advisor to the division director, and represents the program both nationally and internationally. Candidates should possess: Ph.D. or equivalent in biological or environmental discipline; five or more years of experience in developmental toxicology; evidence of a strong publication record; leadership ability in directing a creative research program; and U.S. citizenship. Forward curriculum vitae and names of three references prior to 30 September 1990 to: Dr. Robert J. Kavlock, c/o Ramona Litowsky, HRMD (MD-29), U.S. EPA, Research Triangle Park, NC 27711. An Equal Opportunity Employer.

### Ph.D. AUDIOLOGIST CLINICAL DIRECTOR

The Department of Otorhinolaryngology and Human Communication, University of Pennsylvania School of Medicine, seeks a Ph.D. audiologist clinical director to supervise clinical programs in cochlear implantation, vestibular testing, and intraoperative monitoring. The applicant must have demonstrated expertise, at least 5 years of experience, and referred publications in multimodality evoked potentials, with specialized expertise in intraoperative and intensive care monitoring of evoked potentials and quantitative EEG. Expertise in topographic brain electrical activity mapping is required. Academic rank and salary will be commensurate with the candidate's experience and qualifications. The university provides a highly competitive salary and benefits. Interested applicants should submit curriculum vitae to: Robert A. Hendrix, M.D., Department of Otorhinolaryngology and Human Communication, University of Pennsylvania School of Medicine, 3400 Spruce Street, 5 Silverstein, Philadelphia, PA 19104.

*The University of Pennsylvania is an Equal Opportunity Employer.*

**DIRECTOR, DIVISION OF EXPERIMENTAL PATHOLOGY.** The Department of Pathology and Laboratory Medicine of the University of Rochester announces a search for an experimental pathologist to be appointed director of the Division of Cell and Molecular Pathology and George Hoyt Whipple Professor of Pathology and Laboratory Medicine. The research focus of this newly organized division is the elucidation of the cellular and molecular basis of human diseases. The appointee will provide leadership to enhance and expand the scientific endeavors of the department through recruitment of additional faculty and graduate and postgraduate trainees. Applications from individuals with M.D., M.D./Ph.D., or Ph.D. degree are welcome.

Interested candidates should submit by 30 October 1990 their curriculum vitae and other credentials to: Search Committee for Division of Cell and Molecular Pathology, c/o Dean A. Arvan, M.D., Department of Pathology and Laboratory Medicine, University of Rochester Medical Center, 601 Elmwood Avenue, Box 608, Rochester, NY 14642. Telephone: 716-275-5891. *The University of Rochester is an Equal Opportunity Employer, M/F.*

### PRECOLLEGE SCIENCE EDUCATION PROGRAM MANAGER

Associated Western Universities, a consortium of 41 universities, is seeking a manager to coordinate its DOE-sponsored precollege science education programs including fellowship awards for faculty programs at 14 DOE labs. Qualifications: excellent communication, interpersonal, organizational skills; B.S. with strong background in science/engineering (advertising degree preferred); experience in sponsored program administration a plus. Position available immediately; salary to \$40,000. Send application and names of three references to: Associated Western Universities, Inc., 4190 South Highland Drive, Suite 211, Salt Lake City, UT 84124.

## POSITIONS OPEN

### ENDOWED CHAIR UNIVERSITY OF FLORIDA

The University of Florida Citrus Research and Education Center at Lake Alfred, Florida, invites applications and nominations for the Graves Endowed Chair in Agricultural Biotechnology. The eminent PROFESSOR filling this position will develop an innovative program in molecular or cellular plant biology targeted to increasing the efficiency of Florida's citrus industry. The incumbent will be expected to interact closely with geneticists, physiologists, horticulturists, entomologists, and plant pathologists. Some suggested areas of study include: control of juvenility, flowering, and dormancy; genetic control of enzymes involved in fruit and juice quality; and plant-pathogen interactions. Qualifications include a Ph.D. with an outstanding record of professional accomplishments with evidence of national and international recognition. Funding and continuing research support are derived from an endowment in addition to salary and technical support. Applications should include a complete résumé and names and addresses of five references. Application deadline is 1 December 1990 or until a suitable candidate is found. Send nominations and applications to: Chairperson, Graves Chair Search Committee, Citrus Research and Education Center, 700 Experiment Station Road, Lake Alfred, FL 33850.

**DIRECTOR/MOLECULAR VIROLOGY.** Applications are now being accepted for the position of center director for molecular virology at Children's Research Institute. Applicants should have a doctoral degree, M.D., and/or Ph.D.; have demonstrated expertise in the methods of molecular biology as they apply to virology. He/she will be a full-time laboratory investigator (+/-70% research effort). In addition to responsibility for his/her research program, the director will also oversee the research direction of the laboratories in his/her center (molecular virology/infectious diseases, vaccine development). The director will provide the appropriate environment for collaboration and interdisciplinary investigative effort of the center under the general direction of the chief operating officer of Children's Research Institute. Openings for the position are currently available. Applicants should forward their curriculum vitae to: William Roderiguez, M.D., Chairman, Infectious Disease, Children's National Medical Center, 111 Michigan Avenue, N.W., Washington, DC 20010. *Equal Opportunity Employer.*

**MICROWAVE LABORATORY MANAGER.** Requires B.S. in electrical engineering and 1 year of experience or 1 year of experience as electrical engineer in design and research. To operate and maintain electromagnetic teaching and research laboratory; to assist students and research scientists in use of electromagnetic and microwave equipment, including printed circuit board production equipment, electronics test equipment, and lasers, using computers, HP 8510 network analyzer, computer-controlled instruments for microwave measurements, microwave design software including Supercompact and Touchstone; using computer languages (Fortran, C, HP, Basic) and operating systems (VAX/VMS, DOS, Unix). Forty-hour week; \$25,200 per year. Send résumé to: New York State Department of Labor, 677 South Salina Street, Syracuse, NY 13202, Attention: LSR #51. J.O. No. NY0400768.

### FACULTY POSITION BASIC MICROBIOLOGY

The Department of Microbiology and Immunology at Baylor College of Medicine is seeking microbiologists who can complement ongoing molecular pathogenesis work and interact with microbial biologists and physicians. We desire persons with experience in protein chemistry, signal transduction, and intracellular infection, but all candidates are welcome.

Positions are at the tenure-track ASSISTANT PROFESSOR level with research space and start-up funds available now. Candidates are expected to develop an independent research program and participate in graduate and medical education. Salary and fringe benefits are competitive. Interested persons should submit curriculum vitae and the names of three references to: Dr. Robert B. Couch, Department of Microbiology and Immunology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. *Baylor College of Medicine is an Equal Opportunity Employer.*



The University of Bern invites applications for an open

## PROFESSORSHIP

in the Division of Mass Spectrometry and Space Science of the Physics Institute (Physikalisches Institut). The position will be available from October 1, 1991.

Applications from established scientists, willing to participate at all levels in the teaching duties of the Physics Institute, should be sent no later than November 30, 1990 to Erziehungsdirektion des Kantons Bern, Amt für Hochschulwesen (1000.281/90) Sulgeneckstrasse 70, CH-3005 Bern. In addition to the usual documentation (detailed curriculum vitae, publication record) an outline of the envisaged research activities should also be submitted.

For enquiries contact Prof. H. Debrunner, Managing Director, Physikalisches Institut, Sidlerstrasse 5, CH-3012 Bern, Tel. 0114131 654051.

## TENURE-LEADING FACULTY POST: NMR SPECTROSCOPIST

The Eppley Institute for Research in Cancer and Allied Diseases at the University of Nebraska Medical Center seeks a NMR spectroscopist interested in studying protein structure and dynamics. The faculty position may be at assistant to full professor depending on the research experience and background. Applicants should have a Ph.D. degree in chemistry or biochemistry, postdoctoral experience and an established independent research program, or clear promise to develop one. Some teaching experience is also desirable. The Eppley Institute is an NCI designated Laboratory Cancer Research Center that is involved in the training of doctoral and postdoctoral students. It has excellent physical facilities and startup funding for new faculty. The Institute has a 300 MHz NMR and secured funding for a new top line 500 MHz NMR.

Submit c.v., statement of research plans and at least three references by October 15, 1990, to Dr. Raymond Ruddon, Director, Eppley Institute for Research in Cancer and Allied Diseases, University of Nebraska Medical Center, 600 South 42nd St., Omaha, NE 68198-6805. Refer to position number 0-6182.

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



## Join a prestigious team of Research Scientists in Antiviral Research

Bristol-Myers Squibb has an active program in antiviral research including chemotherapeutics targeted against herpesviruses and retroviruses. We need top quality, highly motivated candidates willing to work with infectious virus. The selected individuals will be located either in our Wallingford, CT, or Princeton, NJ, facilities. We offer excellent research facilities in well-equipped laboratories and, in Wallingford, a spacious vivarium and an excellent BSL-3 facility.

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Develop programs in anti-HIV research. Qualifications: PhD and several years of post-doctoral experience in molecular virology or biochemistry.

### Assistant/Associate Research Scientists (2)

Participate in the molecular retrovirology programs. Qualifications: BS or MS with laboratory experience in retrovirology or molecular biology or transgenic mice techniques.

### Post-doctoral Fellow

Participate in the molecular virology programs. Qualifications: PhD in molecular virology, biochemistry or immunology.

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To apply, send resume and salary history to **Bristol-Myers Squibb Pharmaceutical Research Institute, Dept. SS-SC/VIR, P.O. Box 5101, Wallingford, CT 06492-7661.**

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Research Institute**



**Bristol-Myers Squibb Company**

## Molecular Neurobiologist Medicinal Chemist

### Alzheimer's Research Center for Clinical and Basic Research Medical College of Georgia

The Medical College of Georgia Department of Pharmacology and Toxicology invites applicants for two tenure-track positions working with the university's Alzheimer's research center.

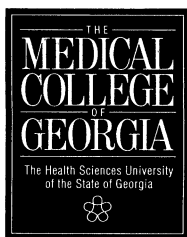
A **molecular neurobiologist** is sought who will bring an independent program and also interact with basic science and clinical faculty in activities such as basic studies of etiology, new therapeutic approaches and novel diagnostic procedures. This position is available, depending on experience, at the rank of assistant, associate or full professor.

A **medicinal chemist** at the level of assistant professor is needed with strong interests in the development of drugs acting on the central nervous system. This faculty member will be encouraged to develop his own research as well as collaborate with various research efforts in the Alzheimer's research center. One area of collaborative research will be the development of test compounds and potential pharmacologic agents to enhance learning, memory and cognition in animal models.

Both new faculty members will participate in the education of medical and graduate students. Substantial support in terms of equipment, supplies and personnel will be provided for both new positions.

Candidates for these positions may send a curriculum vitae, description of research activities and three references to:

**Dr. Jerry Buccafusco, chairman**  
**Search Committee**  
**Department of Pharmacology and**  
**Toxicology**  
**Medical College of Georgia**  
**Augusta, Georgia 30912-2300**



The Medical College of Georgia is an affirmative action/equal opportunity employer.

## HEAD

### Department of Bacteriology and Biochemistry University of Idaho

The faculty of the Department of Bacteriology and Biochemistry at the University of Idaho is seeking an outstanding scientist to serve as Head. The department is comprised of 17 research and teaching faculty (including 12 assistant professors) with research interests in microbiology, biochemistry, molecular biology, and food science. The department offers B.S., M.S., and Ph.D. degrees. The scientist selected for this position will have been recognized by her/his peers as having an exceptional research reputation, a history of grantsmanship and publication, and teaching experience in contemporary biological sciences. The successful applicant will be expected to continue an active research program, supervise the day to day administration of the department, and provide a leadership role in the professional development of the large number of younger faculty members in the department. Competitive salary and start up packages are included and a substantial annual research endowment is possible.

