

responsible for the resurgent interest in thermoluminescence dating; only in the last few years has the technique been picked up again in the West. A chapter dealing with the method would have been a welcome addition to the book.

In keeping with its complexity, the story is still developing. Major differences of interpretation remain, particularly on the extent of Arctic-shelf glaciation and the nature of the mid-Valdai nonglacial interval. The paleobiological evidence is essentially restricted to the last interglaciation and the last 15,000 to 20,000 years; even there only the last 12,000 years or so are adequately dated. Climatic change may have been more extreme in the U.S.S.R. than in most extra-glacial areas of North America, but the quantification of full-glacial climates is hampered by there having been floral assemblages that lack modern analogues. A circulation regime fundamentally different from that of the Holocene must have dominated the Soviet Union during glacial maxima.

An overview volume of this nature can only hope to convey the general concepts currently favored by the host country. In this regard, the book serves its purpose admirably. Those wishing to pursue a selected topic may wish that the editors had indicated the original language of each reference (Russian titles are translated). The English-language editors provide a helpful ten-page introduction that encapsulates the ideas presented in the individual chapters. All Quaternary scientists should at least read those few pages to learn how their Soviet counterparts have reconstructed the events that so altered their vast country in the recent geological past.

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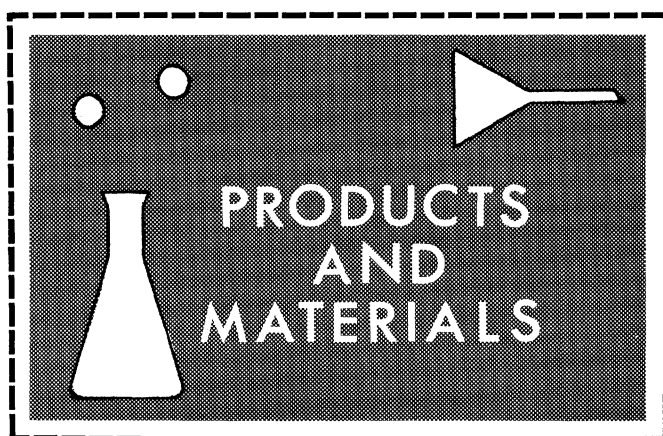
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Exonuclease

Bacteriophage T7 gene 6 exonuclease is a 5'-3' enzyme with a strong preference for double-stranded DNA. Purified by the method of Engler and Richardson, the enzyme is more than 98 percent pure. Each lot is tested to ensure that it has no endonuclease activity. The amino acid sequence of T7 gene 6 exonuclease is known and its molecular weight is approximately 38,000. It acts on 5'-phosphoryl, 5'-triphosphoryl, or 5'-hydroxyl termini and nicks. It hydrolyzes oligoribonucleotide primers hybridized to DNA and it acts in a distributive manner. Products of hydrolysis are 5'-mononucleotides and single-stranded DNA. However, it releases a dinucleoside monophosphate if the starting terminus is a 5'-hydroxyl. United States Biochemical. Circle 626.

Microbiology Computer System

MC² generates a diagnostic, therapeutic, research and administrative data base in the microbiology laboratory. Sample reports include organism distributions, nosocomial organism monthly trend, antibiotic pattern, susceptible percentage, and patient/subject reports. Data may be input from a variety of sources and instruments and may be manipulated and analyzed statistically. Best suited to hospital environments, the system could be adapted to a research facility to integrate the results of several investigators to link usually unrelated projects. Laboratory Consulting. Circle 610.

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 (on pages 1254A and 1342A) and placing it in a mailbox. Postage is free.

—RICHARD G. SOMMER

Automated Sample Processing

The IQ 190 PS preparation station automates liquid-handling procedures where pipetting, diluting, timed addition of reagents, sample aliquoting, or serial dilution are required. The instrument is fully automated to operate unattended. Project applications are developed with menu-driven software. All manipulations are programmed stepwise for maximum accuracy and precision; a liquid-sensing probe and wash station minimize carry-over. Cavo Scientific Instruments. Circle 611.

Laboratory Ovens

The Precision HTM series comprises four models. The model number indicates the capacity (in liters) of the working chamber: HTM 55, HTM 85, HTM 115, and HTM 150. These Type IIA ovens meet ASTM E 145 test standards. They feature microprocessor control and platinum temperature sensors. They operate at temperatures from ambient plus 5°C to 300°C and a high-limit thermostat provides protection against overruns. Oven floors are solid to facilitate clean-up of spills. GCA/Instruments and Equipment Group. Circle 605.

Benchtop Fermentor

The Omni-Culture Chemostat is suited for continuous growth of anaerobic or aerobic organisms and may be adapted for cell culturing applications. It provides accurate reproducible data and regulates temperature, agitation, flow of filtered air or gas, and transfer of medium. It is designed to maintain sterility throughout prolonged research studies. All components that come into contact with fermentation liquids are made of materials that are nontoxic, noncorrosive, and repeatedly autoclavable. Con-

tinuous volume is maintained with overflow sidearm vessels available in volumes of 600 and 1400 ml. Their contents may be sampled easily. VirTis. Circle 630.

Replaceable Junction pH Electrodes

A combination pH electrode with replaceable sleeve junction is available. Accurate readings may be obtained in samples of extremely low conductivity (<5 microsiemens). The sleeve junction arrangement maintains a 1-mm space between the pH-sensing membrane and the reference liquid junction. The easy replacement of a junction immediately solves the problems of clogged electrodes in solutions that are difficult to analyze. Electrolyte is easily added at the liquid junction, too. Markson Science. Circle 606.

Liquid Scintillation Analyzer

The Tri-Carb 2000CA features spectrum unfolding, three-dimensional spectrum analysis, efficiency tracing, and transformed spectral index and pattern recognition to enhance the results of counting. These techniques are routinely programmable along with older standard methods. A large library of software exists to drive several hardware options so that the user may design and automate his/her own analyzer and easily upgrade it as new methods or equipment are developed. Packard Instrument. Circle 607.

Heatable Plastic Beakers

Nalgene Type HP beakers are made of Teflon PFA and graphite. They withstand a hot plate's maximum temperature while heating aggressive liquids. They are shatterproof and noncontaminating. They are useful for procedures such as sample digestion, dissolution, etching silicon with hydrofluoric acid, heating corrosives, and much more. They withstand temperatures from -250°C to +250°C. Nalge. Circle 632.

Fluorescence Microscope

The Fluovert is focused through a lower optic system like an inverted microscope but physically resembles the upright microscope for user comfort. It features an integrated ploemopak illuminator for housing various filter cubes.

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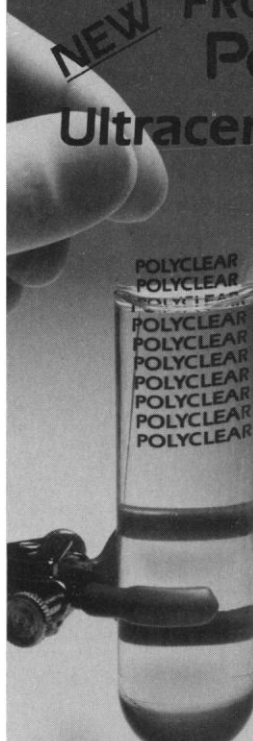
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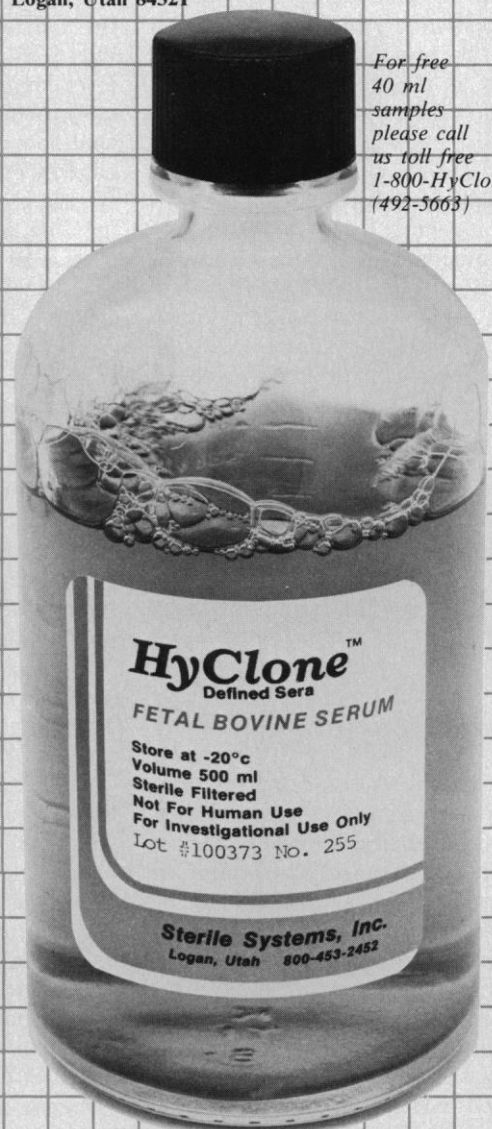
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Peptide Synthesizer

Model 9500 rapidly delivers multigram quantities of peptide. Features include multiaccess amino acid reservoirs and nondestructive resin agitation by a gentle stream of nitrogen. This allows the use of low cross-linked resins which results in higher yields of longer peptides. Multiwindow software contains all necessary chemical protocols and calculates amounts of all reagents required for synthesis. The controlling microprocessor may be freed for data analysis by downloading operating protocols. No special training in programming or peptide chemistry is required of the operator. Biosearch. Circle 631.

Cloning and Expression System

The Protoclone GT system is a lambda gt11 cloning and expression system which is useful in the construction of complementary DNA libraries. Advantages over cloning with plasmid vectors include high cloning efficiency (approximately 10^7 plaque-forming units per microgram) and the production of a high percentage of insert-containing clones. It is not necessary to pass recombinants through a DNA-modifying strain prior to screening. A positive control insert is included with each lot. Promega Biotec. Circle 629.

Centrifuges

A line is offered that comprises four models including ambient and refrigerated, benchtop, and floor models. Each is designed with a range of features for typical laboratory applications. Analog operation renders each centrifuge easy to operate. Reproducible rotor speeds range up to 15,000 revolutions per minute and may be controlled to within 10 revolutions per minute. Tube counterbalancing is not required. Temperature is maintained during spin to within 1°C in rotary buckets. Safety features include a positive latch that prevents opening of the lid during spin. Iso-Data. Circle 633.

DNA Synthesizer

System 1 Plus provides automated synthesis of single-stranded DNA. It offers fast production of hybridization probes as well as accurate synthesis of mutagenesis primers. The unit is controlled by an IBM PC/XT control module and data may be entered with keyboard or light pen. Ninety-nine base additions may be programmed in the 5' to 3' direction. Nucleotides are linked with phosphoramidite chemistry for high yields. Cycle time is less than 15 minutes. All steps are automated: deblocking, condensation, oxidation, and capping. Beckman Instruments. Circle 634.

Gas Chromatograph

Model 3500 is a high resolution, capillary gas chromatograph designed for use with inert capillary fused silica columns. Cross talk between the column oven and the injector and detector ovens is minimized. Electronic pressure readout allows easy reproduction of flows specifically for split/splitless injection. It offers split flow readout and column (calculated) flow readout. A standby temperature feature eliminates need for daily clean-up. The detector electronics time constant is 50 msec. Hydrogen may be used as a carrier gas. Varian, Instrument Group. Circle 635.

Literature

Plasticware details a complete line for all scientific and research applications. Mallinckrodt. Circle 616.

Liquid Chromatography is a product guide oriented to use of LC techniques for analytical, preparative, and process purification. YMC. Circle 617.

Biomedical Imaging describes products for autoradiography, electron microscopy, processing, and safelighting. Eastman Kodak. Circle 619.

Syringes is devoted to the Microliter line of liquid-handling products for chromatography. Hamilton. Circle 620.

Benchtop Reactor describes the Mouse, a bioreactor for fermentation, and cell culture with an integral computer. Queue Systems. Circle 621.

Laboratory Products offers TLC, HPLC, balances, filtration membranes, pH electrodes, and more. Whatman Lab-Sales. Circle 622.

Inverse Microscopes features the full line of optical apparatus for use in transmitted-light applications. Carl Zeiss. Circle 623.