Applications should include a detailed discussion of current research interests, curriculum vitae, a summary statement on administrative philosophy and experience, and at least three reference letters. Nominations and applications should be sent to: Dr. David J. Oliver, Department of Bacteriology and Biochemistry, Life Science Building, University of Idaho, Moscow, Idaho 83843, (208) 885-7164.

The search will be closed when a sufficient number of qualified applicants have been identified but not before September 15, 1990. The University of Idaho is an equal opportunity/affirmative action employer.



### Head, Department of Ophthalmology University of Minnesota

Applications are being solicited for the position of Head and Tenured Professor of the Department of Ophthalmology, University of Minnesota Medical School, and Chief of Ophthalmology of the University of Minnesota Hospital and Clinic, Minneapolis, Minnesota. It is expected that this person will provide leadership in administration of all aspects of the department. We seek a candidate who is Board certified in Ophthalmology and has outstanding academic credentials. The candidate should have demonstrated experience, skill and leadership in patient care, research, teaching and administration and must have a national and international reputation in his/her professional field.

Submit inquiries and curriculum vitae by October 1, 1990 to:

**Roberto C. Heros, M.D.**  
**Head, Dept. of Neurosurgery**  
**Chairman, Ophthalmology Search Committee**  
**University of Minnesota Medical School**  
**Box 96 UMHC**  
**420 Delaware Street S.E.**  
**Minneapolis, Minnesota 55455**

*The University of Minnesota is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities.*

## NEUROBIOLOGIST

The Laboratory of Neurophysiology, National Institute of Mental Health (NIMH) Intramural Research Program, will have a Staff Fellowship available from August, 1990. Located at the NIH Animal Center near Poolesville, Maryland, the laboratory conducts research in the area of behavioral neurophysiology, with special emphasis on the motor areas of the cerebral cortex in nonhuman primates. The Fellow will be able to develop an independent research project or join ongoing research, as appropriate. Applicants must have a Ph.D., M.D., or equivalent. Stipends vary from \$24,000 to \$41,700, depending on postdoctoral experience, and the position is renewable, subject to administrative approval, for up to seven years. To apply, send CV and letter of research interests to:

**Dr. Steven P. Wise, Chief**  
**Laboratory of Neurophysiology**  
**P. O. Box 289**  
**Poolesville, MD 20837**

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## DRUG METABOLISM Structural Relationships

The Department of Biophysical Chemistry in the Merck Sharp & Dohme Research Laboratories has an immediate opening for a Senior Drug Metabolism Scientist interested in the correlation of structural variations with the biotransformations of new drugs. The position requires supervisory experience and a Ph.D. in Chemistry or Biochemistry with at least 5 years of postdoctoral experience in a relevant drug metabolism field. Superior skills in isolation and separation technologies are essential. Primary responsibilities include support of various drug discovery programs using in vitro and in vivo methods to address absorption, bioavailability, and metabolism issues of drug candidates. The applicant's practical skills should be complemented by a high level of initiative and superior communication skills. This position offers a unique opportunity to interact with a team of molecular biologists, protein biochemists, NMR spectroscopists, and X-ray crystallographers in order to understand and better control the biological fate of small organic molecules.

Merck Sharp & Dohme Research Laboratories is located in Rahway, New Jersey approximately 25 miles from New York City. Our facilities are state-of-the art and our renowned research environment is excellent. For consideration, please send your resume with the names of three references to:

**Ms. Susan F. Glinka**  
**P.O. Box 2000, R80M-TL1**  
**Rahway, NJ 07065**

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# Executive Director

## OFFICE OF INTERNATIONAL AFFAIRS

The National Research Council (NRC), the principal operating arm of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, a national non-profit, non-government institution located in Washington, D.C., invites applicants for the position of Executive Director of the Office of International Affairs. OIA activities include international programs to examine relevant science and technology policy issues, including those concerned with scholarly communication; effective uses of science and technology in development; security and world peace. A staff of approximately 60 supports the work of the OIA.

The Executive Director, in cooperation with the OIA Chairman and Executive Board, manages the OIA as one of ten major program units of the NRC, including all scientific, financial and administrative operations, in coordination with cognizant chairmen and subject to policy directives of the Chairman, Vice Chairman and Executive Officer of the NRC. The incumbent plans and oversees the ongoing program of technical activities and studies, and supervises staff. The OIA Executive Director identifies emerging

problems and opportunities for policy analyses, and responds to requests for studies and information.

Applicants should have: Ph.D. or equivalent related to international affairs and at least 12 years' experience related to (1) analysis of international science and technology policy issues; (2) participation of U.S. scientists in international programs; (3) U.S. scientific cooperation and exchanges with other countries; and (4) the U.S. scientific community in effective technical assistance to, and cooperation with, developing nations. Substantial leadership experience is required in program development, policy analysis, policy formulation, staff management and project quality assurance.

Familiarity with institutions of higher education and industry, the U.S. government's role in supporting and using research in international affairs, contract and grant procedures is required. Candidates must also have demonstrated effectiveness in staff and financial management, and oral and written communications.

Please send résumé to: **Deputy Executive Officer, National Research Council, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.** An Equal Opportunity Employer.



NATIONAL RESEARCH COUNCIL



**GLAXO INSTITUTE FOR MOLECULAR BIOLOGY**

The Geneva molecular biology research Institute of one of the world's most successful healthcare groups is recruiting a

### **MOLECULAR BIOLOGIST**

**to establish and characterize neuronal cell lines**

The successful candidate will join a highly motivated research team studying various aspects of neuronal development and neurodegeneration.

The ideal applicant will have a PhD and several years of postdoctoral research experience. Also, extensive knowledge of gene transfer techniques (possibly including retroviral transformation) is required. Experience in neurobiology and neuronal cell culture would be an advantage. The candidate should have a proven track record demonstrated by publications.

The Glaxo Institute for Molecular Biology carries out long term research to support the company-wide effort to discover effective new medicines. It provides a dynamic research environment, and encourages the publication of scientific results as well as collaborative projects with academic groups.

We offer an excellent salary and benefits package and opportunities for career development in one of the most attractive parts of Europe.

If you are interested in this position, please send your Curriculum Vitae with a list of publications and the names of three referees to: Rita Gloor, Personnel Manager, GLAXO IMB S.A., 46, route des Acacias, 1211 Geneva 24, Switzerland.



## POSITIONS OPEN

### FACULTY POSITION ANALYTICAL CHEMISTRY

The Department of Chemistry at Indiana University, Bloomington, invites applications for a tenure-track faculty position in analytical chemistry at the **ASSISTANT PROFESSOR** level beginning in the fall of 1991. Applications for more senior level appointments are also welcome. Applicants must show exceptional promise of establishing a vigorous, independent research program in an academic setting. To apply, please submit curriculum vitae, a publication list, and a short résumé of ideas for the development of research programs, and arrange to have three letters of recommendation forwarded. Established investigators should send a letter of application and appropriate supporting materials. Deadline for applications is 1 November 1990. Please apply to:

**Professor Paul A. Grieco, Chairman**  
Department of Chemistry  
Indiana University  
Bloomington, IN 47405

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

**FACULTY POSITION IN INORGANIC CHEMISTRY.** The Department of Chemistry at Washington University in St. Louis invites applications for a faculty position in inorganic chemistry, effective September 1991. Primary consideration will be given to applicants at the **ASSISTANT PROFESSOR** level, but candidates with distinguished records will be considered for higher level appointments. Competitive start-up funds will be provided with the position. Candidates are requested to submit by 1 November 1990 curriculum vitae and a concise, specific statement of research plans, and arrange to have three letters of reference sent to: **Professor John R. Blecke, Chairman, Search Committee, Department of Chemistry, Washington University, St. Louis, MO 63130.** *Washington University is an Equal Opportunity/Affirmative Action Employer, and employment eligibility verification will be required of the successful candidate.*

### FACULTY POSITIONS IN PHARMACOLOGY

The Department of Pharmacology at the University of Alabama at Birmingham (UAB) invites applications for two tenure-track positions at the **ASSISTANT PROFESSOR** and **ASSOCIATE PROFESSOR** level available in the fall of 1990. Individuals will complement present faculty research and teaching interests in chemotherapy, particularly in the areas of cancer, AIDS and AIDS-related opportunistic infection. The successful applicant(s) will be expected to have potential to attract extramural support and be able to establish an independent research program. Associate professor candidates must demonstrate a strong research record with current funding. Responsibilities will also include teaching of medical/dental and graduate students. Send letter of application with curriculum vitae and three names of references to: **Dr. Robert B. Diasio, M.D., Professor and Chairman, University of Alabama at Birmingham, Department of Pharmacology, Box 402 Volker Hall, UAB Station, Birmingham, AL 35294.** *UAB is an Affirmative Action/Equal Opportunity Employer.*

The Department of Medicine of the University of Pittsburgh is seeking for its Division of Infectious Diseases a minimum of three **FACULTY CANDIDATES**, one of whom must be a senior person at the level of **ASSOCIATE PROFESSOR** or above. This new group of faculty will strengthen a newly enlarged Division of Infectious Diseases which now includes the infectious disease programs at our three main teaching hospitals in adult medicine; i.e., Presbyterian-University, Montefiore, and Veterans Administration Hospitals. Infectious disease physicians who are Board-certified or -eligible and who have had training and research in molecular virology, molecular pathogenesis, or molecular biology are invited to apply. Strong collaborative arrangements and appointments may be developed with departments in the health center dealing with basic molecular virology or the molecular biology of other disciplines related to infectious diseases such as bacteriology and immunology. Adequate space, equipment, and start-up funds are available for the development of a strong research program in a division dedicated to teaching and research. For consideration, send curriculum vitae and letter to: **Monto Ho, M.D., Infectious Diseases, University of Pittsburgh, 968 Scaife Hall, Pittsburgh, PA 15261.** *The University of Pittsburgh is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### FACULTY POSITION VIROLOGY/INFECTIOUS DISEASES

Tenure-track position for a new or established **PHYSICIAN-SCIENTIST** to join a highly interactive group of five faculty investigators actively studying numerous aspects of viral pathogenesis. Candidates should have an M.D. degree with clinical training in pediatrics or medicine and should be capable of independent laboratory based research in virology, immunology, or related field. We have available facilities equipped for conducting biochemical, molecular biological, immunological, and animal model research. Start-up funds, protected research time, and opportunities to participate in ongoing funded projects are available. Candidates should submit their curriculum vitae and a statement of research and career goals to: **Lawrence R. Stanberry, M.D., Ph.D., Division of Infectious Diseases, Department of Pediatrics, University of Cincinnati College of Medicine, Children's Hospital Research Foundation (CHRF), Elland and Bethesda Avenues, Cincinnati, OH 45229.** *CHRF is an Equal Opportunity/Affirmative Action Employer.*

### BIOCHEMISTRY FACULTY POSITION UNIVERSITY OF WISCONSIN-MADISON

Applications are invited for an **ASSISTANT PROFESSOR** position in the Department of Biochemistry and the Department of Nutritional Sciences of the University of Wisconsin-Madison. Exceptional candidates at the **ASSOCIATE PROFESSOR** level will be considered. The successful candidate will be expected to develop a strong research program utilizing modern biochemistry to study problems of nutritional interest. This includes organismal and cellular nutrition. Duties include teaching the departments' graduate and undergraduate courses and the training of graduate and postdoctorate students. Applications including curriculum vitae, publication list, one-page summary of past accomplishments, and a one-page plan of future research should be sent to: **H. F. DeLuca, Chairman, Search Committee, Department of Biochemistry, University of Wisconsin-Madison, 420 Henry Mall, Madison, WI 53706.** Applicants must also arrange for three letters of recommendation to be sent to the same address. To assure consideration, complete applications should be received by 1 October 1990. *The university is an Affirmative Action/Equal Opportunity Employer and encourages women and minorities to apply.*

The Department of Veterinary Anatomy and Public Health at Texas A&M University invites applications and nominations for 12-month, tenure-track, fully budgeted **FACULTY POSITIONS** in molecular/cellular toxicology and food safety. These individuals will be expected to utilize state-of-the-art bioanalytical and molecular techniques and contribute to the core of a multidisciplinary and intercollegiate toxicology research program aimed at: (i) the elucidation of fundamental cellular mechanisms of toxic action/interaction of hazardous chemicals (i.e., foodborne and environmental carcinogens, mutagens, teratogens, developmental toxicants, etc.), and (ii) the development of chemical and biological methods to rapidly detect these substances and detoxify/remediate toxin-contaminated sources. Preference will be given to candidates who are trained in toxicology with exposure to food engineering, biochemical engineering, or food safety. A Ph.D. and a minimum of 2 years of postdoctoral training are absolute requirements. The D.V.M. degree and/or experience in a College of Veterinary Medicine is highly desirable, but not mandatory. Successful applicants will be expected to develop an independently funded research program which will significantly complement active interdisciplinary programs in molecular toxicology and genetics, engineering biosciences, developmental biology/embryology, reproductive biology, and neurobiology.