AAAS NEWS

(Continued from page 1303)

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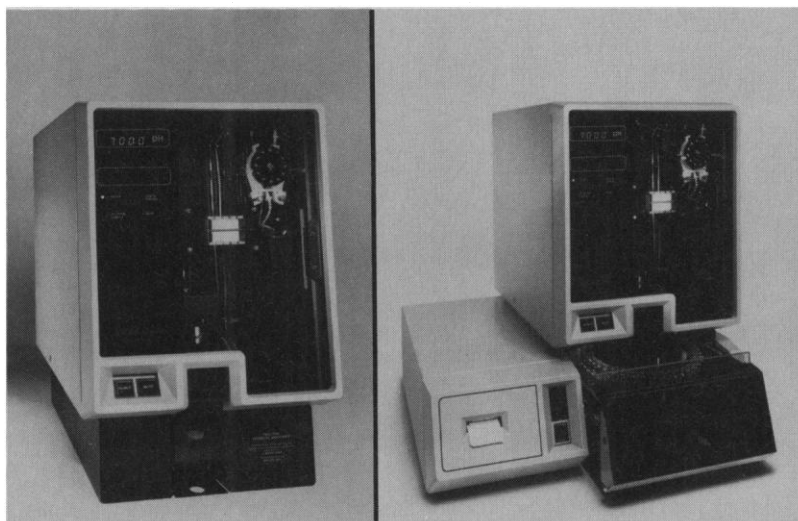
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SCIENCE

Posters

The following posters of *Science* covers are available:

- 30 March 1979, Tropical flowering tree;
- 23 February 1983, Landsat photo of Detroit, Michigan;
- 29 July 1983, Cheetah;
- 2 December 1983, Snowshoe hare;
- 23 December 1983, Cathedral window/DNA molecule.

Combination of space covers in scroll format: 1 June 1979, 23 November 1979, 10 April 1981.

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Reception and Prize Honor Abelson

Past and present editorial board members, reviewers, authors, editorial and Association staff, and members of the science and technology community came together at a reception on 8 March to honor Philip H. Abelson. The reception, hosted by the AAAS Board of Directors and the Secretary of the Smithsonian Institution, was held at the Smithsonian.

Abelson, who retired at the end of 1984 after 22 years as editor of *Science*, said he believed that he had had the "best job in the world . . . providing a special opportunity and incitement for life-long learning." Noting the international readership of *Science*, Abelson described being able to go anywhere in

the world and meet with people whose lives have been touched by *Science*.

He did, however, have a lighthearted word of advice for Daniel E. Koshland, Jr., current editor of *Science*. Abelson explained that authors of articles receive the fan letters and the editor gets the complaints. However, he said, Koshland should not worry unless he stops hearing from the complainers!

Anna J. Harrison, chairman of the Board of Directors, announced the establishment of the Philip Hauge Abelson Prize. The Prize will be awarded, beginning next year, to a public servant in recognition of exceptional contributions to the advancement of science or to a scientist whose career has been distinguished both for scientific achievement and for other notable services to the scientific community of the United States.

Western Scientists Meet in Montana

Topics from bioethics to the origins of dinosaurs in North America will be featured at the 60th annual meeting of the Pacific Division on the campus of the University of Montana at Missoula, 9-14 June.

Some of the symposia will be those on Environmental Risk: Public Perception versus Cleanup Costs; Bioethics; Organismic Speciation; Plant Molecular Genetics; Suspect Terranes; and Dinosaur Origins.

Workshops will be held on Nuclear



Philip H. Abelson (center) chats with AAAS Board Chairman Anna J. Harrison and Robert McC. Adams, secretary of the Smithsonian Institution, at reception to honor former *Science* editor.

Winter and Human Survival—What Can Scientists Do?; Recruiting and Retaining Native American Students in the Sciences; and Science and Technology as if Women Matter.

An illustrated public lecture, "Ecology and Physiography of Glacier National Park, Montana," will be presented by J. Gordon Edwards of San Jose State University. Other special lectures will be by Kathleen Ahlenslager, University of Montana, on "Rocky Mountain Flora," and the presidential address by Walter H. Gardner, Washington State University, on "Growth of Understanding of the Physics of Soil and Water, the Earth's Most Critical Resources—A Historical Perspective."

Field trips are planned to Flathead Lake, a bison range, St. Ignatius Mission, Beaver Creek, and Glacier National Park. Students and teachers can register and receive two credits by attending the Pacific Division Meeting and a special lecture-discussion series.

In 1986 the Pacific Division will hold a joint meeting with the AAAS Arctic Division in Vancouver, British Columbia, 8–13 June.

For further information, contact Alan E. Leviton, Pacific Division, AAAS, c/o California Academy of Sciences, Golden Gate Park, San Francisco, California 94118, or call 415-752-1554.

AAAS Travelers

AAAS has been invited to be represented at the 41st annual session of the Sri Lanka Association for the Advancement of Science. It will be held in Colombo, 9–13 December 1985. The AAAS representative will be invited to deliver a special lecture to the relevant section of the Association.

AAAS members who plan to be in the area at that time and might be interested in participating on behalf of AAAS should contact Denise Weiner, Office of International Science, at the AAAS address, no later than 1 July 1985. Please include a curriculum vitae. No funds for international travel are available; however, partial support (local costs and travel within Sri Lanka) will be provided.

For more information about the activities and publications described in "AAAS News," write to the appropriate office, AAAS, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036, unless otherwise indicated.

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Environmental Toxicologist/Teratologist. Ph.D. Postdoctoral training and more than 10 years of environmental contaminant research experience in avian and mammalian toxicology, teratology, and biochemistry. Many publications. Seeks research position in environmental conservation oriented program or avian sciences. Box 123, SCIENCE. 6/14, 21

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ASSISTANT PROFESSOR BIOCHEMISTRY/MOLECULAR BIOLOGY

The Department of Biochemistry at West Virginia University, School of Medicine, invites applications for a 12-month, tenure-track appointment to commence 1 January 1986. Applications from all areas of molecular biology are encouraged, but preference will be given to those employing state-of-the-art recombinant DNA technology to study mammalian development and/or differentiation. Responsibilities will include participation in graduate level instruction and development of an extramurally funded research program. Applicants should submit curriculum vitae, brief statement of research interests, and have three letters of reference forwarded to: Dr. Rolf F. Kletzien, Biochemistry Search Committee, Department of Biochemistry, West Virginia University School of Medicine, Morgantown, W.Va. 26506. Deadline for applications is 15 July 1985.

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ASSISTANT RESEARCH PHYSICIST OR ASTRONOMER Space Sciences Laboratory, University of California (UC), Berkeley

The Space Astrophysics Group has an opening for an assistant research physicist or astronomer (in accordance with UC academic salary scales) on the Extreme Ultraviolet Explorer (EUVE) Project, effective 1 August 1985. The major responsibilities of the position include providing innovative technical support in all aspects of EUV microchannel plate detector calibration, design, specification, and development of test procedures. Will also assist in the design and development of EUV photocathodes and filters. A Ph.D. in physics or astronomy plus 4 years of experience in high-energy space instrumentation are required. Recent experience with microchannel plate detectors, filters, and EUV instrumentation is helpful with some knowledge of photocathodes desired.

Please send résumé and three letters of recommendation by 30 June to:

Professor Stuart Bowyer
Space Sciences Laboratory
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The Department of Immunology and Infectious Diseases of The Johns Hopkins University (JHU) School of Hygiene and Public Health (an Equal Opportunity Employer) has openings, at the **ASSISTANT PROFESSOR** level, in the areas of (i) immunology (cellular or/and molecular), (ii) parasitic diseases, (iii) vector biology, and, at the **RESEARCH ASSOCIATE** level, in the area of (iv) molecular virology. All applicants should hold a doctoral degree and have a record of research accomplishments. Those applying for positions as assistant professor should be committed to develop or continue active research programs and be prepared to teach at the graduate level. Those applying for the position of research associate should have expertise in molecular biology techniques and be prepared to work on disease-related problems with human polyomaviruses and papillomaviruses; one or more years of postdoctoral experience preferred. Send letter of application, curriculum vitae, description of research goals and interests, and the names of three references by 12 July 1985 to: Dr. Noel R. Rose, Chairman, Department of Immunology and Infectious Diseases, JHU School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, Md. 21205.

ASSISTANT PROFESSOR OF PHYSIOLOGY

The Department of Physiology invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR**. The candidate must be willing and able to teach in any of those areas of physiology that are taught to medical students. Preference will be given to candidates that have a research interest in the field of respiratory physiology. Send curriculum vitae giving specific research interest and the names of three references to: Dr. Robert W. Rasch, Chairman, Box 19780A, Quillen-Dishner College of Medicine, East Tennessee State University, Johnson City, Tenn. 37614. East Tennessee State University is an Equal Opportunity/Affirmative Action Employer and actively seeks the candidacy of minorities and women.

The University of Michigan, Ann Arbor, invites applications for an **ASSISTANT, ASSOCIATE, OR FULL PROFESSORSHIP** in the area of **ORGANIC CHEMISTRY**. This position will be with the Department of Chemistry and the Macromolecular Research Center. Applicants should have demonstrated capability for high-quality research in the area of macromolecular synthetic chemistry and the potential for leadership in the area of macromolecular science generally. Some interest in the synthetic biopolymer area is desirable. The position is centered in the Chemistry Department. Submit a résumé, a brief summary of pre- and postdoctoral research, a list of publications, and a summary of research interests; also have three letters of recommendation forwarded to: Professor Arthur J. Ashe III, Chairman, Department of Chemistry, The University of Michigan, Ann Arbor, Michigan 48109. A nondiscriminatory, Affirmative Action Employer.

ASSISTANT RESEARCH PHYSICIST OR ASTRONOMER SPACE SCIENCES LABORATORY, UNIVERSITY OF CALIFORNIA (UC), BERKELEY

EUV SPECTROSCOPY. The Space Sciences Laboratory of the University of California at Berkeley has an opening for an assistant research astronomer or physicist (in accordance with UC academic salary scales). The position is for 3 years with a high likelihood of extension and will begin 1 August 1985. The major responsibility for the position will be the development of EUV spectrometers for an astronomy satellite. A Ph.D. in physics or astronomy with experience in space instrumentation is required. Laboratory experience with x-ray and EUV reflection gratings spectrometers, development of raytracing and optical design codes, and optical testing techniques is required.

Send résumé and three letters of recommendation by 30 June 1985 to:

Professor C. S. Bowyer
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WEED SCIENCE RESEARCH
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ARS is seeking a Plant Physiologist who will be responsible for conducting research on the physiological and biochemical basis for the action of natural and synthetic bioactive compounds on the growth, reproduction, and competitiveness of perennial weeds. Will conduct physiological and biochemical research that provides essential information on the role, effects and fate of plant bioregulators that can reduce or modify the capacity of perennial weeds to survive and grow; and on those aspects of storage deposition, mobilization and expression of meristematic growth critical to their survival. Candidates must have a knowledge of plant physiology, plant biochemistry and plant bioregulators; skill in physiological measurement and plant metabolite and bioregulator isolation and quantitation. Must also possess the ability to interpret and report research findings, skill in radioisotope theory and use and in statistical analysis. A Ph.D. is desired. Must be a U.S. Citizen. Salary is commensurate with experience—GS-11 (\$26,381–\$34,292) or GS-12 (\$31,619–\$41,105).

For information on the research program/position contact Dr. R. H. Hodgson, 301-663-2922. For information on application procedures/forms contact Alice MacNamara, 301-344-2944. Applications in response to this advertisement should be marked LSR-400-5-0070 (E03). Applications should be sent to: Special Examining Unit, ARS, USDA, Room 409, Bldg. 003, BARC-West, Beltsville, MD 20705. Applications must be received by June 28, 1985.

USDA IS AN EQUAL OPPORTUNITY EMPLOYER.
WOMEN AND MINORITIES ARE URGED TO APPLY.

Postdoctoral Scientist - Organic

The Synthetic Chemistry Department of SK&F Laboratories is seeking an organic chemist to participate in the development of new synthetic methodologies for the synthesis of various heterocyclic molecules. The successful candidate must have a Ph.D. in Organic Chemistry and experience in spectroscopic techniques.

Postdoctoral positions are one year assignments renewable for a second year upon mutual agreement.

Presently located in Philadelphia, the Department will be relocating to a new, state-of-the-art research complex near Valley Forge, PA. We offer an excellent salary, benefits, and relocation package. Interested candidates should forward their c.v. to George P. Kissell, Manager of Personnel Relations, SK&F Laboratories, 1574 Spring Garden Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/H/V.

SK&F
A SmithKline Beckman Company

CNS Pharmacologist

An opportunity to join Pfizer's Neuroscience research section exists for a highly qualified neuropharmacologist. The successful candidate will join a team of scientists who are using advanced imaging and behavioral techniques to study psychosis and depression.

A PhD in Neuropharmacology or Neuroscience with 1 or 2 years post-doctoral research experience in behavioral pharmacology are required. You must also be conversant with current concepts of biochemical neuropharmacology and neurochemistry and possess strong oral and written communication skills. Experience with computer programming and automated behavioral equipment will be an advantage.

A strong motivation to participate in applied, drug-discovery oriented research will be expected. The ability to work as a team member and to set laboratory priorities in accordance with the goals of the Neuroscience section will be essential.

Immediate responsibilities will include the operation of a fully-automated multipurpose behavioral laboratory and participation in the research efforts of the antidepressant and antipsychotic projects. Interpretation and integration of behavioral data with those from other laboratories will be an important responsibility. Original research leading to the establishment of novel approaches for the discovery of psychotherapeutic agents will be expected.