Rank and salaries are negotiable and the starting dates are open. Submit nominations and applications with a statement of research interests, curriculum vitae, and the names, addresses, and telephone numbers of at least three references to:

**Dr. Timothy D. Phillips, Professor**  
Department of Veterinary Anatomy  
Texas A&M University  
College Station, TX 77843-4458  
Telephone: 409-845-3517

*Women and minorities are encouraged to apply. Texas A&M University is an Affirmative Action/Equal Opportunity Employer.*

## Biopolymers Facilities Director

The Howard Hughes Medical Institute Unit at the Harvard Medical School is seeking a qualified individual to supervise a modern biopolymers laboratory. This facility provides solutions to specific synthetic and degradative problems involving protein sequencing and peptide/nucleic acid synthesis. Ideal candidates should be experienced with various purification techniques, gas phase protein sequencing and automated nucleotide and peptide synthesizers. Emphasis will be given to those who have a demonstrated background managing such a facility.

This immediate opening represents an important service and development/research role with ample opportunity for growth. The successful candidate must be able to interact productively with a variety of colleagues on a problem solving basis.

Interested individuals should submit a curriculum vitae, a brief letter summarizing their qualifications and ask that three individuals send letters of reference. These materials should be sent to: **Dr. Philip Leder, Senior Investigator, Howard Hughes Medical Institute, Department of Genetics, Harvard Medical School, 25 Shattuck Street, Boston, MA 02115.**

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# DIRECTOR OF CHEMISTRY

Natural Product Sciences, Inc. is a rapidly growing company developing novel pharmaceutical and agrichemical products based on natural product leads. With a strong in-house research program comprising chemistry, biology, and molecular biology and major industrial partners in both pharmaceuticals and agrichemicals, Natural Product Sciences is a leader in the natural products field.

As part of the continuing expansion of its research efforts, NPS is seeking a Director of Chemistry. Applicants should have a Ph.D. in organic chemistry with expertise in natural products/bio-organic chemistry and at least 5 years of industrial experience in the area of drug or pesticide discovery and development. The successful candidate will be responsible for directing a team of B.S. and Ph.D. chemists working on the isolation, characterization, and synthesis of natural products from a variety of plant and animal sources. Applicants should have a proven record of scientific leadership and a research record of national or international stature.

Natural Product Sciences offers competitive salaries, benefits, and the opportunity for equity ownership. Our location on the western slope of the Rocky Mountains provides an unusually beautiful and livable environment in which to pursue innovative and important science.

Please send curriculum vitae and names and addresses of three references to: Director of Personnel, Natural Product Sciences, Inc., 420 Chipeta Way, University Research Park, Salt Lake City, Utah 84108. Natural Product Sciences is an equal opportunity employer.



NATURAL PRODUCT SCIENCES, INC.

THE UNIVERSITY OF WAIKATO  
Hamilton, New Zealand



## LECTURER IN EARTH SCIENCES

The University of Waikato has a vacancy for a Lectureship in the Department of Earth Sciences in the general area of soil mechanics, in which applicants should have a secondary interest in engineering geology or soil physics or another related field that supports the teaching and research programme of the Department. The appointee will assist with teaching, laboratory classes, and fieldwork in established Earth Science courses; will be required to supervise graduate and postgraduate research projects; and will foster and become involved in personal and/or collaborative pure and applied research programmes.

Applicants preferably should have a doctorate, or be about to gain one, or should have equivalent practical experience and research qualities in their field. The position is available from late 1990 but must be taken up by 1 February 1991.

Further information about the activities and facilities of the Department can be obtained from Associate Professor C. S. Nelson, Chairperson of the Department of Earth Sciences (tel. (64) 71 562889 Fax (64) 71 560115).

The current salary range for lecturers NZ\$36,000–NZ\$47,200 per annum.

Information on the conditions of appointment and method of application can be obtained from the Academic Staff Registrar, University of Waikato, Private Bag 3105, Hamilton, New Zealand. (Tel. (064) 71 562889. Fax (064) 71 560135). Applications quoting reference number A90/56 close on **28 September 1990**.

Places for appointees children may be available in the creche run by the Campus Creche Society (Inc). The University welcomes applications from suitable people regardless of race, creed, marital status or disability.



**CELGENE CORPORATION**, a four-year old public company committed to the leadership position in chemical Biotechnology, has immediate openings within the Bioremediation Group, R&D for the study of anaerobic degradation of halogenated aromatic compounds.

## POSTDOCTORAL RESEARCH ASSOCIATE

Requirements for this position are a Ph.D. Microbiology with research emphasis on anaerobic microorganisms and a strong background in microbial physiology and ecology.

## RESEARCH ASSOCIATE

Requirements are a BS Microbiology + 2 years experience with anaerobic techniques, of MS Microbiology with research emphasis on anaerobic microorganisms. This individual will have laboratory experience with enrichment and purification of aerobic and anaerobic bacteria, culture growth and maintenance, aseptic techniques, Hungate techniques and anaerobic chambers, and GC, HPLC, and spectrophotometry. Good communication and data analysis skills are necessary.

**Celgene** offers a competitive salary and benefits package including an Education Assistance Program and 401(K). Our modern facility in Somerset County, New Jersey, an hour away from New York City and Philadelphia, provides an attractive working environment, conducive to personal growth and professional achievement. Qualified applicants should send a detailed resume and salary requirements to:

Human Resources Department - SCI  
Celgene Corporation  
7 Powder Horn Drive, Warren, NJ 07059  
Equal Opportunity Employer M/F

## DRUG DISCOVERY Chemist

We are an established world wide pharmaceutical company seeking a senior level Chemist for our expanding Molecular and Cell Biology Department.

The selected individual will lead a group of scientists in the discovery of new drugs for the treatment of inflammatory and infectious diseases. This individual will actively participate in multi-disciplinary project teams, applying their medicinal chemistry expertise to the design and synthesis of new chemical entities for development as drugs.

Requirements include a Ph.D. in organic chemistry or equivalent with 5+ years of additional experience

in an academic or industrial research setting. The successful candidate will have a strong record of accomplishment in medicinal chemical research with supervisory experience. A background in the areas of inflammation, immunology or infectious diseases is preferred but not required.

Please send your resume, in confidence, to:

Searle, Human Resources, Dept. PB7, 4901 Searle Parkway, Skokie, IL 60077.

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## POSITIONS OPEN

### FACULTY POSITION NUCLEAR CHEMISTRY

The Department of Chemistry at Indiana University invites applications for a tenure-track position in nuclear chemistry at the ASSISTANT PROFESSOR level for the fall of 1991. Applicants should have demonstrated outstanding potential for leading a vigorous research program and for teaching at the undergraduate and graduate level. Research in nuclear chemistry at Indiana University is carried out at the Indiana University Cyclotron Facility (IUCF) and other user facilities. IUCF is a national accelerator laboratory which provides variable-energy, light-ion beams up to 500 q2/A MeV. A dossier including curriculum vitae, list of publications, three letters of reference, and a brief statement of research interests should be sent to:

**Professor Paul A. Grieco, Chairman**  
Department of Chemistry  
Indiana University  
Bloomington, IN 47405

Deadline for receipt of materials is 1 October 1990. *Indiana University is an Equal Opportunity/Affirmative Action Employer.*

### TENURE-TRACK FACULTY POSITIONS DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY GEORGETOWN UNIVERSITY

We are interested in outstanding scientists capable of organizing, or already directing, an independent research program in the area of macromolecular interactions or genetics. Successful candidates will be expected to participate in graduate and postdoctoral training. Cooperative programs are in place with the Fidia-Georgetown Institute for the Neurosciences, the Lombardi Cancer Center, and NIH. Applicants should send curriculum vitae and the names of three referees by 1 November 1990 to: **Dr. E. Davidson, Chairman, Department of Biochemistry and Molecular Biology, Georgetown University School of Medicine, 3900 Reservoir Road, NW, Washington, DC 20007.** *Equal Opportunity Employer.*

### MOLECULAR BIOLOGY OF THE ANIMAL VIRUSES JUNIOR AND SENIOR FACULTY POSITIONS AVAILABLE

The Department of Microbiology and Immunology in the College of Medicine at The University of Tennessee, Memphis, invites applications for several junior and senior level, tenure-track positions focusing on the molecular analysis of significant problems in animal virology. Senior candidates should have a strong record of research accomplishment with sustained program growth and development. Junior candidates will be expected to develop a high quality, independent research program with long-term growth potential. Teaching responsibilities, which emphasize quality rather than quantity, include medical, dental, and graduate students. The University of Tennessee, Memphis, is well into a major growth phase. The department has recently moved into a completely renovated building and will be appointing at least five new faculty during the next several years. New faculty are also being appointed in the Departments of Anatomy, Pharmacology, and Biochemistry.

A large Center of Excellence grant has resulted in establishment of a Molecular Resource Center within the department featuring state-of-the-art facilities for: oligonucleotide synthesis, peptide synthesis, monoclonal antibody production, amino acid analysis, protein sequencing, polymerase chain reaction, molecular graphics, and flow cytometry. Funds for the initiation of research programs will be available and salaries will be highly competitive.

Applications will be received until 1 October 1990, or until the position is filled thereafter. Applications should consist of curriculum vitae, copies of several recent publications, a brief statement of future research goals, and three letters of reference to be sent to:

**Dr. Terrance G. Cooper**  
Department of Microbiology and Immunology  
The University of Tennessee, Memphis  
858 Madison Avenue, Room 801  
Memphis, TN 38163

*The University of Tennessee is an Affirmative Action/Equal Opportunity Employer, Section 504, Title IX.*

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## POSITIONS OPEN

### BIOCHEMISTRY FACULTY POSITIONS UNIVERSITY OF WISCONSIN-MADISON

The University of Wisconsin-Madison Biochemistry Department invites applications for two tenure-track positions at the ASSISTANT OR ASSOCIATE PROFESSOR level. We are particularly interested in applications from individuals whose research emphasizes metabolic regulation (assistant or associate professor level) or molecular neurobiology (assistant professor level); however, outstanding candidates in any area of biochemistry will be considered. The successful candidates are expected to develop vigorous independent research programs and participate in the undergraduate and graduate teaching of general and specialized biochemistry courses. Applications, including curriculum vitae, list of publications, summary of past work and accomplishments, and a statement of plans for future research, should be sent to: **Professor William S. Reznikoff, Chairman, Department of Biochemistry, University of Wisconsin-Madison, 420 Henry Mall, Madison, WI 53706.** In addition, applicants should arrange for at least three letters of reference to be mailed to the same address. Applicants should state in their cover letter for which position they wish to be considered. To assure consideration, all application materials should be received by 1 October 1990. *The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities.*

### FACULTY POSITION IN NEUROBIOLOGY NEUROBIOLOGY RESEARCH CENTER UNIVERSITY OF ALABAMA AT BIRMINGHAM (UAB)

A tenure-track position in neurobiology is available at the ASSISTANT OR ASSOCIATE PROFESSOR level. Neurobiology faculty also receive an appointment in a basic science department, such as Cell Biology or Physiology and Biophysics. The appointment is on a 12-month basis and includes recently renovated space and nationally competitive salary and start-up funds. The successful candidate will be expected to conduct an active, extramurally funded research program in an area that complements the research of the current faculty. Particular consideration will be given to individuals using contemporary tools of biophysics, cell biology, or molecular biology. The Neurobiology Research Center is currently composed of 17 faculty members with research programs in synaptic transmission, neurobiology of learning, membrane biophysics, developmental neurobiology, neuromodulation, and cell/cell interactions. These research groups utilize a variety of vertebrate and invertebrate experimental preparations. Access to shared facilities, including cell culture suite, image analysis and confocal microscopy center, and super computer network, is available in the center. UAB is a major biomedical research center with thriving graduate programs in neuroscience, cell and molecular biology, and physiology and biophysics. A primary emphasis of the university is vigorous expansion of the basic and clinical neurosciences. Applicants should send curriculum vitae with a statement of research interests and have three letters of reference sent by 21 October 1990 to: **Michael J. Friedlander, Ph.D., Director, Neurobiology Research Center, University of Alabama at Birmingham, Birmingham, AL 35294.** *UAB is an Affirmative Action/Equal Opportunity Employer.*

### JUNIOR FACULTY POSITION

The Department of Chemistry at Indiana University plans to make a tenure-track appointment at the ASSISTANT PROFESSOR level in organic chemistry, effective fall 1991. This position will require the ability to organize and present courses at both the graduate and undergraduate levels. Potential candidates are expected to have a solid record of accomplishment in research and show promise of developing vigorous, independent programs of scholarly investigation. To apply, submit a brief biographical sketch, publication list, and a short description of ideas for the development of teaching and research programs. The applicant should also arrange to have three letters of recommendation transmitted. Deadline for applications is 1 November 1990. Please apply to:

**Professor Paul A. Grieco, Chairman**  
Department of Chemistry  
Indiana University  
Bloomington, IN 47405

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

## POSITIONS OPEN

### FACULTY POSITION IN DEVELOPMENTAL BIOLOGY

The Division of Biological Sciences, University of Missouri-Columbia, continues a multi-year hiring program with an ASSISTANT OR ASSOCIATE PROFESSOR tenure-track faculty appointment. We seek a developmental molecular biologist who uses an invertebrate model system to study genetic and molecular aspects of cell growth and differentiation, or the control of gene expression in development. We offer a highly competitive salary, generous start-up package, a modern research laboratory and support facilities, an active graduate program with institutional support for students and postdoctoral associates, and an interactive faculty. *We are firmly committed to fostering ethnic and racial diversity on our faculty and applications from women and minority candidates are strongly encouraged.* Applicants with a Ph.D., postdoctoral research experience, and a demonstrated potential for creative research should send their curriculum vitae, publication reprints, statement of future research and teaching interests, and names, addresses, and telephone numbers of three references to: **Dr. John David, Biological Sciences, 110 Tucker Hall, University of Missouri, Columbia, MO 65211.** Applications must be received by 1 December 1990 to receive full consideration.

### UNIVERSITY OF WESTERN AUSTRALIA PERTH

Program of VISITING PROFESSORIAL APPOINTMENTS (Reference: A45/90), Department of Anatomy and Human Biology. The first of a series of visiting professorships, to be held for periods of up to 1 year, is available. The primary responsibility of the position will be to provide inspiration and innovation in both research and teaching. The objective is to attract individuals to pursue their investigations in an area or areas cognate with those of the department. Research is currently being undertaken by various research groups in such areas of human biology as (i) biological anthropology, evolution, genetics, variation, and ecology; (ii) comparative and functional anatomy including biomechanics and morphometrics; (iii) reproduction, development, growth and aging; (iv) histology, cell biology, and tissue regeneration; (v) growth, plasticity, and regeneration in the nervous system. Techniques available include light and electron microscopy, autoradiography, stereology, computer modeling, and data analysis of various types. It is expected that the visiting professors will also contribute to postgraduate studies and participate in the department's ongoing graduate programs on human biology. Applications are invited from persons with academic qualifications and teaching and research experience at the professorial level in one or more of the general fields encompassed by the department. In particular, the appointee will be expected to participate in the activities of the Centre for Human Biology, contribute to the new postgraduate programs, and engage in activities of the Australasian Human Biology Society. The commencement date is negotiable but the department would hope for an appointment in late 1990. Benefits include financial assistance with travel costs which will be negotiated. Inquiries to: **Associate Professor J. McGeachie, telephone: 09-380-3298, FAX: 09-380-1051.**

Salary range: \$AUS67,182 per annum. Closing date: 26 October 1990.

Conditions of appointment will be specified in any offer of appointment which may be made as a result of this advertisement.

Written applications quoting reference number, telephone number, qualifications and experience, and the names, addresses, and FAX/telephone numbers of three references, should reach: **Director, Personnel Services, The University of Western Australia, Nedlands WA 6009, Australia,** by the closing date.

*Equal Employment Opportunity is university policy.*

### BONUS CIRCULATION FOR YOUR CLASSIFIED AD

Our issue of 5 October 1990 will be distributed to scientists attending two important meetings: IBEX (San Mateo, California, 23 to 25 October) and Expoquimia (Barcelona, Spain, 5 to 8 November). Deadline or submission of line classified ads: 20 September 1990.

**SCIENCE Classified Advertising**  
Telephone: 202-326-6555  
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## VETERINARIAN

The Bristol-Myers Squibb Company, an internationally recognized pharmaceutical leader, currently has an opportunity available for a Clinical Veterinarian to work in our state-of-the-art research laboratories in Wallingford, CT.

The qualified candidate will provide veterinary care for a wide variety of animal species and assist in Quality Assurance programs that monitor the animal's health and environment. Other duties will be to manage clinical microbiology and murine serology laboratories, assist in training programs at the technical and professional levels and supervise technical staff in independent or collaborative research.

Qualifications include a VMD or DVM from an accredited veterinary medical college and postdoctoral training in Laboratory Animal medicine or 1-3 years experience in Laboratory Animal medicine. ACLAM board eligible candidate preferred.

Bristol-Myers Squibb offers an excellent salary and a comprehensive benefits program. For confidential consideration, please forward a resume with salary history to: **Bristol-Myers Squibb, TZ, P.O. Box 5101, Wallingford, CT 06492-7661.** An equal opportunity employer, M/F/H/V.

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## DIRECTOR

### DRUG DISCOVERY/CELLULAR AND MOLECULAR IMMUNOLOGY

SmithKline Beecham, a worldwide leader in pharmaceutical research, has a challenging opportunity for a Director to head our Immunology section within the Department of Cell Sciences. The successful candidate will be responsible for directing a research group of established immunologists whose efforts are focused on the pharmacological manipulation of immune functions with emphasis on autoimmunity and transplantation, as well as the establishment of new drug discovery efforts directed at molecular targets associated with immune disorders. In addition, the Director will provide molecular immunological expertise to: existing drug discovery programs; to other departments with overlapping interests; to project compounds undergoing preclinical and clinical evaluation; and most importantly, to management committees charged with making key research decisions. The position carries with it significant responsibility and high visibility.

We are interested in scientists with the following background: Ph.D. and/or M.D. with 5-8 years of postdoctoral experience in Molecular Immunology; industrial experience in drug discovery (highly desirable); established track record in scientific excellence as evidenced by publications and/or patents; proven managerial skills and excellent communications skills.

We offer the opportunity for growth in a scientifically intense environment structured on creativity, teamwork and commitment. For confidential consideration, please submit your C.V. to N. Hasson, Employment Administrator, H0151, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. Equal Opportunity Employer, M/F/H/V.



**SmithKline Beecham**  
Pharmaceuticals

## RESEARCH SCIENTIST

Progressive Urology Department, located in 567-bed major NYC teaching hospital, is seeking a dynamic researcher to direct the routine metabolic evaluations of stone formers in addition to conducting basic science and clinical research studies. Candidate must have PhD and be able to carry on independent research and communicate well with clinicians. Applicants are invited to submit C.V. to: **Aljean Smith, Empl Mgr**



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## Insect Physiology

FMC Corporation, a Fortune 150 leader in the field of Agricultural Chemical Research, is seeking an accomplished scientist in the area of insect physiology to join in a research effort in the discovery of novel insecticides. The successful candidate will work with a team of biochemists, biologists and chemists to develop and implement rational approaches to the discovery of insecticides.

The position requires a Ph.D in Insect Physiology or Biology, with 1-2 years post-doctoral or industry experience preferred. A broad background in physiology is desirable with expertise in one or more of the following areas: neurophysiology, insect developmental physiology, insect neuroendocrinology, insect neurophysiology on molecular entomology that can be applied to the discovery of new insecticides.

FMC offers an R&D center in a prime location, challenging work, and excellent benefits and a salary commensurate with your experience. Please forward your resume to: **Steve Cugine, Dept. 90-68, FMC Corporation, Chemical R&D Center, Box 8, Princeton, NJ 08543.** Equal Opportunity Employer, M/F. Females are encouraged to apply.



## RESEARCH SCIENTIST

PANLABS is expanding its U.S. laboratory facility. We have opportunities for a scientist with a demonstrated record of scientific innovation and independence. Applications for the following position are currently being accepted:

**Ph.D in Chemistry with experience in natural products isolation/purification and structural determination.**

PANLABS is a growing U.S. based international company that has provided R & D services to pharmaceutical companies and the fermentation industry worldwide for 20 years. Located in the high tech corridor north of Seattle, PANLABS offers competitive salaries and benefits. Please send CV with names and phone numbers of three references to:

**PANLABS**

Att: Human Resources Manager  
11804 North Creek Parkway South  
Bothell, Washington 98011

AN EQUAL OPPORTUNITY EMPLOYER



**PHARMACOKINETIC REVIEWERS  
U.S. GOVERNMENT  
FOOD AND DRUG ADMINISTRATION**

**POSITION DESCRIPTION:** The reviewer serves as a pharmaceutical scientist in the Division of Bioequivalence of the Food and Drug Administration, located in Rockville, Maryland. Responsibilities include the review of pharmacokinetic/bioavailability data received from the pharmaceutical industry as part of Investigational New Drug (IND), Abbreviated New Drug Application (ANDA) submissions. As an ongoing part of the review, a determination is made by the reviewer, as to the acceptability of the data submission. These recommendations have a direct impact on the quantity and quality of drug products reaching the U.S. consumer and on the direction and depth of research efforts by the pharmaceutical industry.

**HIGHLY DESIRABLE:** Ph.D. in pharmacokinetics/biopharmaceutics or Pharm.D. with pharmacokinetic training/experience; thorough knowledge of pharmacokinetics, biopharmaceutics, analytical methods and statistics. U.S. Residency, though not citizenship, required.

**RANGES:** GS-12 \$35,825-\$46,571  
GS-13 \$42,601-\$55,381

Commission in the U.S. Public Health Service, and commensurate pay scale may also be possible.