This position offers an excellent opportunity for professional recognition and career growth. We offer an excellent salary, benefit and relocation package plus an attractive southeastern Connecticut shore location. Qualified applicants should submit their resume, including the names, addresses and phone numbers of three professional references, to: **Dr. J.K. Larson, Manager of Employment, Pfizer Central Research, Eastern Point Road, Groton, CT 06340.**

Pfizer

An equal opportunity employer



PHARMACEUTICAL RESEARCH

PRE-CLINICAL

Program expansion has created the following vacancies at the US subsidiary of a world leader in drug discovery.

PHARMACOLOGY

BS/MS Neuropharmacology to join Central Nervous System group whose goal is discovery of novel drugs for treatment of mental disorders. Demonstrated competence in operant behavioral research, stereotaxic research, neuroanatomy advantageous.

PhD Pharmacology to join Osteoarthritis group evaluating drug candidates *in vivo*. Competence in proteoglycan biochemistry, enzyme purification, and protease assay systems.

BS/MS in biology or chemistry to join Receptor & Autonomic group as Neurochemical Pharmacologist with hands-on experience neurobiology, preferably drug receptor interactions at molecular level. Familiarity with catecholamine metabolism and HPLC analysis advantageous.

TOXICOLOGY

MS in Biology, Toxicology, or Pharmacology with 2-5 years experience in General Tox, including acute and chronic studies in rodents and non-rodents. Demonstrated ability to write protocols and familiarity with GCP's, SOP's and relevant data processing systems.

MEDICINAL CHEMISTRY

BS/MS in organic to act as experimental support worker in synthesis and characterization of drug candidates under direction of Senior Chemist. Renal project, to identify isokalemic diuretics as potential compounds.

Modern laboratories in suburban setting 25 miles south of Philadelphia. Competitive salary and benefits. Tuition aid for relevant graduate study. Please submit resume in confidence. Principals only. Charles T. Brodigan, Associate Employment Manager, Stuart Pharmaceuticals, Wilmington, DE 19897



STUART PHARMACEUTICALS | Div. of ICI Americas Inc.
WILMINGTON, DELAWARE 19897

POSITIONS OPEN

ASSISTANT PROFESSOR, MICROBIOLOGIST. The Southeastern College of Osteopathic Medicine (SECOM) invites applications for a faculty position in microbiology. The successful candidate will be expected to teach courses in virology and mycology, help supervise microbiology teaching laboratories, and pursue individual research interests. Please submit a letter of application, a résumé, and three letters of reference to: **Dr. Harold E. Laubach, Chairman, Department of Microbiology, Southeastern College of Osteopathic Medicine, 1750 Northeast 168 Street, North Miami Beach, Fla. 33162.** SECOM is an Affirmative Action/Equal Opportunity Institution.

ASSISTANT OR ASSOCIATE PROFESSOR OF PATHOLOGY positions available in the Department of Pathology of the George Washington University Medical Center, Washington, D.C. Two full-time faculty positions are available for individuals with training and experience in academic pathology: (i) clinical pathologist with expertise in clinical microbiology and (ii) experimental pathologist capable of maintaining research program and support. Candidates should be M.D.'s with Board-certification or -eligibility. Teaching responsibilities involve medical students and residents. Send curriculum vitae and bibliographies to: **Dr. H. Sidransky, Chairman, Department of Pathology, The George Washington University Medical Center, 2300 Eye Street, NW Washington, D.C. 20037.** Equal Opportunity Employer.

ASSISTANT PROFESSOR, PEDIATRICS

Ph.D. cell biologist to perform independent and collaborative research, to supervise Pediatric Infectious Disease Division Electron Microscopy Laboratory, and teach under possible joint appointment. Must have background, ability, and commitment to secure joint appointment in Department of Anatomy based on independent review. Must have comprehensive knowledge of transmission and scanning electron microscopy including freeze-fracture techniques. Familiarity with organ culture and other model systems for evaluation of injury to respiratory epithelium by infectious agents and air pollutants and skills in mycoplasmaology are desirable. Contact: **Albert M. Collier, M.D., Department of Pediatrics, University of North Carolina, Chapel Hill, N.C. 27514.** Deadline: 15 July 1985. *Women and minorities are encouraged to voluntarily identify themselves. The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT RESEARCH SCIENTIST position open starting 1 July 1985 in the Cardiovascular Division, Department of Medicine. Applicant should be able to identify important questions and perform experiments independently on the interaction of vasopressin with nonadrenergic mechanisms in the control of arterial pressure. Requirements include: (i) doctorate in physiology (cardiovascular) with at least 2 years of postdoctoral training; (ii) experience and training in the use of HPLC and EC to measure catecholamines and their metabolites is vital; experience with various techniques for stimulation (brain-neurophysiology) and neuroanatomy is essential; experience in the use of various techniques to assess neurotransmitter biosynthesis and utilization in vivo, small animal surgical techniques, and familiarity with anatomy of the CNS and peripheral autonomic nervous system; experience with pharmacokinetics and in vivo metabolism of neurotransmitters would be desirable; (iii) experience with various models of experimental hypertension; and (iv) published evidence of ability to function as an independent investigator. Salary: \$23,000; 40 hours per week. Send résumé to: **Iowa Department of Job Service, 1810 Lower Muscatine Road, P.O. Box 2477, Iowa City, Iowa 52244.** An Equal Opportunity/Affirmative Action Employer. Job Number 1581283.

The Department of Human Genetics, University of Utah School of Medicine, seeks applicant for a position at the **ASSOCIATE PROFESSOR OR PROFESSOR** level. The successful applicant should have strength in epidemiological methods and be able to design and execute epidemiological studies. An established track record in the genetics and epidemiology of coronary heart disease is required. It is anticipated that the successful candidate will participate in ongoing efforts in computerized record linking. Please address inquiries to: **Raymond L. White, Ph.D., Chairman, Department of Human Genetics, University of Utah School of Medicine, Salt Lake City, Utah 84132.** Deadline is 28 June 1985. Applications submitted after the deadline will be accepted if no qualified candidate has been found. *The University of Utah is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSOCIATE DIRECTOR FOR ACRC DIRECTOR FOR RESEARCH

The University of Arkansas Health Sciences Campus is seeking a director for research for newly organized Arkansas Cancer Research Center (ACRC). Can be M.D. or Ph.D. Must have extensive research and teaching experience. Individual must qualify for full-time academic appointment at associate or professor level. Send curriculum vitae with inquiries to: **Dr. D. H. Berry, Chairman, Search Committee, Professor of Pediatrics, Arkansas Children's Hospital, Hematology/Oncology, 804 Wolfe Street, Little Rock, Arkansas 72201.** This is an Affirmative Action/Equal Opportunity Employer. The deadline for applications is 1 August 1985.

BEHAVIORAL NEUROSCIENTIST

In conjunction with its development of a Behavioral Neuroscience Program, the Biopsychology Doctoral Subprogram at Hunter College of the City University of New York (CUNY) invites applications for a tenure-track appointment at the assistant or associate professor level. We are particularly interested in scientists whose work is directed at understanding the relationship between neurochemical/neurophysiological processes and the behavior of organisms. The program is interdisciplinary and offers comparative and developmental perspectives on behavior in order to illuminate the mechanisms which make possible adaptation, reproduction, and evolution.

Applicants should submit curriculum vitae, including experience directing student training and research, names and addresses of three references, and a brief statement of current and future research to:

**Dr. Stanley Novak, Chairperson
Department of Psychology
Hunter College of CUNY
Box Number 389
695 Park Avenue
New York, N.Y. 10021**
*Equal Opportunity/Affirmative
Action Employer, M/F*

BIOLOGY

Carroll College, a small, Catholic, 4-year, liberal arts college is seeking a biologist for a full-time teaching position in zoology, vertebrate embryology, and genetics. Ph.D. and teaching experience required. Seeking a person to lend leadership in an established undergraduate premedical program. Requires advising of preprofessional students and an operational knowledge of medical school admission processes. Academic rank and salary negotiable. Starting date: 22 August 1985.

Send letter of application, résumé, official transcripts of all graduate work, and at least three letters of reference from persons who can speak for the applicant's professional and academic qualifications to: **Vice President for Academic Affairs, Carroll College, Helena, Mont. 59625.** Application deadline: 1 July 1985. *Carroll College is an Equal Opportunity/Affirmative Action Employer.*

CANCER RESEARCH

The AMC Cancer Research Center seeks to expand its laboratory and clinical research programs. Individuals at all levels, from postdoctoral fellows to department chairmen, will be considered. Current interests include tumor cell biology, tumor immunology, experimental hematology, monoclonal antibodies, cell kinetics, nucleic acid metabolism, nuclear magnetic resonance imaging, as well as clinical and national community research and control programs. Scientists (assistant professor equivalent) will be expected to vigorously develop independent research. Senior faculty must be of national prominence and hold significant external funding. Opportunities exist for collaboration and growth. Facilities, equipment, and initial research support are available. Clinical resources on campus include a 32-bed inpatient unit, outpatient clinics, and services. Individuals with interests bridging laboratory and clinical cancer research are particularly sought. Send curriculum vitae and other pertinent information to:

**Dr. Philip Furmanskij
Associate Director
AMC Cancer Research Center
1600 Pierce Street
Denver, Colorado 80214**

POSITIONS OPEN

BIOMEDICAL ENGINEER. U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Beltsville Human Nutrition Research Center, Energy and Protein Nutrition Laboratory, Beltsville, Maryland, is seeking a **biomedical engineer** to be responsible for engineering and computer aspects of the continuing development and operation of a large direct/indirect human calorimeter chamber and a small animal calorimeter. Will serve as lead or collaborating scientist in nutritional studies with human volunteers and animals (dogs) in research on human energy requirements and metabolism. Experience in computer interfacing and programming (FORTRAN, and so forth) and in telemetric monitoring desirable. Ph.D. in biomedical engineering or electrical engineering preferred. Must be U.S. citizen. Salary is commensurate with experience (\$31,000 to \$44,000). For information on the research program/position, telephone: **Dr. C. E. Bodwell at 301-344-2203.** For information on application procedures/forms, contact: **Ms. R. Cunningham (telephone: 301-344-3954), USDA, Agricultural Research Service, Personnel Operations Branch, Room 107, Building 003, BARC-West, Beltsville, Md. 20705.** Applications in response to this announcement should be marked **E06.** *An Equal Opportunity Employer.*

CARDIOVASCULAR SCIENTIST. Rhode Island Hospital is recruiting a cardiovascular scientist to direct cardiovascular experimental laboratories within the Division of Cardiothoracic Surgery at the Rhode Island Hospital. Applicant must possess M.D. or Ph.D. and qualify for an academic appointment at assistant or associate professor level in Brown University. Broad training and experience in cardiac physiology is essential; experience in hemodynamics, to include cardiac assist devices, and cardiac electrophysiology, both laboratory and clinical, are desirable. The successful applicant must relate well to others in a supervisory capacity. He/she is expected to compete for research grants. Salary is competitive. *Brown University and Rhode Island Hospital are Equal Opportunity Employers.* Closing date for applications is 15 August 1985. Applications should be sent to: **Michael Cavanagh, Department of Surgery, Rhode Island Hospital, 593 Eddy Street, Providence, R.I. 02902.**

CHAIRPERSON. Applications and nominations are sought for a chairperson to administer a Botany Department. Candidates are required to hold a Ph.D. degree in plant science with some previous administrative experience preferred. The tenure-track position is available after 1 July 1985, and will be filled at the associate or full professor level (salary competitive). Applicants must have demonstrated success in research and teaching. Preference will be given to candidates with expertise in one of the following areas: physiology, ecophysiology, molecular or cellular biology. Although the chairperson has a primary responsibility for the administration of both undergraduate and graduate (M.S. and Ph.D.) programs in botany and biology, the successful candidate will be expected to maintain active research and teaching programs. Review of applications will begin on 15 June 1985, and continue until a successful candidate is identified. Send letter of application, résumé, and names of three references to: **Dr. Donald S. Galitz, Botany Department, North Dakota State University (NDSU), Fargo, N.D. 58105.** *NDSU is an Equal Opportunity Employer.*

CLINICAL PATHOLOGIST

The Department of Pathology, New York State College of Veterinary Medicine, has a position available for a **clinical pathologist.** The successful candidate will be expected to serve in the Clinical Pathology Service of the Veterinary Medical Teaching Hospital, assist with the professional student teaching program in clinical pathology, participate in postdoctoral training program in clinical pathology, and develop an independent research program in the field of his/her choice. The position is available 1 July 1985.

Academic rank and salary will be commensurate with background and experience. Preference will be given to applicants certified in clinical pathology with research experience in clinical chemistry.

Applicants should send curriculum vitae, five letters of reference, and a statement of long-term career goals to: **Robert M. Lewis, D.V.M., Chairman, Department of Pathology, New York State College of Veterinary Medicine, Room E205, V. A. Moore Laboratory, Cornell University, Ithaca, New York, 14853.** Telephone: 607-256-5454, extension 2300.