**Positions Available:** Positions are available immediately. These positions may either be as scientific fellows or permanent positions.

**Applications:** Submit current curriculum vitae or U.S. Government application form (SF-171) to:

**Food and Drug Administration**  
Center for Drug Evaluation and Research  
5600 Fishers Lane, Room 15-22  
Rockville, Maryland 20857  
Attention: Rhonda S. Alderman  
Telephone: 301-443-0553

**AN EQUAL OPPORTUNITY EMPLOYER**



**Vice President for Research**

**The Ohio State University  
Columbus, Ohio**

The Ohio State University invites nominations and applications for the position of Vice President for Research. The Vice President will report directly to the newly appointed President and work closely with the Vice President for Academic Affairs/Provost and the Dean of the Graduate School to stimulate and facilitate research and scholarship at the University. This individual will play a key role in the growth of research activities at the University.

Strong leadership skills, creativity, and innovation will be required to develop University research strategies emphasizing interdisciplinary and interinstitutional programs as well as collaborative projects with the private sector. Candidates should have a record of outstanding achievement in research, demonstrated administrative ability, a commitment to education through research, and experience in grant and contract activities with governmental agencies, private foundations, and industry. The University seeks a candidate who understands the comprehensive scope and mission of a large, land grant institution and the role of university research in formulating national science strategies.

The Ohio State University is located on a 3250-acre campus in Columbus with five regional campuses. There are approximately 59,000 students on the main campus in 19 colleges, 7 schools, the Graduate School, and a complex of health and medical sciences. The University is among the top 25 universities in the nation in total expenditures for research and has a number of nationally and internationally recognized facilities and centers spanning a broad spectrum of research activities.

To assure full consideration, applications and nominations should be received by October 8, 1990. The Search Committee will begin screening dossiers on that date and will continue to review applications until the Vice President is selected.

Applications and nominations should be addressed to:

Search for Vice President for Research  
c/o Office of the President  
The Ohio State University  
205 Bricker Hall  
190 North Oval Mall  
Columbus, OH 43210

The Ohio State University is an Equal Opportunity, Affirmative Action Employer. Women and minorities are encouraged to apply.

**BIOPROCESS  
MICROBIOLOGIST**

Merck Chemical Manufacturing Division has a challenging opportunity available for a Bioprocess Microbiologist in its Biotechnology laboratories.

Responsibilities will include:

- Identifying and developing microorganisms and enzymes for bioprocessing applications.
- Developing process schemes encompassing organic and biochemical steps.
- Optimizing fermentation conditions in present and future production operations.
- Conducting experimental programs at the bench and pilot-plant scale to support bioprocess development.

The successful candidate must have a PhD in Microbiology with 0-3 years of post-doctoral or related experience. A strong background in microbial physiology, genetic and molecular biology is required. Experience in strain improvement, protein engineering, fermentation optimization, organic chemistry, and statistical methods is highly desirable. A demonstrated interest in gaining project management experience is valuable. Excellent communications skills and the ability to work independently are essential.

Located in the Shenandoah Valley, the Biotechnology laboratories are closely associated with large-scale bioprocessing facilities of Merck's Stonewall Plant in Elkton, Virginia.

Interested candidates should submit their resume with the names of three references and salary requirements to **Mr. J. Stephen Harris, Merck & Co., Inc., P.O. Box 7, Elkton, VA 22827**. Merck & Co. is an Equal Opportunity Employer.



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Becton Dickinson, internationally renowned in health-care, is seeking a dynamic, creative scientist to strengthen our impact in the global immunodiagnostic market.

The successful candidate will focus on development of Folate and B12 assays for automated immunochemistry systems. PhD plus one year's experience, or MS plus 3 years' experience, or BS plus 5 years' experience required. Background must include serum/plasma based immunoassay development from feasibility to manufacturing, 510(k) documentation, as well as protein conjugation and characterization.

We offer a competitive salary, comprehensive benefits and all opportunities for growth commensurate with being a leader in our field. For prompt, confidential consideration, send resume with salary history to: Human Resources, Becton Dickinson and Company Advanced Diagnostics Division, 225 International Circle, 2nd Floor, Cockeysville, MD 21030. An equal opportunity employer/affirmative action employer.

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We are hiring Computational Chemists, Molecular and Cell Biologists, Enzymologists, Peptide Chemists, and Medical or Synthetic Organic Chemists to work in our fully equipped, modern laboratory facilities. These positions require a PhD or MD and post-doctoral experience. Send your resume to Michael J. Ross, ARRIS Pharmaceutical Corporation, P.O. Box 2603, South San Francisco, CA 94080-2603. An Equal Opportunity Employer.

ARRIS Pharmaceutical Corporation

**T**he Hospital for Sick Children is a downtown landmark in paediatric medicine. With more than 700 staff, our Research Institute seeks answers to childhood diseases and leads the world in fields such as genetic research. You can help us extend our excellence in this position.

## Postdoctoral Position Developmental Biology

As a developmental molecular and cellular biologist, you'll study the genetic regulation of nephrogenesis and tumorigenesis, capitalizing on recent advances in Wilms' tumour research. Experience in animal cell culture and molecular biology is essential.

Send your curriculum vitae and letters of reference to: Dr. Herman Yeger, Department of Pathology, The Hospital for Sick Children, 555 University Avenue, Toronto, Ontario, Canada M5G 1X8.



THE HOSPITAL  
FOR SICK CHILDREN

# ORGANIC CHEMISTS

Technicon Instruments Corporation, a dynamic leader in the field of automated analytical instrumentation, has immediate openings for Organic Chemists.

We are seeking individuals with a BS/MS in Chemistry and 2-4 years experience in synthesis, instrumental analysis, and wet chemistry to support reagent development for immunology systems.

These excellent career opportunities offer a wide range of benefits and competitive salaries. For consideration please send resume to:

**Manager, Human Resources - R&D**

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**511 BENEDICT AVENUE  
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**TECHNICON**

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## POSITIONS OPEN

### CENTERS FOR DISEASE CONTROL MOLECULAR PARASITOLOGIST

The Division of Parasitic Diseases, Malaria Branch, Center for Infectious Diseases, Centers for Disease Control (CDC), invites applications for the staff position of research molecular parasitologist. The successful candidate will supervise and conduct an independent program of research on human, nonhuman primate, and rodent malaria parasites using molecular biologic and immunologic techniques. Candidates should have a Ph.D., M.D., or equivalent experience in immunologic research. Candidates should have specific research experience in both the analysis of stage-specific genes of malaria parasites and the characterization of within species polymorphisms in the putative proteins. Experience participating in epidemiological studies in malaria endemic regions of the world is desirable. A demonstrated record of productivity in the above research areas is essential. The salary range is \$42,601 to \$55,381, based on the candidate's qualifications and experience. Interested candidates should send curriculum vitae, statement of research interests, list of publications, and three letters of recommendation to: Mr. William V. Nelson, Personnel Management Office, Centers for Disease Control, Atlanta, GA 30333. For additional information, contact: Dr. Frank Collins, Malaria Branch, CDC, Atlanta, Georgia, telephone: 404-488-4046. CDC is an Equal Employment Opportunity Employer and provides a smoke-free work environment.

**PHYSIOLOGIST/PHARMACOLOGIST.** Needed to establish Division of Research in Department of Emergency Medicine. Require Ph.D. and research interest relevant to emergency medicine. Send curriculum vitae to: Robert Schneider, M.D., Department of Emergency Medicine, Carolina Medical Center, P.O. Box 32861, Charlotte, NC 28232.

**POSTDOCTORAL POSITION.** A postdoctoral position is immediately available to study the biochemical and drug-binding characteristics of P-glycoprotein in multidrug-resistant tumor cells. Experience in protein chemistry, receptor binding assays, and/or hybridoma technology required. Send curriculum vitae and three letters of references to: A. R. Safa, Ph.D., Department of Medicine, The University of Chicago, 5841 South Maryland Avenue, Box 420, Chicago, IL 60637. An Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION.** Available for a recent Ph.D. to study gene transcription in yeast. Molecular genetics and biochemical approaches are being used to analyze strains bearing mutations in transcription factors and regulators [see *EMBO J.* 8, 4281 (1989)]. Send résumé and the names and addresses of three references to: Dr. Ian Willis, Department of Biochemistry, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. Equal Opportunity Employer.

### P450 PROTEIN CHEMIST/ MOLECULAR BIOLOGIST

**POSTDOCTORAL POSITION** for Ph.D. experienced with cytochrome P450 protein chemistry, enzymology, and/or molecular biology to work on project studying structure/function relationships of mitochondrial P450scc and its electron transport proteins. Experience with the steroidogenic mitochondrial P450 enzymes preferred but not essential. Send curriculum vitae and letters of recommendation to: Dr. Walter L. Miller, Building MR-IV, Room 209, University of California, San Francisco, CA 94143-0978.

**POSTDOCTORAL POSITION.** Available immediately to study the structure and functional aspects of ETS oncogene and its related genes (*erg*, *elk-1*, *elk-2*) [see *Science* 244, 66 (1989); *Oncogene Res.* 3, 239 (1988); *Science* 237, 635 (1987); *PNAS* 84, 6131 (1987)]. Ongoing studies are focused on the sequence-specific DNA binding, the transcriptional activation, the expression and purification of ets proteins in eukaryotic and prokaryotic systems, and the role of ets genes in leukemias. Experience in recombinant DNA and protein purification is desirable. Please send curriculum vitae and names, addresses, and telephone numbers of three references to: E. Shyam Reddy, Ph.D., Fels Institute for Cancer Research and Molecular Biology, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, PA 19140. An Equal Opportunity Employer.

## POSITIONS OPEN

### POSTDOCTORAL POSITION/IMMUNOLOGY

Postdoctoral position (full-time) available immediately to study immune suppressive mechanisms induced by tumors. Includes opportunity for independent studies. Experience in cellular immunology required, and in molecular biology or biochemistry preferred. Send résumé and salary requirements to: Dr. M. Rita Young, Department of Veterans Affairs Hospital, P.O. Box 250, Hines, IL 60141. Located 12 miles west of Chicago, Illinois. Equal Opportunity Employer. M/F/H.

**A POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY OF LENS GAP JUNCTIONS** is available. We are looking for a Ph.D. with experience in current molecular biological techniques such as in vitro translation; cDNA cloning; library screening; DNA sequencing; and Northern, Southern, and Western blotting. Several potential lens gap junctional proteins have been isolated and we are working on cloning them, expressing their mRNA in oocytes, and electrophysiologically studying induced cell coupling. Send curriculum vitae with telephone numbers of three references to: Dr. Richard T. Mathias, Department of Physiology and Biophysics, Health Sciences Center, State University of New York (SUNY), Stony Brook, NY 11794-8661. SUNY Stony Brook is an Affirmative Action Educator and Employer. AK 138.

### POSTDOCTORAL POSITION DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF WISCONSIN-MADISON

A postdoctoral position is available in the Department of Biochemistry at the University of Wisconsin-Madison for a joint project in professors Julius Adler's and Bruce Selman's laboratories. The nature of the research to be pursued is the mechanism of sensory transduction in the eukaryotic green alga *Chlamydomonas reinhardtii*. In particular, the role of protein methylation will be examined in relation to the response of the alga to external stimuli. Interested candidates should send their curriculum vitae and arrange to have three letters of recommendation sent to either: Professor Julius Adler or Professor Bruce Selman, Department of Biochemistry, University of Wisconsin-Madison, 420 Henry Mall, Madison, WI 53706. The university is an Affirmative Action/Equal Opportunity Employer and encourages women and minorities to apply.

### POSTDOCTORAL ASSOCIATE/INSTRUCTOR

To carry out research on chemosensory signal transduction and to teach one advanced laboratory per year to a small group of advanced undergraduates (with assistance of preparator and graduate teaching fellow). Research expertise can be in molecular biology, membrane biochemistry, or electrophysiology. Send curriculum vitae and two to three letters of recommendation to: Dr. Judith Van Houten, University of Vermont, Department of Zoology, Burlington, VT 05405.

### POSTDOCTORAL TRAINEESHIP MOLECULAR BIOLOGY AND ELECTROPHYSIOLOGY

Available immediately in a multidisciplinary NIH-funded research training program to study the molecular mechanism of ion channel modulation by phosphorylation. Ph.D. with experience in molecular biology. Trainee will receive training in electrophysiology. Annual stipend is \$17,000 to \$31,500. U.S. citizenship or permanent residence required. Applicants should send research interest and three letters of recommendation to: Dr. Gea-Ny Tseng, Department of Pharmacology, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

### BONUS CIRCULATION FOR YOUR CLASSIFIED AD

Our issue of 12 October 1990 will be distributed to scientists attending two important meetings: Human Genome II (San Diego, California, 22 to 24 October) and Society of Neuroscience (St. Louis, Missouri, 29 October to 2 November). Deadline for submission of line classified ads: 27 September 1990.

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## POSITIONS OPEN

**POSTDOCTORAL POSITIONS.** Postdoctoral traineeship positions are available in the areas of molecular biology and genetics, gene mapping, cell biology, biochemistry, and carcinogenesis. Active programs include oncogenes, genes in growth control, DNA repair mechanisms, receptors, and cellular transduction systems. Send curriculum vitae, a short statement on training interests, if known, and three letters of recommendation to: Dr. Gerald Litwack, Deputy Director, Fels Institute for Cancer Research and Molecular Biology, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, PA 19140. Applicant must be U.S. citizen or permanent resident. An Equal Opportunity Employer.

**A POSTDOCTORAL FELLOW** position is available immediately for 2 years to conduct research on the molecular mechanisms of cholinergic deficit and abnormal membrane fluidity in aging and Alzheimer's disease. Preference will be given to individual with experience in molecular biology and protein chemistry or monoclonal antibody production. Applicants must have a Ph.D. or M.D. degree. Please send curriculum vitae with statement of research interest and three letters of references to: Dr. Joseph C. Parker, Department of Pathology, University of Missouri-Kansas City (UMKC) School of Medicine, Truman Medical Center, 2301 Holmes Street, Kansas City, MO 64108.

UMKC is an Equal Opportunity Employer.

**POSTDOCTORAL FELLOWSHIP.** Field: Protein-glycolipid interactions and endotoxemia. Immediately available (2 years). Research involves interactions between bacterial endotoxins and stroma-free hemoglobin (SFH), with emphasis on stoichiometric composition, protein conformational changes, distribution of endotoxin and SFH in vivo, and biologic activity of endotoxin. Send curriculum vitae and names of three references to: Jack Levin, M.D., Professor of Laboratory Medicine and Medicine, University of California, San Francisco (UCSF) and VA Medical Center (113A), 4150 Clement Street, San Francisco, CA 94121. Equal Opportunity Employer.

**POSTDOCTORAL RESEARCH ASSOCIATE.** Department of Pharmacology, Cornell University. A position is available to participate in any of a number of ongoing studies involving molecular biological, protein chemical (reconstitution), or biophysical approaches to investigate: (i) signal transduction pathways of the EGF receptor and the neu tyrosine kinase, and (ii) structure-function aspects of low molecular weight GTP-binding proteins. Send curriculum vitae and names of three references to: Dr. Richard Cerione, Department of Pharmacology, D101 Schurman Hall, New York State College of Veterinary Medicine, Cornell University, Ithaca, NY 14853. Cornell is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL RESEARCH ASSOCIATE.** Directed mutagenesis study of the role of amino acid residues at an enzyme-active site. Candidates for a position in this project should have research experience with publications on protein structure, molecular biology, or biophysical chemistry. For recent published work by the group, see *J. Biol. Chem.* 264, 9391 (1989); 265, 2740, 5579 (1990); and *Biochemistry* 29, 1290, 4554, and 6428 (1990). Training will be provided in directed mutagenesis and in obtaining rate constants for ligand binding and release, interconversion of conformers, and catalysis. Methods for the study of transient state kinetics as well as steady-state kinetics will be included. Results will be interpreted with the aid of computer graphics. Starting salary: \$22,000 or higher depending on relevant experience. To apply, send curriculum vitae and three references to: Dr. R. L. Blakley, Department of Biochemical and Clinical Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. An Equal Opportunity/Affirmative Action Employer.

**RESEARCH ASSOCIATE.** University of Minnesota. Tree improvement specialist for Aspen/Larch Genetics Cooperative. Requires Ph.D. and field experience in forest genetics or silviculture. Application deadline is 15 October 1990. Direct inquiries to: Dr. Howard Hoganson, University of Minnesota, 1861 Highway 169 East, Grand Rapids, MN 55744. Telephone 218-327-4490. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

## SENIOR and ASST. RESEARCH SCIENTISTS Molecular Biology

Merck Sharp & Dohme Research Laboratories has immediate openings for Senior and Assistant Research Molecular Biologists in the Department of Molecular Immunology.

Senior candidates must have a Ph.D., M.D. or equivalent with a minimum of two years postdoctoral experience in molecular biology and the ability to conduct independent research in one of the following areas:

- (1) Signal transduction mechanisms involved in the activation of eukaryotic cells (specifically lymphocytes and monocytes), with an emphasis on cellular oncogene homologues such as G-protein interactions or specific kinases and phosphatases.
- (2) Development of transgenic mouse models of immune and inflammatory diseases by gene "knock-out" or replacement using homologous recombination in embryonic stem cells. This position will involve interactions with scientists from our transgenic animal experimentation group. State-of-the-art micro-injection and animal facilities are available.

Individuals will be expected to perform and supervise a broad range of molecular biological and biochemical techniques which include gene transfer and expression, RNA & DNA hybridizations, genomic and/or cDNA cloning, PCR analysis, site specific mutagenesis, DNA sequencing and cell culture. Good oral and writing communication skills are essential. Publications in primary scientific journals are important.

We are also seeking an Assistant Research Molecular Biologist to aid in defining the roles of specific genes in the pathogenesis of immune and inflammatory diseases.

Preferred candidates will have a B.S., M.S. or equivalent degree in Molecular Biology or a related field and a minimum of two years laboratory research experience. Individuals will be expected to perform a broad range of molecular biological and biochemical techniques including: RNA and DNA hybridizations, genomic and/or cDNA cloning, PCR analysis, site specific mutagenesis, DNA sequencing, cell culture, gene transfer and expression. Good communication skills are important.

Merck Sharp & Dohme Research Laboratories is located in Rahway, New Jersey approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. Applicants should respond to AD#500. Interested individuals are encouraged to send their resume and the names of three references to:

**Ms. Susan Glinka**  
**Merck Sharp & Dohme**  
**Research Laboratories**  
**P.O. Box 2000, R80M-TL1**  
**Rahway, NJ 07065**  
**Attn: AD#500**

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This position will encompass in vitro studies of drug absorption across physiological membranes and in vivo pharmacokinetic studies in animals. In addition, applicants should have the ability to analyze samples using HPLC, RIA and other techniques, maintain accurate records and prepare oral and written reports.

Candidates should have a BS or MS in Physiology, Biochemistry, Pharmacology or Chemistry and 2-5 years relevant experience in absorption studies including acute and chronic vessel cannulation.

CIBA-GEIGY Corporation offers excellent opportunity for continued professional development, a very competitive salary and full range of company-paid benefits. Candidates should send their resume with salary history to: **V. Senatore, CIBA-GEIGY Corporation, Dept. S-824, 444 Saw Mill River Road, Ardsley, New York 10502-2699.** We are an equal opportunity employer M/F/H/V.

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## POSTDOCTORAL POSITION

Position available for an individual with a Ph.D. in cell biology, biochemistry, or physiology with experience in cell culture. The successful applicant will be involved in research into the molecular mechanisms through which physical forces, generated during cellular deformation, influence cellular biochemistry. Research will focus on the molecular structures involved in regulation of mechanically-sensitive adenylate cyclase and Na<sup>+</sup>/H<sup>+</sup> antiporter activities during volume expansion and compression, as well as during cell spreading following extracellular matrix attachment.

Competitive salary and fringe benefits are available. Please send CV and three names or letters of reference to:

**Dr. Peter A. Watson**  
**Weis Center for Research**  
**Geisinger Clinic**  
**Danville, PA 17822**

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## Geisinger



## Postdoctoral Positions Biochemist/ Molecular Biologist

Monsanto's Corporate Research Cellular Oncology group is seeking to fill two postdoctoral positions. One is for a recent Ph.D. in biochemistry/cell biology and the other is for a Ph.D. molecular biologist/cell biologist. The individuals will work on a team conducting basic research on the roles of tumor cell derived factors in tumorigenesis and metastasis. These positions require individuals with experience in cell culture as well as proteins purification and/or molecular biology. These will be highly interactive positions requiring effective communication and organizational skills.

For consideration, send resume and letters of reference to: Ms. Tammy Skelton, Supervisor, Human Resources, Mail Zone 02H, Monsanto Company, 800 North Lindbergh Boulevard, St. Louis, Missouri 63167. Monsanto is an Equal Opportunity Employer M/F/H/V.

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## CAREER OPPORTUNITIES FOR SCIENTISTS

VICAL is a young biopharmaceutical company with technology to deliver functional nucleic acids to cells both in vitro and in vivo. We are expanding our gene therapeutics group in order to exploit these discoveries and are seeking research scientists at the Ph.D. and technical levels with experience in the following areas:

### CELLULAR IMMUNOLOGY

We are looking for immunologists with background in one or more of the following fields: functional assays of T-cell subsets, effects of lymphokines on lymphoid cell subsets and vaccine development. Research projects will explore the use of the intracellular expression of antigens to stimulate immune responses.

### MOLECULAR BIOLOGY

We are seeking molecular biologists with experience in construction and development of eukaryotic expression vectors, and isolation and characterization of tissue specific transcriptional and translational elements. Research will be aimed at optimizing expression in muscle, fibroblastic and lymphoid cells.

### PHARMACOLOGY

We are looking for a pharmacologist with background in hormone research and pharmacokinetics. Research will center on developing systems to demonstrate the utility of gene delivery for the expression of biologically active polypeptides with specific applications to hormones and the treatment of genetic diseases.

### CELL BIOLOGY

We seek a person with a broad background in cellular biology, experience in tissue sectioning, immunohistology and cell transfection. Main research projects will be to study the delivery of macromolecules to tissue culture cells and to animal tissues in vivo.

We also have openings for people at the technical level with experience in one or more of the following fields: plasmid construction, plasmid growth and purification, immunoassays, cell culture and synthetic lipid chemistry.

VICAL rewards your efforts with excellent benefits. Salary and equity commensurate with experience. For immediate consideration, please send resume to: **Human Resources, VICAL Inc., 9373 Towne Centre Dr., Suite 100, San Diego, CA 92121.**



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## POSITIONS OPEN

### POSTDOCTORAL RESEARCH ASSOCIATE.

Position available beginning immediately to study role of opioid peptides in hypertension in rat models using in vivo and isolated tissue cardiovascular and biochemical techniques. Recent Ph.D. in pharmacology or related discipline with experience in opioid radioimmunoassay and radioligand binding techniques preferred. One-year appointment renewable for second year. Salary: \$19,000 annually plus fringe benefits. Federal law requires proper documentation of identity and employability at the time of employment. Send curriculum vitae and three letters of recommendation to: **Dr. A. J. Ingenito, Department of Pharmacology, School of Medicine, East Carolina University, Greenville, NC 27858. Affirmative Action/Equal Opportunity Employer.**

### RESEARCH ASSOCIATE IN MOLECULAR VIROLOGY

The Infectious Diseases Division, Department of Medicine, Jefferson Medical College, Philadelphia, Pennsylvania, invites applications for the above position. Candidates require doctorate and experience in molecular virology. Laboratory to be developed will focus on molecular retrovirology. Position immediately available. Faculty rank to be determined by credentials.