Cornell University is an Equal Opportunity/Affirmative Action Employer/Educator.

ENGENICS

Engenics is a **BIOPROCESS DEVELOPMENT COMPANY** committed to international leadership in providing innovative and economic processes and systems for making, purifying and using a wide range of biologically-derived materials.

Engenics, located on the San Francisco Peninsula, has opportunities for those highly qualified professionals (PhD, MS, or BS level) with at least two years of applicable industrial experience in the following areas:

MOLECULAR BIOLOGY
MICROBIOLOGY
BIOCHEMISTRY
PROTEIN CHEMISTRY
ANALYTICAL CHEMISTRY
FERMENTATION ENGINEERING
SEPARATIONS ENGINEERING
BIOCHEMICAL REACTOR &
PROCESS DESIGN
BIOCHEMICAL PLANT DESIGN,
COST ANALYSIS, AND
OPERATIONS

If you would be challenged by an entrepreneurial, results-oriented position with an excellent salary and benefits package, including an opportunity for equity participation, please send your resume to:

ENGENICS, INC.
3760 HAVEN AVENUE
MENLO PARK, CALIFORNIA 94025

ELECTRONICS ENGINEER

GM-13 **\$37,599—\$48,876**

(Salary dependent on qualifications)

The Optical Techniques Branch of the Optical Science Division has an opportunity for an electronics engineer to work in the area of integrated optics research and device development. Duties include the fabrication and testing of titanium-diffused waveguide and modulation in lithium niobate and the coupling of single-mode optical fibers to waveguides. Research is also conducted on novel materials and devices concepts in the guided wave optics field.

TO APPLY: Interested applicants should submit a Personal Qualifications Statement (SF-171) or comprehensive resume by 30 June 1985 to:

NAVAL RESEARCH LABORATORY

Civilian Personnel Division
4555 Overlook Avenue, S.W. Code 1811.1
Attn: Announcement #65-032-11.1KF (S)
Washington, D.C. 20375-5000
Telephone: Ms. Kathy Feldpausch (202) 767-3030

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Division of Educational Programs

Argonne National Laboratory

Program Leader Positions

Argonne National Laboratory is seeking professionals with strong academic and/or research backgrounds to lead and develop major educational programs with close technical and programmatic ties to the research divisions of the Laboratory. The programs involved are:

Student Research Program (undergraduate participation) Box-D-DEP-25568-55.

Faculty and Graduate Student Research Program (visiting appointments, sabbatical leaves, and short courses) Box-D-DEP-25572-55.

Regional Instrumentation Sharing Program (access and use of Laboratory equipment by the academic community) Box-D-DEP-25571-55.

International Technical Assistance Program (technical assistance to developing countries in non-power nuclear applications) Box-D-DEP-25569-55.

Persons in these influential roles also contribute to the development of laboratory/university research collaborations.

Positions require a Ph.D. (or equivalent) in Engineering, Physics, Chemistry, Biology, Materials Science or related field; and a considerable technical expertise and achievement in a broad range of scientific and engineering research.

Additional information about these positions can be obtained through writing to the Director of the Argonne Division of Educational Programs.

To apply for one of these positions, please send a statement of interest, a current resume and a list of five references by **July 17, 1985** to the appropriate box number to the attention of: Rosalie L. Bottino, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439.



Argonne National Laboratory is one of the nation's foremost multidisciplinary centers of energy research and related scientific studies.

Argonne is an equal opportunity/affirmative action employer.

POSITIONS OPEN

Applicants for **CHAIRPERSON**, Pathology Department, in a 700-bed, busy, modern Veterans Administration (VA) hospital with close university affiliations are being considered. Successful candidate must be Board-certified in AP-CP, qualify as full professor at University of California at Los Angeles, be an established basic science investigator, be an effective teacher, and must have strong administrative capability. Salary commensurate with experience and is negotiable. For further information, telephone: 213-824-4480 or write: **Dr. Sydney Finegold, Chief, Infectious Disease Section, VA Wadsworth Medical Center, Wilshire and Sawtelle Boulevards, Los Angeles, Calif. 90073. An Equal Opportunity/Affirmative Action Employer.**

CHEMISTRY. Full-time, temporary faculty appointment (sabbatical leave replacement) for the 1984-1985 academic year. Applications are invited from individuals in all areas of chemistry, particularly physical chemistry. Preference will be given to applicants with earned doctorates or previous college teaching experience. Send résumé, original copies of graduate transcripts, and three letters of reference to: **Dr. Bruce N. Storhoff, Department of Chemistry, Ball State University, Muncie, Ind. 47306.** Applications should be postmarked by 30 June 1985. *Ball State University practices Equal Opportunity in Education and Employment.*

CLINICAL GENETICIST

The Baystate Medical Center is seeking a **clinical geneticist** for its regional program serving a population of 850,000 in western Massachusetts. Resources include the regional program in ultrasound and the recent development of the Cytogenetics Laboratory. Responsibilities include the regional satellite clinics, hospital consultation service (newborn as well as adult), membership on the Perinatal Team, medical student, resident and outreach educational programming and clinical investigation. Academic appointment and salary are competitive and based on prior experience. Reply to: **Paul von Oeyen, M.D., Chief, Maternal-Fetal Medicine, telephone 413-787-5323, or Karen Ferroni, M.D., Director of Antepartum Testing Unit, telephone 413-787-5345. Department of Obstetrics and Gynecology, BAYSTATE MEDICAL CENTER, 759 Chestnut Street, Springfield, Mass. 01199. An Equal Opportunity Employer, M/F/H.**

CLINICAL IMMUNOLOGIST/ MICROBIOLOGIST

The Department of Associated Health Professions at Eastern Michigan University announces a tenure-track position, available at the associate or assistant professor level. Candidates should possess a Ph.D. Teaching responsibilities include course work in applicant's specialty area for university-based Clinical Laboratory Sciences Program. Development and maintenance of an active research program is expected. Applicants should send complete curriculum vitae with reprints, research interests, and names of three references to: **Dr. S. A. Sonstein, Head, Department of Associated Health Professions, Eastern Michigan University, King Hall-SCI, Ypsilanti, Michigan 48197.** Application deadline: 15 July 1985.

An Affirmative Action/Equal Opportunity Employer and Educational Institution

EXECUTIVE VICE PRESIDENT

The Nature Conservancy, the nation's leading private conservation organization dedicated to preserving biological diversity, invites applications for the position of **executive vice president.** Responsibilities encompass planning and managing operations of entire organization, including program, financial, personnel, and administrative areas. Work closely with Conservancy governing board, president, and management staff in field offices. Participate in fund-raising as needed. Requirements include graduate degree and at least 5 years of successful work experience in conservation or related field; an in-depth knowledge of organizational operations and programs; excellent management and communications skills; an effective leadership track record; proven ability to work successfully with a wide variety of staff and business and government leaders; and a strong commitment to preserving biological diversity. Must be willing to travel frequently and on short notice. Submit résumé and cover letter to: **Search Committee (CONFIDENTIAL), c/o William D. Blair, Jr., President, The Nature Conservancy, 1800 North Kent Street, Suite 800, Arlington, Va. 22209.** *The Nature Conservancy is an Equal Opportunity Employer.*

POSITIONS OPEN

DEAN OF THE SCHOOL OF MEDICINE University of Pittsburgh Pittsburgh, Pennsylvania

Applications and nominations are invited for this position. The School of Medicine graduates approximately 136 M.D.'s each year and operates programs leading to the M.S. and Ph.D. degrees in each of the basic sciences. Its full-time faculty consists of 730 persons. The dean reports to the Senior Vice President for the Health Sciences to whom the deans of the Schools of Dental Medicine, Nursing, Pharmacy, and Health Related Professions, and the Graduate School of Public Health also report.

The School of Medicine is adjacent to six major affiliated hospitals and is on the main campus of the University of Pittsburgh in the Oakland section of the city of Pittsburgh. The University is a privately governed, state-related institution with a total enrollment of about 35,000 students.

Candidates should have a doctorate in medicine or in one of the basic biological sciences and a record of success in the administration of a major academic department or its equivalent.

Applications and nominations should be sent by 15 July 1985 to:

**Secretary, Search Committee
Room E-606 WPIC
University of Pittsburgh
Pittsburgh, Pa. 15213**

The University of Pittsburgh is an Equal Opportunity Employer.

DIRECTOR, DIVISION OF HEMATOLOGY/ONCOLOGY, PROFESSOR/ASSOCIATE PROFESSOR THE UNIVERSITY OF VERMONT

Full-time academic appointment with responsibility for leading, planning, and organizing the commitment of personnel and resources for the division. This experienced oncologist/hematologist is expected to assume responsibility for faculty development, for teaching of house staff, students and postdoctoral fellows. Interested applicants must have ABIM certification with certification or eligibility in oncology and/or hematology. Training and experience for senior faculty rank, excellence in teaching and health care delivery, and ability to conduct independent and fundable research and demonstrated administrative skills essential. Research interest in molecular biology, genetics, tumor immunology, clinical pharmacology, or cell biology is preferred. Send curriculum vitae and inquiries by 5 July 1985 to: **John C. Hoak, M.D., Chairman, Department of Medicine, Fletcher House, Medical Center Hospital of Vermont, Burlington, Vt. 05401.** *The University of Vermont is an Affirmative Action Employer. Women and minority members are encouraged to apply.*

EXERCISE PHYSIOLOGIST (Ph.D.) is sought to become member of a research team examining the effects of prescribed medications on human behavior. Experience with microprocessor-based assessment procedures and a willingness to collaborate with psychologists and physicians are desirable. Position is a temporary civil service job with 1 year terms renewable for up to 4 years. Salary level ranges from \$26,381 to \$37,599, depending upon qualifications. Send curriculum vitae to: **Dr. Vincent M. O'Donnell, Department of Behavioral Biology (SGRD-UW1-C), Walter Reed Army Institute of Research, Washington, D.C. 20307-5100.**

MANAGER, NATIONAL LASER USERS FACILITY

The University of Rochester is seeking qualified candidates for the position of manager of the National Laser Users Facility (NLUF) at the Laboratory for Laser Energetics. The laboratory is a research unit within the College of Engineering and Applied Science. The manager will report to the director of the laboratory. Tasks associated with the position include coordinating proposals from prospective users, coordinating the NLUF Steering Committee, arranging for efficient engineering interface between facility staff and users, and scheduling time for user experiments. The applicant should have a Ph.D. in physics or an engineering discipline, and broad experience in high-energy-density physics or related technologies. Previous technical management experience is desirable. Send résumé to: **R. L. McCrory, Director, Laboratory for Laser Energetics, University of Rochester, 250 East River Road, Rochester, New York 14623.**

Equal Opportunity Employer, M/F

POSITIONS OPEN

DIRECTOR, CLINICAL PHARMACOLOGY. We invite applications for the position of director of the Division of Clinical Pharmacology in the Department of Medicine at Jefferson Medical College. The director is responsible for the organization and implementation of research, teaching, and clinical programs at Jefferson Medical College of Thomas Jefferson University. Please respond with curriculum vitae to: **Willis C. Maddrey, M.D., Chairman, Department of Medicine, Jefferson Medical College, 1025 Walnut Street, Philadelphia, Pa. 19107.**

ENDOCRINOLOGY BIOCHEMISTRY/PHYSIOLOGY Postdoctoral Opportunities

Broad range of endocrine research projects: (i) isolation and identification of pituitary and lung peptides; (ii) physiologic and pharmacologic action; (iii) growth and control of function of fetal adrenal; (iv) role of growth factors in fetal development.

Send curriculum vitae, bibliography, three letters of recommendation, and short statement regarding career goals, interests, and experience to: **Dr. Samuel Solomon, Endocrine Laboratory, Royal Victoria Hospital, 687 Pine Avenue West, Montreal, Quebec, Canada H3A 1A1.**

UNIVERSITY OF CALIFORNIA DIVISION OF AGRICULTURE AND NATURAL RESOURCES COOPERATIVE EXTENSION

**Extension Nematologist
Davis Campus**

Educate individuals and industry by initiating, implementing, and extending educational programs in the plant and soil nematology field. Implement available technology and conduct applied research in a problem-solving mode. Conduct field tests and demonstration plots. Assure Affirmative Action in development and delivery of programs. Graduate education, experience in applied nematology or related discipline is desired. Must be willing to travel in- and out-of-state. Salary in associate specialist rank. Contact: **Cooperative Extension Personnel, University of California, Berkeley, Calif. 94720. Telephone: 415-644-4320. Closes: 26 July 1985. Refer to: A-85-100.**

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

DOBROCKY SEATECH LTD.

Marine Geochemist. The successful applicant will have a Ph.D. in chemistry (or related field) and will be expected to conduct and manage pure and applied research programs in geochemistry. Initial studies will be on marine hydrothermal interstitial water chemistry.