Forward curriculum vitae and ten references to: **Dr. Roger J. Pomerantz, Director, Division of Infectious Diseases, Department of Medicine, Jefferson Medical College, 1025 Walnut Street, Philadelphia, PA 19107. Affirmative Action/Equal Opportunity Employer.**

**POSTGRADUATE RESEARCH, ENVIRONMENTAL PROTECTION AGENCY (EPA).** Positions available in environmental or chemical engineering at Risk Reduction Engineering Laboratory in Cincinnati, Ohio, and Edison, New Jersey. Experience in municipal wastewater system management or stormwater runoff characterization preferred. Contact: **EPA Postgraduate Research Program, Science/Engineering Education Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117. Telephone: 615-576-3456.**

Seeking M.D./Ph.D. to conduct **RESEARCH** in molecular virology, immunovirology, and recombination genetics. Experience in HIV-related studies, recombinant DNA technologies, and/or in vitro expression systems is desirable. Salary: \$35,825 to \$42,601. Interested applicants should send application and curriculum vitae to: **Georgia Department of Labor, 1275 Clarendon Avenue, Avondale Estates, GA 30002, or to the nearest Georgia Job Service Center. Control: #GA 5439440. An Equal Opportunity Employer providing a smoke-free work environment.**

**RESEARCH INVESTIGATOR.** The Department of Dermatology, University of Michigan, seeks a Ph.D. with one or more years of postdoctoral experience in molecular and/or cellular biology to join an established laboratory studying the molecular biology of growth regulation and gene regulation in human skin. Areas of interest include: receptor tyrosine kinases, growth factor gene regulation, retinoid and steroid receptors, and dermal-epidermal interactions. Send curriculum vitae and two letters of reference to: **James T. Elder, M.D., Ph.D., University of Michigan, C560 MSRB II, Box 0672, Ann Arbor, MI 48109-0672. An Equal Opportunity/Affirmative Action Employer.**

### RESEARCH AND DEVELOPMENT CHEMIST

Conduct research projects aimed at developing novel, advanced performance chemicals, polymers, and surfactants for the paper, cosmetics, personal care, household products, plastics, additives, anodized aluminum, and industrial and institutional products industries. Design and conduct synthesis, purification, analysis, characterization, evaluation, modification, and formulation of a wide range of organic materials. Requires Ph.D. degree in organic chemistry, including graduate level courses in catalysis and kinetics, mechanistic organic chemistry, inorganic chemistry, and advanced analytical chemistry. Also requires at least 2 years of research experience with surface characterization using organic probes, 2 years of research experience with multistep organic synthesis, and 1 year of research experience in structure elucidation by modern spectroscopic methods (2-D NMR, infrared + MS). Salary: \$41,000 per year; 40+ hours per week; 8 a.m. to 5 p.m.; Monday to Friday. Apply to: **Job Service, 500 West Trade Street, Charlotte, NC 28202. Reference Job Order #2600572.**

## POSITIONS OPEN

### RESEARCH ASSOCIATE (POSTDOCTORAL)

Position available immediately in group characterizing the response of nonsmall-cell lung cancer to glucocorticoids. Experience in RNA isolation, basic molecular biologic techniques, and tissue culture preferred.

Send curriculum vitae and names of three references to: **Craig W. Beattie, Ph.D., Specialized Center for Cancer Research and Education, University of Illinois College of Medicine at Chicago, 840 South Wood Street (M/C 820), Chicago, IL 60612.**

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

### RESEARCH ENTOMOLOGIST: DEPARTMENT OF AGRICULTURE (USDA) FOREST SERVICE

The Southern Forest Experiment Station is seeking a permanent scientist for its Forest Insect Research Unit at the Alexandria Forestry Center, Pineville, Louisiana. We are interested in candidates with research experience in insect population dynamics, natural enemies, and/or biocontrol. The research goal is to enhance understanding of southern pine beetle population dynamics and to assess technical feasibility of developing southern pine beetle biological control programs. Qualifications: Ph.D. or equivalent in entomology or related field. For questions on position/location, contact: **Dr. Jane Hayes, 318-473-7232.** Application materials sent on request. Note: Application postmark deadline: 21 September 1990.

**NEUROBIOLOGY.** Two staff **RESEARCH SCIENTIST** positions, requiring a Ph.D. or an M.D., to join the biochemistry group of a leading neuroscience company. One investigator will study the role of proteases in neurodegenerative disease, while the second will focus on defining protein structural and functional domains. Cephalon, located in suburban Philadelphia, offers an outstanding collaborative research environment, an excellent compensation package, and a newly constructed laboratory facility. Send curriculum vitae and the names of three references to: **Dr. Robert Siman, Cephalon, Inc., 145 Brandywine Parkway, West Chester, PA 19380.**

**LABORATORY RESEARCH SPECIALIST.** Needed for molecular, genetic, and developmental biology experiments. Salary: \$16,328 to \$23,566 per year. Require bachelor's degree in biological science plus 2 years of experience or master's degree in biology and ability to perform experiments with recombinant DNA methods, DNA sequencing, microscopy, and electrophoresis as well as all basic methods and instruments common to biochemistry/molecular biology. Employer is an Equal Opportunity/Affirmative Action Employer. **Job Order No. 3936328. Contact: Utah Job Service, 1234 South Main Street, P.O. Box 11750, Salt Lake City, UT 84147.**

### CELLULAR IMMUNOLOGISTS STAFF SCIENTISTS

Applications are invited for entry level tenure-track staff scientist positions located in cellular immunology at The Wadsworth Center for Laboratories and Research, New York State Department of Health, Albany, available fall/winter 1990-1991. The center is particularly interested in candidates working in the areas of lymphocyte activation, interaction, and/or regulation. Successful candidates will be expected to possess a broad knowledge of immunology and to develop a strong independent basic research program. Participation in immunology graduate programs at the State University of New York, Albany, and at other area institutions is strongly encouraged. Candidates must possess a Ph.D. or equivalent degree and have at least 3 years of postdoctoral experience. Send curriculum vitae, a statement of current and future research interests, and the names, addresses, and telephone numbers of three references by 1 November 1990 to: **Dr. Donal Murphy, Chairman, Immunology Search Committee, P.O. Box 509, Albany, NY 12201-0509.** The Wadsworth Center is a multidisciplinary basic research and public health center devoted to the study of human disease, and is an Equal Opportunity/Affirmative Action Employer.

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

National Institutes of Health  
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(Having less than 3 years professional research experience)

Salary Range: \$24,000 - \$41,795 per year

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(Having 3-7 years professional research experience)

Salary Range: \$28,000 - \$46,861 per year

The Neuropharmacology Section is seeking an individual to participate in ongoing studies on the regulation of neuropeptides and neurotransmitters in neural systems. The focus of the studies is on the molecular mechanisms regulating the expression of genes encoding opioid peptides and catecholamine synthesizing enzymes. The candidate should have a Ph.D. and strong experience in neuropharmacology, neurochemistry or molecular biology. The candidate must have a record of demonstrated research productivity and the ability to carry out independent as well as collaborative research. For detailed information, please call Dr. J.S. Hong at (919) 541-2358. Salary commensurate with candidate's qualifications and experience. Send curriculum vitae, bibliography and three recommendation letters to:

Mr. Bruce Wiggins (Code: HNV18)  
NIEHS Personnel Office  
P.O. Box 12233 (MD 1-01)  
Research Triangle Park, NC 27709



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The University of Sydney

AUSTRALIA

## RESEARCH FELLOW IN NMR SPECTROSCOPY

Department of Cancer Medicine

Reference No. 28/04

Applications are invited from enthusiastic scientists to join a multidisciplinary team utilising magnetic resonance spectroscopy to study the role of membrane lipids in tumour biology. This is part of an international program which includes scientists and clinicians from the EEC and other Commonwealth countries.

Applicants should be familiar with Bruker equipment. Preference will be given to applicants with expertise in organic chemistry since verification of NMR assignments by chemical methods is required.

Successful applicants will be offered a one year contract in the first instance with probable renewal.

The department is well equipped with: a wide bore 360 MHz NMR spectrometer with microimaging facility, ultracentrifuge, HPLC, GC, etc. Tumour and cell models to be studied are established in the laboratory with well qualified staff working in this aspect of the program.

For further information write to Dr Carolyn Mountford or phone (+612) 692 3675, fax (+612) 692 4105.

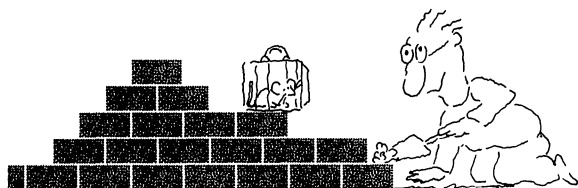
Salary: A\$33,163-A\$43,096 per annum.

Closing: 7 September, 1990.

**Method of Application:** Applications, quoting reference no., including curriculum vitae, list of publications and the names, addresses and FAX numbers of three referees, to the Registrar, Staff Office, University of Sydney, N.S.W. 2006, Australia by the above date.

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## HAIR/SKIN SCIENTIST

The Gillette Research Institute, a division of The Gillette Company, has an opportunity in our Physiology department for a scientist to join our hair and skin research programs.

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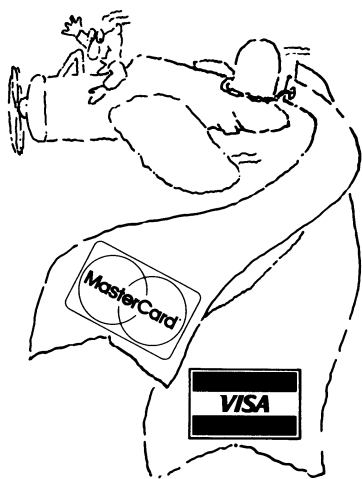
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### POSITIONS OPEN

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### VIROLOGIST

The Yerkes Regional Primate Research Center and Department of Pathology, Emory University, have an opening for a virologist with experience in retrovirus research. Candidates should have a Ph.D., D.V.M., M.D., or equivalent and should have sufficient research experience to demonstrate their ability to establish an independent research program in areas related to the pathogenesis of AIDS and related retroviruses in animal models. The successful applicant will also participate in ongoing clinical, immunological, and pathological studies with the simian immunodeficiency virus. Salary is negotiable and is commensurate with experience. The position is available immediately. Letters of application including curriculum vitae, a brief statement of research interests, and the names of three references, should be sent to: **Dr. Harold McClure, Associate Director, Yerkes Primate Research Center, Emory University, Atlanta, GA 30322.** *Emory University is an Equal Opportunity/Affirmative Action Employer.*

### MEETINGS

#### ADVANCES IN CHEMOTHERAPY OF AIDS-II 13-14 September 1990

Symposium on recent advances in basic research on development of novel drugs and pharmacologic approaches against AIDS. Details and application forms: **Department of Pharmacology, University of Alabama at Birmingham, University Station Box 600, Birmingham, AL 35294.** Telephone: 205-934-4578 or 205-934-4584. FAX: 205-934-8240.