Microbiologist. The successful applicant will have a Ph.D. in microbiology, biochemistry (or related field) and have an interest or experience in trace metal metabolism and mobilization. He/she will be expected to conduct and manage pure and applied research projects within the company chemistry section.

Dobrocky Seatech is a multidisciplinary oceanographic consulting company. Both positions will be located in our office in Sidney, British Columbia. Submit two copies of curriculum vitae by 10 July 1985 to: **Dr. Bryan Imber, Manager, Chemistry, Dobrocky Seatech Ltd., 9865 West Saanich Road, P.O. Box 6500, Sidney, British Columbia, Canada V8L 4M7.**

MOLECULAR NEUROBIOLOGIST/ NEUROCHEMIST

Applications are invited for a molecular neurobiologist/neurochemist in the Division of Molecular Biology and Biophysics, School of Basic Life Sciences, University of Missouri-Kansas City.

Appointment will be at the level of instructor. Applicants should have an M.D. or Ph.D., significant experience in the area of membrane proteins and monoclonal antibodies, and a strong commitment to a productive research program in molecular neurobiology relating to acoustic receptors and/or synaptic transmission in the auditory system.

Applications must be received by 15 July 1985. Please send curriculum vitae, statement of research interests, and the names of three referees to:

**Dr. Rosa H. Huang, Professor
Division of Molecular Biology and Biophysics
School of Basic Life Sciences
University of Missouri-Kansas City
Kansas City, Mo. 64110**

The University of Missouri-Kansas City is an Equal Opportunity Employer.

RESEARCH CENTER DIRECTOR

Applications and nominations are invited for a Director, Center for Atmospheric and Biospheric Effects of Combustion, located in the Applied Science Division. The scope of the Center is interdisciplinary and includes four major areas: Combustion and Abatement, Atmospheric Pathways and Chemistry, Radiative Balance, and Ecosystem Pathways and Effects. The Director will coordinate the efforts of a number of scientists, including chemists, physicists, engineers, biologists, geologists, meteorologists, and energy analysts to carry out the objectives of the Center; will be responsible for obtaining research support from governmental and non-governmental organizations; will represent the Laboratory at various related national and international meetings; and will also carry out research within the Center. This position requires a Ph.D., and a record of distinguished leadership, outstanding research accomplishments and an international reputation in one or more of the above areas. Experience and background in program planning, development, implementation, administration and evaluation is required. The incumbent should also have experience in obtaining research funds and have a familiarity with organizations that provide these research funds. Salary will be negotiable. The successful candidate will be appointed a Senior Staff Scientist at the Lawrence Berkeley Laboratory. Applications and/or nominations should be forwarded to: Lawrence Berkeley Laboratory, One Cyclotron Road, Employment Office 90-1042, Berkeley, CA 94720. Please specify Job #A/3330. An Equal Opportunity Employer M/F/H.



LAWRENCE
BERKELEY
LABORATORY

POSTDOCTORAL FELLOWSHIPS

California Biotechnology Inc. invites applications from recently qualified Ph.D.'s to join its postdoctoral research program. CBI is an established biotechnology company located in the Palo Alto area forty miles south of San Francisco. The company, which has about eighty scientific employees, is dedicated to applying the techniques of molecular biology, protein chemistry and cell biology to develop novel human and veterinary pharmaceuticals. It currently has major research programs in hypertension, atherosclerosis, inflammation, lung disease, reproductive biology, growth factors and polypeptide hormones. Recent graduates, who have experience in areas such as recombinant DNA technology, protein and peptide chemistry, cell biology and pharmacology, would join established research teams in one of the above areas. The postdoctoral fellowships would be for a minimum of two years. Please send applications, including a complete curriculum vitae to:



Dr. John Shine
Director of Research
California Biotechnology Inc.
2450 Bayshore Frontage Road
Mountain View, CA 94043

BIOTECHNICAL/ RESEARCH OPPORTUNITIES

Interferon Sciences, Inc. is a growing biotechnology company located at the heart of the pharmaceutical industry in central New Jersey. Applications are invited at all degree levels for research positions in the following areas:

IMMUNOCHEMISTRY

- Immunochemists with experience in production and purification of monoclonal and polyclonal antibodies (IC103).
- Immunochemists with experience in immunoassay development and affinity chromatography (IC104).

CELLULAR IMMUNOLOGY

- Biochemist/Immunologist with hands-on experience in bioassay development and protein purification and characterization (CI102).

Please refer to position numbers. Send resume to: L. Zuckerman, Personnel Department



INTERFERON
SCIENCES, INC.

783 Jersey Avenue, New Brunswick, NJ 08901
An Equal Opportunity Employer M/F

MOLECULAR GENETICS

- Molecular biologists with experience in regulation of gene expression in bacteria and/or yeast. Experience in cDNA synthesis and cloning required. DNA sequencers with experience in subcloning. IN VITRO mutagenesis experience desirable (MG102).

ANALYTICAL BIOCHEMISTRY

- Molecular biologists/biochemists with expertise in the synthesis and purification of nucleic acid probes or synthetic gene sequences, HPLC experience highly desirable (AB102).

A GIFT FOR EXCELLENCE

As a parent, you know that your children need books and films by the best of our writers and artists to bring the special insights of science to life.

To identify these special materials, the American Association for the Advancement of Science publishes *Science Books & Films*, a critical review journal of science books and nonprint media for students in kindergarten through college.

If you give a subscription to *SB&F* to your children's school, their librarian can choose the best among the many hundreds of new science books and films published each year. You—or your PTA—can use *Science Books & Films* to select gift science materials for a school on a tight library budget.

A subscription to *SB&F* costs \$20. Give a gift subscription to your children's school; get one for your PTA. Your children will thank you today . . . and tomorrow.

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the Advancement of Science

POSITIONS OPEN

FACULTY POSITION IN IMMUNOPHARMACOLOGY

The School of Pharmacy, University of California at San Francisco (UCSF), seeks an outstanding scientist for a tenure-track position at the assistant or beginning associate professor level in the Department of Pharmacy. We are particularly interested in an individual whose research interests will complement the departmental strengths in drug delivery and pharmacodynamics. Specific areas of interest might include immunomodulation for therapeutic purposes, drug targeting by antibodies, the development of immunologic therapeutic agents, the development of immunologic indices to monitor drug efficacy and toxicity or the formulation of mathematical models of the immune system. Applicants should have a Ph.D., M.D., or M.D./Ph.D. and be committed to develop or continue a first-rate active research program. Teaching responsibilities will be in the professional and graduate curriculum. Applicants should submit curriculum vitae, three letters of reference, and a statement on present and future research interests by 15 August 1985 to: Dr. Francis C. Szoka, Jr., School of Pharmacy, 926-S University of California, San Francisco, Calif. 94143. UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

INSECT BIOCHEMIST postdoctoral research position available 1 September 1985 to study catecholamine metabolism, enzyme pathways, and hormonal regulation in relation to insect cuticle tanning. Training in enzyme chemistry, biochemistry of insect development, or hormonal regulation desirable. Send résumé, letter of career goals, transcripts, and three letters of reference to: Dr. T. L. Hopkins, Department of Entomology, Waters Hall, Kansas State University, Manhattan, Kans. 66506. Application deadline: 1 August 1985. Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGY

The Alton Ochsner Medical Foundation and the Ochsner Clinic seek candidates to direct a new major laboratory initiative in the area of molecular biology. This staff position requires a person with an M.D. or Ph.D. background and with expertise in this area of fundamental research. Adequate space and generous start-up funds will be provided. Any interested applicants should forward a letter of interest, curriculum vitae, and bibliography to: Richard N. Re, M.D., Chairman, Search Committee, Alton Ochsner Medical Foundation, 1516 Jefferson Highway, New Orleans, Louisiana 70121. The Foundation and Clinic are Equal Opportunity/Affirmative Action Employers.

MOLECULAR GENETICS/BIOCHEMISTRY MEHARRY MEDICAL COLLEGE

MEHARRY MEDICAL COLLEGE is making a concerted effort in at least three departments to strengthen the area of molecular biology—molecular genetics. Two positions are available in the Department of Biochemistry at the level of assistant or associate professor. The department expects to fill these positions in spring 1986. Preference will be given to applicants with expertise in regulation of gene expression who plan to study or are studying contemporary problems in eukaryotic or prokaryotic molecular genetics, using recombinant DNA technology. Applicants should have broad training in biochemistry and molecular biology and will be expected to develop and/or maintain a funded research program of high quality and to participate in the graduate and professional school teaching programs of the department of biochemistry. Applicants should send curriculum vitae, names of four individuals who may be contacted for reference, and a summary of research interests or ongoing project to: Ifeanyi J. Arinze, Ph.D., Chairman, Department of Biochemistry, Meharry Medical College, Nashville, Tenn. 37208. Meharry Medical College is an Equal Opportunity/Affirmative Action Employer.

MUSHROOM RESEARCH. Monterey Mushrooms, Inc. (an Amfac Company) is seeking to fill an entry-level Ph.D. position with the incumbent expected to work as part of an interdisciplinary research team on projects related to yield and quality. The successful candidate will have demonstrated the ability to investigate aspects of either physiological, genetical, or pathological problems in fungal systems, with an organismal orientation. Our company offers growth potential, competitive salaries, and a full benefit package. Please send résumé to: Perry Mulleavy, Monterey Mushrooms, Mushroom Research Laboratory, P.O. Box 189, Watsonville, Calif. 95077. An Equal Opportunity Employer.

POSITIONS OPEN

UNIVERSITY OF WISCONSIN-MADISON MYCOLOGY/MICROBIAL ECOLOGY

RESEARCH ASSOCIATE (postdoctoral) position available 1 June 1985 on the BIOTECHNOLOGY and microbial ecology of fungal pathogens (biocontrols) to watermillfoil. Research aspects include mass culture and strain improvement techniques, interaction with other control measures, and tracking marked populations in water and sediment. Funding for 2 years. Salary competitive and commensurate with qualifications. Send résumé with names of three references to: Dr. John H. Andrews, Department of Plant Pathology, 1630 Linden Drive, Madison, Wis. 53706. An Affirmative Action/Equal Opportunity Employer.

NEW POSITION

Major Kansas City medical center seeks a recent Ph.D. in physics with current experience in clinical applications of laser to serve as a scientific resource to medical staff at a new Laser Institute. Compensation: \$40,000 to \$65,000, based on experience. Send résumés in confidence to:

NAS Department JR/SCI
P.O. Box 14047
Oakland, Calif. 94614

Equal Opportunity Employer

PHYSICAL BIOCHEMISTRY MEHARRY MEDICAL COLLEGE

The Department of Biochemistry has a tenure-track position available at the assistant or associate professor level. Applicants should have broad training in biochemistry and will be expected to develop and/or maintain a funded research program of high quality and to participate in the graduate and professional school teaching programs of the Department of Biochemistry. Applicants should send curriculum vitae, names of four individuals who may be contacted for reference, and a summary of research interests or ongoing project to: Ifeanyi J. Arinze, Ph.D., Chairman, Department of Biochemistry, Meharry Medical College, Nashville, Tenn. 37208. Meharry Medical College is an Equal Opportunity/Affirmative Action Employer.

PHYSICIST—Ph.D. in nuclear physics. Five years of experience as a researcher in nuclear reaction studies. Outstanding record of accomplishment in nuclear reaction studies as evidenced by scientific journal publications and presentations at international meetings. Research should include experience with different types of particle accelerators and in writing computer programs for data acquisition and analysis.

Will carry out an independent research program to study the interactions of different nuclear projectiles, including mesons, protons, and energetic heavy ions, with target nuclei. Plan experiments to test theoretical ideas and to explore new areas in the field of nuclear reactions and structure. Help to design and assemble the appropriate apparatus to perform such experiments, in collaboration with other staff members. Use modern computers and electronics effectively in order to collect and interpret experimental data. Salary: \$3600 per month—40 hours per week, 8:30 a.m. to 5:00 p.m. Geographical area of employment: Southwest suburb of Chicago. Send résumé to: Illinois Job Service, 910 South Michigan Avenue—Third Floor, Chicago, Illinois 60605, attention: Joan Sykstus, Reference Number 4490-T. An employer-paid ad.

POSTDOCTORAL BIOCHEMIST OR PHYSIOLOGIST position available to begin work with the Michigan State University Parasitology Research Program. We invite applications from individuals to explore the biochemical and/or physiological action of drugs on parasitic helminths. Person must be willing to work 3 to 4 months per year in our research facilities in Sudan, Africa. *Minority applications encouraged.* Send curriculum vitae and two letters of reference to: Dr. James L. Bennett, Department of Pharmacology and Toxicology, Michigan State University, East Lansing, Michigan 48824.

POSTDOCTORAL FELLOW. Physiologist/biochemist with interest in elucidating biochemical basis for smooth/cardiac/skeletal muscle contraction. Strong emphasis on use of human material. Outstanding academic environment. Send letter and curriculum vitae to: Dr. Fred J. Julian, Department of Anesthesia Research Laboratory, Harvard Medical School, Brigham & Women's Hospital, 75 Francis Street, Boston, Mass. 02115.