#### ASCORBIC ACID: BIOLOGICAL FUNCTIONS AND RELATION TO CANCER 10 TO 12 SEPTEMBER 1990 AT NIH

Symposium sponsored by: National Cancer Institute, National Institute of Diabetes and Digestive and Kidney Diseases. Contact:

**Ms. Sheridan Hill-Ellis**  
**The Mayatech Corporation**  
**Telephone: 301-929-6800**

### ANNOUNCEMENTS



Grant applications for **NATIONAL GLAUCOMA RESEARCH** will be accepted for 1 year, \$25,000 maximum, renewable. The deadline date for submission of applications is 30 November 1990. Write to:

**American Health Assistance Foundation  
Research Grants Department  
15825 Shady Grove Road, Suite 140  
Rockville, MD 20850**



Grant applications for starter grants for **CORONARY HEART DISEASE RESEARCH** will be accepted for 1 year with a limit of \$15,000 (renewable). The deadline date for submission of applications is 30 November 1990. Write to:

**American Health Assistance Foundation  
Research Grants Department  
15825 Shady Grove Road, Suite 140  
Rockville, MD 20850**

### ANNOUNCEMENTS

#### WORKSHOP ON GENERAL POPULATION EXPOSURES TO GASOLINE

Sponsored by the American Petroleum Institute, U.S. Environmental Protection Agency, Motor Vehicle Manufacturers Association, Northeast States for Coordinated Air Use Management (NESCAUM), National Petroleum Refinery Association, Western States Petroleum Association, Health Effects Institute (HEI), and the Canadian Petroleum Products Institute (CPPI).

#### CALL FOR DATA CALL FOR PAPERS

There is increasing debate among public health officials about exposure to gasoline. A 2 1/2-day workshop is planned for 12 to 14 December 1990 in Annapolis, Maryland, to facilitate discussion among scientists, managers, and policymakers in the public and private sectors about general population exposures to gasoline or constituents thereof (excluding combustion products or smog). The workshop will highlight new data on gasoline exposures and examine new strategies for analyzing exposure. The product will be a compilation of peer-reviewed papers and an executive summary to inform regulatory decision-makers as they consider possible reduction strategies for gasoline exposures. We are seeking submissions of data (for incorporation into a background paper currently in preparation) or presentations of data on nonoccupational gasoline exposures. Please emphasize the database available.

Deadline for submission of abstracts (200 to 300 words) and/or data is 1 October 1990.

Registration is open; fee is \$150. To submit abstracts and/or data and to obtain further information about the workshop, contact: **Dr. Karen L. Hulebak, Environ International Corporation, 4350 North Fairfax Drive, Arlington, VA 22203.** Telephone: 703-516-2300. FAX: 703-516-2345.

### SITUATIONS WANTED

**BIOCHEMIST, Ph.D. (1988).** Experienced in electrophoresis, Western blot, purification of protein, enzymes, monoclonal and polyclonal antibodies. Industrial/government position. **Box 91, SCIENCE.**

**CELL BIOLOGIST, Ph.D. (1990).** Teaching/post-doctoral experience. Seeks instructor position (introductory biology, cell biology, histology) at liberal arts college. **Box 92, SCIENCE.**

**IMMUNOLOGIST, Ph.D.** Tenured associate professor in medical school wishes to change career into industry, etc. Experience: many areas of immunology. **Box 90, SCIENCE.**

**MOLECULAR BIOTECHNOLOGIST, M.S.** Strong practical experience in molecular biology. Seeks technical sales/marketing or C.R.A. position, pharmaceutical/biotechnology firm. Will relocate. **BOX 93, SCIENCE.**

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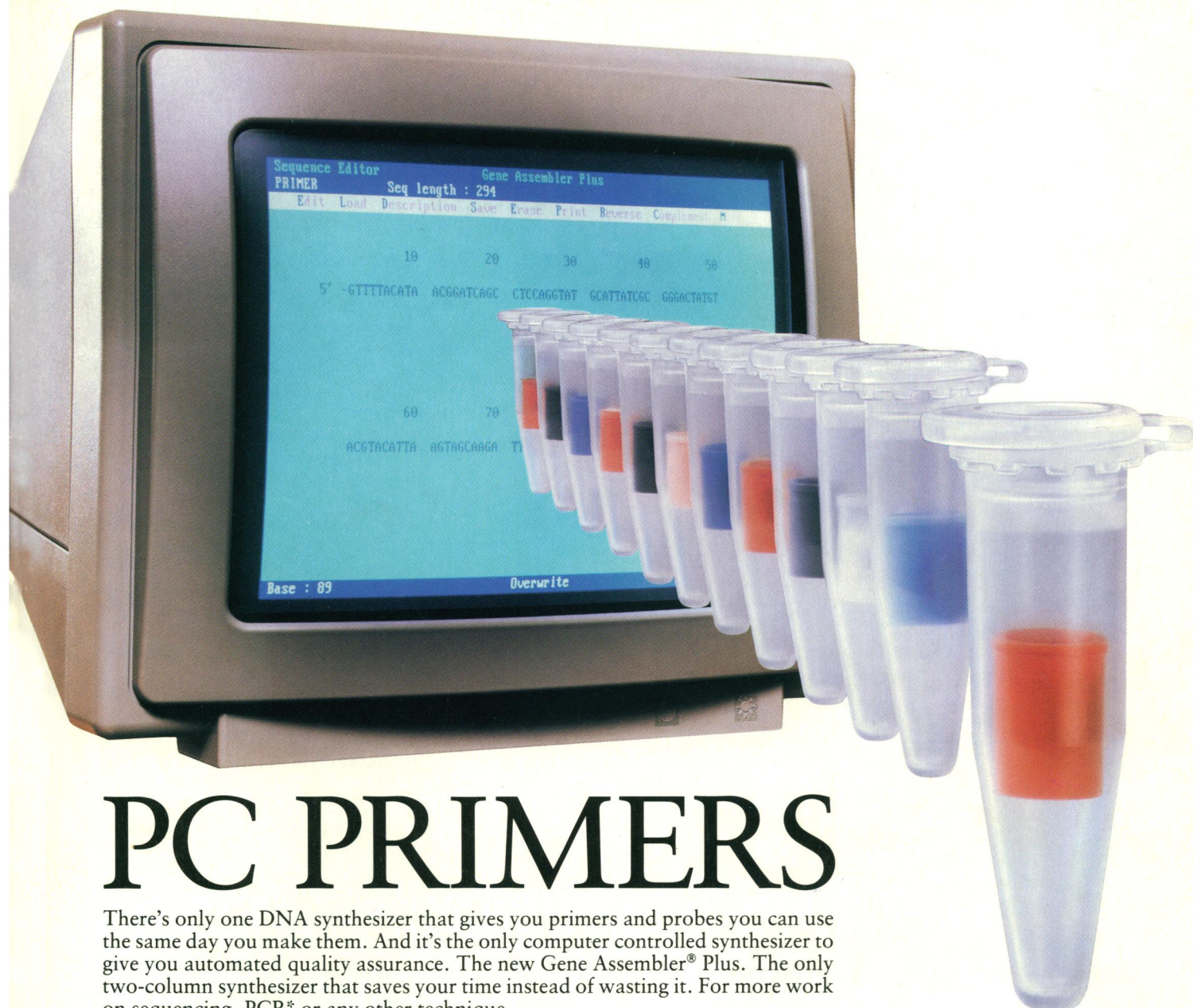
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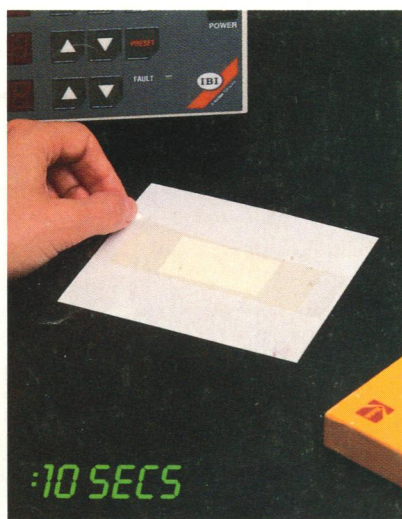
Head office Sweden Tel 46 (0)18 163000 Australia Tel 61 (0)2 8883622 Austria Tel (0222) 6866250 Belgium Tel (02) 2424660 Brazil Tel 011-2889122 Canada Tel (514) 4576661 Denmark Tel 42 265200  
Federal Republic of Germany Tel 49 (0)761 49030 Finland Tel (90) 5021077 France Tel 1-30 643400 Great Britain Tel (0908) 661101 Holland Tel 0348077911 India Tel (0812) 269631 Italy Tel 02 273221  
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# Now ultra-sensitive detection of Western Blots takes less than a minute.



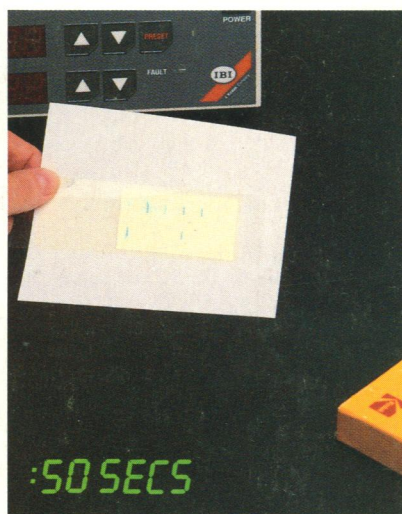
Western hybridized with peroxidase linked antibody.



Overlay web under ordinary room light.



Develop image at lab bench.



Final record.

## IBI introduces Enzygraphic™ Web\* A revolutionary new detection method without radioactivity.

It's a breakthrough! With new Enzygraphic Web, you just process your Western in the usual manner using peroxidase linked antibody as your secondary probe to localize your target protein.

Then overlay Enzygraphic Web on your Western under ordinary room light for detection and amplification of your target protein in a single step.

The target band rapidly appears on the web by electron transfer via peroxidase linked probe to the unique web detection system. Result: you get ultra-sensitive detection of Westerns in less than a minute without radioactive probes.

### Ultra-Sensitive:

- More sensitive than radioactive methods using  $^{125}\text{I}$  labeled probes.
- More sensitive than existing colorimetric methods using peroxidase or alkaline phosphatase linked probes.

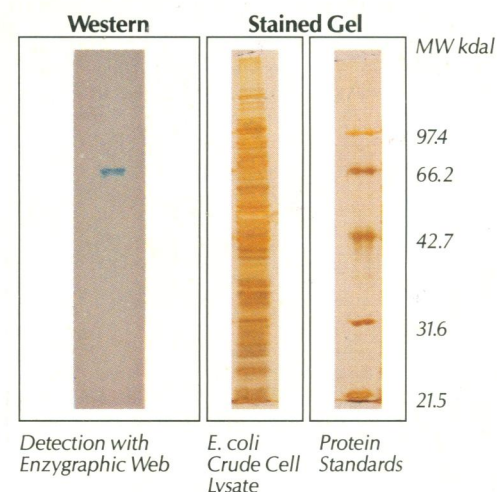
### Ultra-Fast:

- Image development time is reduced from hours to less than a minute.
- Preparation of alkaline phosphatase or peroxidase substrates is eliminated.
- Detection time is much less than with  $^{125}\text{I}$  labeled probes.

### Ultra-Safe:

- Use of radioactive probes is eliminated.

Enzygraphic Web is available in high sensitivity or rapid screening versions in 15-count boxes of 4" x 5" sheets. Order today from our exclusive distributor, VWR Scientific. Or call IBI Technical Services at (800) 243-2555 for more information.



Detection by Enzygraphic Web of fusion protein expressed by the IBI FLAG™ vector.



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\*Patent Pending

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