GENETICS INSTITUTE is the largest privately-held company actively engaged in the development and application of recombinant DNA technology to human health care, agriculture and chemicals. During the first four years of operation, we have grown to over 200 employees and have undertaken research projects in collaboration with a number of prominent commercial partners.

ENTOMOLOGY

We seek a highly motivated research scientist at the B.S. or M.S. degree level to join our biological pesticides research team. The ideal candidate will have a strong background in entomology specializing in insect rearing and pathology. An exposure to molecular biology would be helpful.

We offer a stimulating scientific environment and excellent compensation package. Qualified candidates should forward their resumes, in confidence, to: Barbara Covell, Genetics Institute, 87 CambridgePark Drive, Cambridge, MA 02140.

Genetics Institute

Plant Genetics



An equal opportunity employer

The Plant Genetics Department of Pfizer Central Research has an opening in plant biochemistry at the Research Scientist level. This department provides the basic research support for the corn, sorghum and soybean breeding programs of DeKalb-Pfizer Genetics.

You will be joining a multi-disciplinary team working on genetic improvement of crop plants and will be responsible for investigating the biochemical basis for desirable agronomic traits. This position will interface with both the whole-plant biologists and specialists in molecular and cellular biology involved in the genetics transformation of cereals.

You should have training in plant biochemistry at the PhD level and have interests in other aspects of plant biology such as plant physiology, tissue culture and molecular biology. Preference will be given to those candidates with some postdoctoral experience.

This position offers an excellent opportunity for professional recognition and career growth. We offer an excellent salary, benefit and relocation package plus an attractive southeastern Connecticut shore location. Qualified applicants should submit their resume, including the names, addresses and phone numbers of three professional references, to: Dr. J.K. Larson, Manager of Employment, Pfizer Central Research, Eastern Point Road, Groton, CT 06340.

FLUID DYNAMICIST

The Office of Naval Research is seeking a highly qualified individual to plan and manage a contract research program in Fluid Mechanics. The research sponsored is conducted principally at universities and industrial laboratories. This is a Civil Service position at the GM-13, 14, or 15 level, (\$37,599-\$67,940), depending on individual qualifications.

The position offers a unique opportunity for managing the synthesis of new results and exciting developments in the fundamental disciplines of fluid physics including hydrodynamics and aerodynamics, fluid/structure interactions and combustion fluid dynamics. The Office of Naval Research program in Fluid Mechanics is committed to advancing the scientific foundations of the field, and to extending its application potential by establishing the conceptual bases for the design of advanced prototype components and systems. Position responsibilities include the direction and integration of research activities addressing these interests.

Applicants must have a Ph.D. or equivalent in Aerospace Engineering, Mechanical Engineering, Engineering Sciences or Applied Mathematics or a minimum of three years of progressively responsible professional experience. A broad research background with demonstrated research experience in at least two of the disciplines listed above is desired. All applicants must have at least one year of experience comparable in difficulty and responsibility to the next lower level in the Federal Service. Equivalent combinations of professional experience and graduate education may be acceptable.

Interested persons should send a Standard Form SF-171, Application for Federal Employment (available at Federal Job Information Centers or from the address below), to:

OFFICE OF NAVAL RESEARCH

Civilian Personnel Division, Code 791SC
ATTN: Announcement #85-37 (S)
800 North Quincy Street
Arlington, VA 22217-5000
U.S. CITIZENSHIP REQUIRED

Applications will be accepted through 26 July 1985 and must be postmarked by that date. Applicants are requested to complete the appropriate supplemental forms. For further information and supplemental forms, please call (202) 696-4705.

AN EQUAL OPPORTUNITY EMPLOYER

POSITIONS OPEN

The Barrow Neurological Institute of St. Joseph's Hospital and Medical Center announces its search for a **JAMES R. ATKINSON PAIN SCIENTIST**. This position is a tenure-track position in the Division of Neurosurgery with a joint appointment in Neurobiology. Applications are sought from individuals with previous experience in pain research and at least a 2-year period of postdoctoral training in this area. Individuals with exceptional qualifications with less postdoctoral training also may apply. Please send letter of application, curriculum vitae, and letters from three references to: **Dr. Andrew Shetter, Division of Neurosurgery, Barrow Neurological Institute, 350 West Thomas Road, Phoenix, Arizona 85013.**

St. Joseph's Hospital and Medical Center is an Equal Opportunity Employer.

PLANT SCIENTIST—TISSUE CULTURE

Crop Genetics International, a plant biotechnology company located in Dorsey, Maryland, in close proximity to the U.S. Department of Agriculture, Beltsville facility, is seeking B.S. (with experience) or M.S. personnel to add to our scientific team. Individuals with skills and experience in plant tissue culture manipulations and systems are encouraged to apply. Persons with cellular selection experience highly desirable. Send résumé and a copy of transcripts to: **Mark E. Sander, Crop Genetics International, 7170 Standard Drive, Dorsey, Maryland 21076.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOW

The Center for Separation Science, College of Engineering, and the Department of Pharmacology, College of Medicine, have a joint full-time position available to study neuropeptide processing (metabolism) in animal tissues. The focus of the studies is applying state-of-the-art separation techniques to the isolation and purification of peptide specific proteolytic enzymes altered by disease or drugs. A strong background in biochemistry and pharmacology desired.

Applications will be accepted until 28 June 1985. Salary: \$18,000. Send résumé, copies of representative publications, and names of three references to: **Dr. Thomas P. Davis, Department of Pharmacology, University of Arizona, College of Medicine, Tucson, Arizona 85724.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately for work on in vitro immunization methodology to develop human monoclonal antibodies. The candidate should have a strong immunological and/or biochemical background with some experience in tissue culture techniques and hybridoma production. Position for 1 year with a renewal for the second at the Theodore Gildred Cancer Facility. Send curriculum vitae, three letters of references, and a one-page summary of research interests to: **Dr. M. C. Glassy, University of California, San Diego, University of California, San Diego Cancer Center, T-011, San Diego, California 92103.**

POSTDOCTORAL POSITION

Opportunity is available to study enzyme synthesis and secretion in actinomycetes. Investigations will include biochemical parameters and molecular analysis of genes encoding tyrosinase in mesophilic and thermophilic strains of actinomycetes. Experience in biochemical and molecular genetics is desirable. Send curriculum vitae and names of three references to: **Dr. E. Katz, Department of Microbiology, Schools of Medicine and Dentistry, Georgetown University, Washington, D.C. 20007.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION

Synthetic organic/medicinal chemist to work in a multidisciplinary, multi-institutional group investigating the potential of polyamine biosynthesis inhibitors as chemotherapeutic agents [*Ann. Rep. Med. Chem.* 17, 253 (1982)]. Our efforts in synthesis and enzymology will be coordinated with others in the group studying the effects of the new enzyme inhibitors on polyamine biosynthesis, cell growth, and antitumor activity in vitro and in vivo. Salary negotiable. Send curriculum vitae, containing names of three references, and a statement of research interests and experience to: **Professor James K. Coward, Department of Chemistry, Rensselaer Polytechnic Institute (RPI), Troy, N.Y. 12180-3590.** *RPI is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITION IN VIROLOGY

Available for research on biological characterization and cellular immunology of human enteric and respiratory viruses. Virologic experience with purification, protein analysis, and immunological assays essential. Send curriculum vitae and names of three references to: **Dr. Neil R. Blacklow, Division of Infectious Diseases, University of Massachusetts Medical School, Worcester, Massachusetts 01605.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION

Available beginning summer/fall 1985 to investigate metabolic regulation in prokaryotic organisms by reversible protein phosphorylation. Strong background in protein purification/characterization and biochemistry is essential. Send curriculum vitae and have three letters of recommendation sent to: **Dr. Henry C. Reeves, Department of Botany and Microbiology, Arizona State University, Tempe, Ariz. 85287.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately for minimum of 2 years. Neuroscientist, neurophysiologist, recent Ph.D., or more established investigator to collaborate on research examining the role of the brainstem in modulating septohippocampal activity and brainstem control of sleep-walking states. Salary: \$17,000 to \$19,000 per year. Will be provided with half-time technician and fully-equipped laboratory. Please send curriculum vitae and brief description of research interests to: **Dr. Robert P. Vertes, Mercer University, School of Medicine, Macon, Georgia 31207; telephone: 912-744-4063.**

POSTDOCTORAL POSITION at Harvard Medical School available immediately in the Mailman Research Center of McLean Hospital. Research deals with the neurobiology of protein and neuropeptide metabolism and the role of proteolysis in neuropsychiatric disorders in aging. Particular emphasis is on the neuronal cytoskeleton. Experience or interest in one of the following areas is desired. Immunocytochemistry, RIA, immunocytochemistry, tissue culture, and protein purification and characterization. Address curriculum vitae and letters of reference to: **Ralph A. Nixon, M.D., Ph.D., Mailman Research Center, Ralph Lowell Laboratories, McLean Hospital, 115 Mill Street, Belmont, Mass. 02178.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION IN NUTRITION AND CANCER. Available immediately in the laboratory of Bandaru S. Reddy to study the mechanism of carcinogenesis as affected by nutritional factors. Candidates with Ph.D. in biochemistry or nutritional biochemistry and experience in HPLC, GC, and enzymology should send their curriculum vitae with three references to: **Dr. Bandaru S. Reddy, Associate Chief, Nutritional Biochemistry, American Health Foundation, Valhalla, N.Y. 10595.** *Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE. Two positions are available. Involves crystallization and x-ray structure determination of siderophores, natural products, membrane protein, small oligonucleotides, and peptides; also, microbial production, isolation and purification of membrane proteins and siderophores, synthesis, and NMR of oligonucleotides, and molecular mechanics calculations. Research capability in some of these areas is expected. Salary: \$14,000 to \$17,000. Send résumé plus references to: **D. van der Helm, Chemistry Department, University of Oklahoma, Norman, Okla. 73019.**

RESEARCH ASSOCIATE, Department of Cancer Biology, Harvard School of Public Health. To characterize karyotypic and cytogenic changes produced by external radiation and internally emitting radionuclides in human diploid cells, and to correlate these with cell cycle analyses and biochemical measurements. Candidate must have Ph.D. in radiobiology with at least 1 year of postdoctoral training. Must have expertise in mammalian cytogenetics and DNA biochemistry. Also requires proven expertise in tissue culture, flow microfluorimetry, and cell cycle analysis by radiolabeled tracer and velocity sedimentation techniques. Full-time position with annual salary of \$28,359. Send résumés to: **Division of Employment Security, Hurley Building, Boston, Mass. 02114,** and refer to Job Reference Number 5548.

POSITIONS OPEN

POSTDOCTORAL POSITION. Radiobiology Section. Applications are invited for a position available immediately to study the influence of ionizing radiation and chemical carcinogens on gene expression. These studies involve defined DNA sequences in animal cells and plasmids. Collaboration with investigators in other departments is encouraged. Send curriculum vitae and three references to: **Dr. Robert Bases, Department of Radiology, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, N.Y. 10461.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION available September 1985 for research on the molecular genetics of mammalian cytoskeletal genes including those encoding tubulins and MAPS. Send curriculum vitae and the names and addresses of three references to: **Dr. N. J. Cowan, Department of Biochemistry, New York University Medical Center, 550 First Avenue, New York, N.Y. 10016.**

POSTDOCTORAL RESEARCHER

in Biomedical Image Processing

A position for a postdoctoral researcher is available immediately in the **Laboratory of Experimental Atherosclerosis** of the Ohio State University. The applicant should have training in computer and information science, electrical engineering, biomedical engineering, or biological sciences with particular emphasis in image processing. Experience in theoretical aspects of image processing and practical applications of Fourier transformation and image reconstruction, segmentation, and classification is required. The applicant will join an interdisciplinary laboratory studying arterial wall physiology and pathology. The individual will participate in ongoing image processing studies on the macro and micro topography of normal and diseased arterial structures, quantitative autoradiography, three-dimensional reconstructions, and NMR imaging. Excellent dedicated computer and image processing hardware exists within the laboratory. Send curriculum vitae and the names of three references to: **Dr. J. Frederick Cornhill, 2005 Wiseman Hall, 400 West 12 Avenue, Columbus, Ohio 43210.** *An Equal Opportunity/Affirmative Action Employer.*

Resources for the Future (RFF), a non-profit, nonadvocacy organization for research and public education seeks a **PRESIDENT**. Founded in 1952, RFF conducts interdisciplinary programs on resource, energy, and environmental issues.

The president provides intellectual and administrative leadership for a 100-member staff and represents the organization to the research and funding communities, to other institutions, and to the public. RFF is recognized both nationally and internationally as a leading institution in resource and environmental economics. Applicants should have a proven record of leadership in fields of concern and interest to the organization.

Candidates should send a letter and résumé by 30 June to: **Robert M. White, Chair, Presidential Search Committee, Resources for the Future, 1616 P Street, NW, Washington, DC 20036.** The position is available beginning fall 1985.

Resources for the Future is an Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

PROFESSIONAL RESEARCH ASSISTANT II

Position available 1 July 1985 within the microvascular research laboratory to investigate mechanisms regulating hepatic blood flow and glucose/glycogen metabolism in rats. Master's degree in biology or related field or B.S. degree in a biological science with five or more years of job-related experience required. Individual must be independent and able to execute complex experiments and to analyze and interpret research results. Procedures include standard electron microscopic and photographic techniques, as well as specialized histologic, histochemical, biochemical, and high resolution in vivo microscopic methods. Familiarity with videodensitometric and image shearing techniques preferred. Forward résumé to: **Dr. Frank D. Reilly, Professor, Department of Anatomy, West Virginia University Medical Center, Morgantown, W.Va. 26506.** *An Equal Opportunity/Affirmative Action Employer.*

Psychobiologist / Psychophysiological

The Life Sciences Division of Los Alamos National Laboratory is seeking an experienced psychobiologist/psychophysiological for work on the noninvasive assessment of neurophysiological function using neuromagnetometry. The Laboratory offers a state-of-the-art system for measuring magnetic fields from the central nervous system and is involved in the development of advanced systems.

Responsibilities:

This staff scientist will assume a major role in the design and execution of psychobiological and neurophysiological experimentation with an emphasis on cognitive function and behavior. The position offers an excellent opportunity for self-directed, creative scientific endeavors.

Requirements:

- Ph.D. in psychology, psychobiology, physiology, or related discipline.
- Experience in neurophysiological assessment using electroencephalography or neuromagnetometry.
- Familiarity with techniques for the study of sensory, cognitive, and behavioral processes.
- Three or four years of postdoctoral experience is highly desirable.

Salary and benefits are excellent and commensurate with qualifications.

To apply, please send your resume, bibliography, three letters of reference and undergraduate and graduate transcripts to:

Sandra Harding
DIV 85-CY
Personnel Administration Division
Los Alamos National Laboratory
Los Alamos, New Mexico 87545



An Affirmative Action/Equal Opportunity Employer U.S. Citizenship Required.

PHARMACEUTICAL RESEARCH

Director, Diagnostic Pathology

Warner-Lambert/Parke-Davis Pharmaceutical Research Division, a world leader in pharmaceutical discovery and development, is seeking a Director of Diagnostic Pathology for the Pathology and Experimental Toxicology Department. The department has recently opened a new laboratory facility in Ann Arbor, Michigan adjacent to the University of Michigan.

This new director will provide managerial and scientific leadership for the pathology and histopathology groups; guide the groups' two-year expansion program; direct the pathology support for toxicity evaluations of novel therapeutic entities; participate in departmental planning and policy making; and represent the company as an expert in drug safety.

The successful candidate must possess a DVM or MD degree and an advanced degree in pathology with board certification; a record of research productivity; the ability to carry out, as well as direct, both independent and collaborative research; a minimum of five years of experience in toxicologic pathology and safety assessment. Previous experience with U.S. and international requirements for drug registration is desirable.

Join the dynamic research team at Warner-Lambert/Parke-Davis, and enjoy excellent compensation, benefits, relocation, professional development opportunities, and living environment.

Qualified candidates should send resume, and salary requirements in confidence to: **Ms. M. Wolin, Sr. Human Resources Representative, WARNER-LAMBERT/PARKE-DAVIS, 2800 Plymouth Road, Ann Arbor, Michigan 48105.** An Equal Opportunity Employer M/F/H.

**WARNER
LAMBERT**

CHIEF PATHOLOGIST

Director of Laboratories at Los Angeles County Rancho Los Amigos Medical Center and Pathologist to USC/Clinical/Research Liver Group. Joint appointment with University of Southern California at the appropriate rank for an individual with an established or growing national reputation. Applicant should possess strong interest in scholarly pursuits and teaching. California Medical license required. Apply to:

Matthew O. Locks, M.D.
Medical Director



Downey, CA 90242
(213) 922-7161

Equal Opportunity Employer M/F

Ph.D. SCIENTISTS VACCINE DEVELOPMENT

Lederle Laboratories, a leading pharmaceutical manufacturer, has openings for Ph.D. Scientists in the Vaccine Development area.

The successful candidates will have a Ph.D. in Molecular Biology, Microbiology or a related field and preferably post-doctoral or related experience in recombinant DNA techniques, and /or purification and biochemistry.

Lederle offers excellent benefits, career challenge and a convenient Rockland County location, 30 miles northwest of New York City. Please reply, in confidence, indicating salary requirements, to: Mr. K.J. Graveline, Professional Employment Coordinator, Lederle Laboratories, Pearl River, New York 10965.



**Dedicated People
Dedicated to People
Since 1906.**

NEUROPHYSIOLOGIST/ PROJECT SCIENTIST

Ph.D. in psychology, neuroscience, toxicology, or related field with demonstrated competence in conducting macrophysiological research. Will be a member of an established multidisciplinary research team developing cost effective methods for assessing the functional integrity of the CNS in rodents exposed to suspected neurotoxicants. In collaboration with neurophysiologists investigating sensory systems, will formulate and implement an *in vivo* macrophysiological research program investigating non-sensory systems (e.g. limbic) and will publish the findings in scientific literature.

Please send curriculum vitae including salary history and present salary requirements, copies of recent publications, statement of research interests, and names of three references to:

**Human Resources
NORTHROP SERVICES, INC.
P.O. Box 12313
Research Triangle Park, N.C. 27709**

ATMOSPHERIC BIOGEOCHEMIST

OAK RIDGE NATIONAL LABORATORY's Environmental Sciences Division is seeking applicants with Ph.D. or equivalent in atmospheric chemistry or earth science for a research position concerning the biogeochemistry of trace and major constituents of the atmosphere. Must have some experience with analysis of the atmospheric emission, transformation and transport, and particularly with the wet, dry and cloud-water deposition and interaction with vegetation of mixtures of particles and gases released during fossil-fuel combustion.

ornl offers an excellent benefits package and a generous relocation program plus a stimulating working environment. Salary commensurate with experience. Qualified applicants should forward resume and copy of academic transcripts before June 30, 1985 to Mr. J. T. Atherton, Ph.D. Employment, Building 4500N, Oak Ridge National Laboratory, P.O. Box X, Oak Ridge, Tennessee, 37831.

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AN EQUAL OPPORTUNITY EMPLOYER

POSITIONS OPEN

RESEARCH ADMINISTRATION

An experienced manager is being sought for the American Red Cross Biomedical Research and Development program. Responsibilities include grants administration and supervision of the National Headquarters-Laboratory central research support services and management of the Regional Blood Centers development support program. Position requires scientific background at the doctoral level or equivalent, plus superior administrative and communication skills. Must possess at least 5 years of experience in research and/or research administration with demonstrated staff management and planning skills. Salary commensurate with experience. Send curriculum vitae and the names of three references to:

**Leon W. Hoyer, M.D.
Associate Vice President
American Red Cross Laboratories
9312 Old Georgetown Road
Bethesda, Maryland 20814**

RESEARCH ASSISTANT POSITION available for recent Ph.D. with bachelor's and doctorate degrees in pharmacy or a related science. Research will involve experimental cancer chemotherapy, molecular pharmacology, and biochemistry both *in vivo* and *in vitro*. The applicant must be experienced in enzyme purification and kinetics, receptor-binding methodology, high-performance liquid chromatography, two-dimensional gel electrophoresis, and DNA hybridization and must be familiar with *in vivo* studies of antineoplastic agents. Salary: \$17,200. Send curriculum vitae and names of three references to: Dr. J. A. Houghton, Division of Biochemical and Clinical Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, Tennessee 38101. An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE, POSTDOCTORAL. Available immediately for research concerned with mechanisms of host defense and immunoregulation. Background in immunology or virology desirable. Send résumé and names of three references to: Dr. Eva Cramer, Department of Anatomy and Cell Biology, 450 Clarkson Avenue, Brooklyn, N.Y. 11203; DMC Number 711. Equal Opportunity/Affirmative Action Employer. SUNY-DOWNSTATE MEDICAL CENTER.

SENIOR RESEARCH SCIENTIST—Ph.D. in organic chemistry with background in the synthesis of complex biologically active compounds.

The candidate must have 3 to 5 years of postdoctoral experience in the areas of carbohydrate and peptide chemistry, including peptide synthesis. Experience in drug targeting and cancer research is required. Salary: \$35,000.

Please send résumé or curriculum vitae to: The Philadelphia Job Bank, 444 North 3rd Street, Philadelphia, Pa. 19123, and refer to Order Number 3990349.

TOXICOLOGIST

BUSHY RUN RESEARCH CENTER UCC-CMU

Bushy Run Research Center (BRRC), operated by the Union Carbide Corporation (UCC) and Carnegie-Mellon University (CMU), is seeking a Ph.D. toxicologist with 2 to 3 years of experience at conducting subchronic and chronic toxicity/oncogenicity studies by oral/dermal exposure. Candidate should have relevant publications and a strong background in biostatistics. Primary responsibilities will include the design, implementation, analysis, interpretation, and technical supervision of toxicology studies done with multiple species. Study cost-estimating experience is desired.

BRRC is located 25 miles east of Pittsburgh in beautiful rolling countryside. The Laboratory has recently undergone a multimillion-dollar renovation and has some of the most modern, state of the art facilities available. BRRC is accredited by AALAS and by the Toxicology Laboratory Accreditation Board. Send résumé and references to: D. L. Geary, Bushy Run Research Center, R.D. Number 4, Mellon Road, Export, Pa. 15632.

BRRC is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

MOLECULAR BIOLOGY

Sandoz, Inc. is responsible for pharmaceutical products that improve the quality of life. Our developments are the result of research conducted by professionals who specialize in many different fields.

Currently we have a two-year postdoctoral position available for study of the regulation of gene transcription by insulin. Candidates should have experience with the techniques of molecular biology. Experience in measurement of mRNA levels and cell-free transcription would be desirable. The goal of the research program is to develop drugs useful for treatment of non-insulin dependent diabetes.

Positions at Sandoz offer personal satisfaction, professional opportunity/challenge, competitive salaries and excellent benefits package. Our campus-like facilities are conveniently located in northern New Jersey.

For prompt consideration, please forward your resume and salary requirements in confidence to:



Personnel Manager
SANDOZ, INC.
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Abbott Laboratories stands at the forefront of modern medical diagnostic research. We've made major financial investments, created sophisticated instrumentation, and developed an extensive line of immunoassays including the first FDA approved test for AIDS. And we've only just begun.

IMMUNOLOGIST

This key position assumes a leadership role on our immunocytochemical project team and focuses on the research of immunochemical and physicochemical properties of human tumors, and the development of tumor antigen immunoassay systems for diagnostic purposes. Qualified candidates will have a Ph.D. in Immunology or equivalent, and a minimum of 2 years post-doctoral research experience in immunocytochemistry with publications. An expertise in immunochemical and biochemical methods of protein isolation, purification and characterization development of various immunoassay systems, a background in humoral and cellular aspects of technology, and experience in paraffin imbedded sections and frozen sections is highly preferred.

Abbott Laboratories is a \$3.1 billion corporation headquartered in an attractive suburban area on the Lake Michigan shoreline, just 30 miles north of Chicago. We offer excellent salaries and full benefits including profit sharing and stock retirement plan. For consideration, send a resume with salary history to: **Sue Hart-Wadley/Corporate Placement**. Abbott is an Affirmative Action Employer.



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SYNTHETIC ORGANIC CHEMISTS

Merrell Dow Research Institute, Cincinnati Center, is currently undergoing a major expansion of its basic research sciences group. At this time we are interested in identifying synthetic organic chemists who would be interested in joining our chemical sciences group to work in a multi-disciplinary environment on new approaches to developing agents for pharmacological application. Applicants must have a PhD and preferably recent post-doctoral experience. A background in bioorganic or medicinal chemistry is helpful, but not necessary. US citizenship or resident visa is a requirement.

We offer you professional growth and advancement in our modern, rapidly expanding research facility, a pleasant working environment in the northern suburbs of Cincinnati and a highly competitive salary and benefits package which includes relocation assistance.

Please send your curriculum vitae and a cover letter in confidence to:

Personnel Services Manager

Merrell Dow

MERRELL DOW RESEARCH INSTITUTE

2110 East Galbraith Road
Cincinnati, OH 45215
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Senior Scientist

Allergy & Inflammation Research

Hoffmann-LaRoche, a leader in the pharmaceutical industry, has a career opportunity in the area of Allergy and Inflammation Research.

This position will provide a qualified investigator the independence to establish a laboratory to study mechanistic approaches to the development of novel antirheumatic agents.

Qualifications include a PhD in a biological science and a minimum of 2 years postdoctoral experience studying disease mechanisms in inflammatory diseases. A strong publication record is desirable. Knowledge of the biology of retinoids, leukotrienes, and interleukins would be useful.

Please send resume to: Eleanor M. Malone, Professional Employment & Staffing Specialist



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POSITIONS OPEN

RESEARCH ASSOCIATE. Ph.D. with background in biochemistry, particularly in reactions of glutathione and other thiols, is sought to join group developing new radiosensitizing drugs and chemotherapy agents. Familiarity with pharmacology or pharmacokinetics of anticancer drugs and the use of high-performance liquid chromatography would be an advantage. Send curriculum vitae and names of three references to: **Dr. J. Martin Brown, Director, Division of Radiobiology Research, Department of Radiology, Stanford Medical Center, Stanford, Calif. 94305.**

Stanford University is an Equal Opportunity/Affirmative Action Employer.

Full-time, 2-year academic position (**RESEARCH BIOLOGIST**, University of California, Santa Barbara), available July 1985, for an established Ph.D. in the modeling of population dynamics. Position will be funded on a 12-month basis for two full years, starting at time of hire. Specific level (assistant to full research biologist) will be commensurate with experience and qualifications. (Range: \$30,800 to \$42,900 per annum.) The position is that of co-principal investigator of a research contract devoted to assessing the environmental impacts of a coastal power plant on nearshore fish stocks for the California Coastal Commission. Experience with fisheries production models beneficial, but not essential. The appointee will be based at a laboratory and computer facility in Encinitas, San Diego County, California. Send curriculum vitae, representative reprints, and the names, addresses, and telephone numbers of at least three references to: **Dr. E. DeMartini, University of California, Santa Barbara, 531 Encinitas Boulevard, Suite 114, Encinitas, Calif. 92024**, on or before 12 July 1985. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

RESEARCH GENETICIST/RESEARCH CHEMIST with the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS). Position located at Clay Center, Nebraska. Incumbent will conduct research on genetic basis for disease resistance and genetic linkage of polymorphic traits to parameters associated with efficient livestock production. Incumbent will apply principles of histocompatibility and/or molecular genetics. Career Federal Service, GS-12/13/14 (\$30,549 to \$55,087); salary based on qualifications and experience. *An Equal Opportunity Employer.* For information, contact: **Dr. Larry Cundiff, USDA-ARS-CPA, Meat Animal Research Center, Box 166, Clay Center, Neb. 68933**; telephone: 402-762-3241. For applications, contact: **Lee Triplett**, telephone: 301-344-1863.

RESEARCH POSITION available 1 September 1985 for Ph.D. with at least 2 years of prior postdoctoral experience to examine interrelationship of components of enteric nervous system with gastrointestinal endocrine cell function. Specific areas of interest relate to cholinergic, adrenergic, and GABAergic control of gut regulatory peptide release. Experience in cell and nerve culture, radioimmunoassay, and immunocytochemistry desirable. Salary and status negotiable. Curriculum vitae and three references to: **Richard F. Hart, M.D., Department of Internal Medicine, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Neb. 68105.** *An Affirmative Action/Equal Opportunity Employer.*

The Department of Veterinary Microbiology and Pathology of Washington State University invites applications for a faculty position in **VETERINARY BACTERIOLOGY**. Qualifications include the Ph.D. and D.V.M. degrees (or equivalent) plus evidence of research productivity in bacterial host parasite relationship during the past 5 years. A molecular approach to study of bacterial host parasite relationships should be demonstrated. Duties include teaching and training of graduate students in the areas of bacterial pathogenesis and immunity to bacterial infections of domestic animals. Collaboration on projects involving immunity to Gram-negative reproductive infections will be expected. The position is available 1 September 1985, subject to anticipated funding. Rank and salary commensurate with experience and qualifications. Application deadline: 1 July 1985 or until filled. Submit a résumé with statement of research interests, a list of publications, and names of three references to: **Dr. L. B. Corbett, Department of Veterinary Microbiology and Pathology, College of Veterinary Medicine, Washington State University, Pullman, Wash. 99164-7040.**

Washington State University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

RESEARCH ASSISTANT PROFESSOR: Research focused on structural analysis and dynamic processes of biomolecular diffusion in cell organelles using fluorescence recovery after photobleaching, resonance energy transfer, and freeze-fracture electron microscopy. Candidate must have Ph.D., postdoctoral research in biochemistry and biophysics of cell membranes, and published research in fluorescence recovery after photobleaching, resonance energy transfer, or freeze-fracture electron microscopy. *Women and minorities are encouraged to voluntarily identify themselves.* Send curriculum vitae and names of three references to: **Dr. Charles Hackenbrock, Laboratories for Cell Biology, School of Medicine, 108 Swing Building 217H, University of North Carolina at Chapel Hill, Chapel Hill, N.C. 27514**, by 12 July 1985. *An Equal Opportunity/Affirmative Action Employer.*

SENIOR RESEARCH TECHNICIAN

Immediate opening. Tasks include protein isolation, immunoblotting, measurements of enzyme activities, and analysis of peptides and amino acids.

B.S. degree and experience with HPLC required.

Send résumés to: **Dr. Andrew G. Szent-Gyorgyi, Brandeis University, Department of Biology, Waltham, Mass. 02254.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP: Available now to work on membrane function and control of growth and differentiation of tumor cells in culture. Background in biochemistry and cell biology desirable. Send curriculum vitae and names of two references to: **Dr. Leon A. Heppel, Department of Biochemistry, Cornell University, Ithaca, N.Y. 14853.** *An Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIP IN NEUROPHYSIOLOGICAL MECHANISMS OF TRAUMATIC UNCONSCIOUSNESS (2 to 3 years) available after 1 July 1985. Opportunities for qualified Ph.D. in interdisciplinary group investigating pathophysiology of concussive head injury. Potential faculty appointment. Research areas include recordings of spinal and supraspinal field potentials and [¹⁴C]-deoxyglucose studies. Other studies will examine effects of brain lesions on neurological consequences of injury. Persons with training in electrophysiology and behavioral assessments will be considered. Preference given to candidates with background in autoradiographic techniques or neurochemistry. Stipend of \$20,000. Send curriculum vitae and three letters of recommendation to: **Ronald L. Hayes, Ph.D., Division of Neurosurgery, Medical College of Virginia, Box 693, MCV Station, Richmond, Virginia 23298-0001.**

POSTDOCTORAL FELLOWSHIPS AT

THE JOHNS HOPKINS ONCOLOGY CENTER

Three individuals with the M.D., Ph.D., or equivalent degrees are sought to join an interdisciplinary team of clinical and basic research scientists studying carcinogenesis and cancer therapy at the molecular, cellular, tissue, and host levels. Candidates should have a record of excellence in their academic studies.

1) One individual will study the relationship between markers of energy-associated metabolism in irradiated tumors as detected by NMR and the radiocurability of these tumors. Radioresponsive-ness and interconversion of energy-associated molecular species will be investigated.

2) One individual will study the molecular biology of the response of normal and malignant cells to DNA-damaging agents, particularly as it relates to chromatin structure.

3) One individual will study the molecular biology of induced cellular memory of exposure to DNA-damaging agents. Experiments will be performed in model systems and in cells of exposed humans.

Interested applicants should send current curriculum vitae and a letter of interest that includes the names of three references to:

**Dr. Jerry R. Williams
Radiobiology Laboratory
The Johns Hopkins Oncology Center
600 North Wolfe Street
Baltimore, Md. 21205**

The Johns Hopkins University is an Affirmative Action Employer.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP Laboratory of Psychoneuroendocrinology Duke University Medical Center

Focus is on the role of neuropeptides in neurobiology with a special emphasis on alterations in neuropeptide systems in neuropsychiatric disorders. A multidisciplinary approach is taken to study the role of neuropeptides in the mammalian CNS. Exposure to clinical neuropsychiatry is available and encouraged. M.D. and/or Ph.D. required. Available 1 July 1985. Send three letters of recommendation, including curriculum vitae, to: **Charles B. Nemeroff, M.D., Ph.D., Departments of Psychiatry and Pharmacology, Box 3859, Duke University Medical Center, Durham, N.C. 27710.** *An Equal Opportunity Employer.*

The Johns Hopkins University Department of Anesthesiology and Critical Care Medicine POSTDOCTORAL FELLOWSHIP IN RESEARCH

Applications are invited for this position available immediately to study the molecular biology of human cytochrome P450. The applicant must be creative and highly motivated to carry out independent experimentation utilizing human cytochrome P450 under study.

M.D. and Ph.D. required with 1 to 2 years of experience in molecular biology. Contact:

**Roy C. Levitt, M.D.
The Johns Hopkins University
Department of Anesthesiology
and Critical Care Medicine
Blalock 1410
Baltimore, Maryland 21205
Telephone: 301-955-7609**

CONFERENCE

The New York Academy of Sciences Conference on Computer Simulation of Chemical and Biomolecular Systems 2 to 4 October 1985 Barbizon-Plaza Hotel, New York City

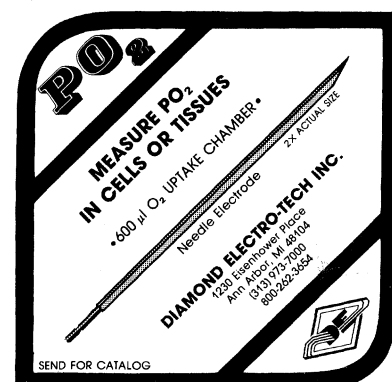
This symposium is intended to facilitate the exchange of ideas and information among scientists involved in computer modeling of chemical and biochemical systems. Methods and applications in the areas of aqueous solutions, crystal hydrates, reactions and interactions, and biomacromolecules, will be discussed. Leading scientists working in this area will be featured.

There will be contributed poster sessions. The deadline for submission of abstracts is 1 September 1985. The abstracts should include the name of the author(s), institution, and a 200-word summary of the work to be presented. Send abstracts to: **David L. Beveridge, Ph.D., Department of Chemistry, Hunter College-CUNY, New York, N.Y. 10021.**

Chairs: **David L. Beveridge, Ph.D., Hunter College-CUNY, New York, New York 10021**, and **William L. Jorgensen, Ph.D., Purdue University, West Lafayette, Indiana 47907.**

Inquiries should be addressed to: **Conference Department, The New York Academy of Sciences, 2 East 63 Street, New York, N.Y. 10021.**

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BIOCHEMIST—Research involves biochemical and histochemical analysis of mechanisms and factors affecting muscle and adipose tissue composition and cellular structure in poultry. Emphasis is on developing means to control deposition of abdominal and carcass fat. Training and experience in biochemistry, animal cell and tissue anatomy and physiology, receptor site analysis and histochemical analysis are required. *(Philadelphia, PA) FOR INFORMATION CONTACT DR. ROBERT C. BENEDICT—215-233-6455.*

BIO-ORGANIC CHEMIST—Research involves determination of selected aspects of the structure and function of a lipase. Training and experience in affinity labeling, HPLC, and general protein and lipid methodology is required. Knowledge of NMR techniques applicable to the research is desirable. *(Philadelphia, PA) FOR INFORMATION CONTACT DR. PHILIP E. SONNET—215-233-6412.*

BIO-PHYSICAL CHEMIST—Research involves determination of the structure and interactions of the glutenin complex of wheat proteins and its relationship to the unusual viscoelastic properties of wheat flour doughs. Properties of monomolecular films of native and modified glutenins at the air-water interface and interactions of glutenins with other wheat proteins and surface-active molecules will be studied. Training and experience in biochemistry and physical chemistry with emphasis on protein structure and interactions is required. Knowledge of CD and IR spectroscopy, capillary viscometry, rheology of films and gels, and film balance is desirable. *(Philadelphia, PA) FOR INFORMATION CONTACT DR. DONALD G. CORNELL—215-233-6470.*

CHEMIST-SPECTROSCOPIST—Research involves determination of uronic acid polymer orientation in plant cell walls via labeled polymer spin-spin and exchange interactions. Training and experience in one of the following areas is required: spin label chemistry (synthesis), EPR spectroscopy, or computer simulations of EPR spectra in the slow-tumbling region. *(Philadelphia, PA) FOR INFORMATION CONTACT DR. PETER L. IRWIN—215-233-6420.*

PLANT PHYSIOLOGIST—Research involves isolation of DNA and fragments or sequences capable of serving as promoters in bacterial operon fusion vectors. Research objective is to develop improved understanding of function and regulation of plant gene promoters. Training and experience in molecular biology cloning and sequencing is required. *(Kearneysville, WV) FOR INFORMATION CONTACT DR. FRED ABELES—304-725-3451.*

Successful candidates will be hired for up to 2 years. Salary for these GS-11/12 positions (\$26,381 to \$31,619) will be based on qualifications and experience. A Ph.D. is required and candidates must be U.S. citizens. For application procedures contact:

**Sue Montgomery
Personnel Office
USDA, ARS, North Atlantic Area
600 E. Mermaid Lane
Philadelphia, PA 19118
215-233-6573**

Completed applications should be sent to the above address. Applications in response to this advertisement should be marked E02. The deadline for receipt of applications is **July 26, 1985.**

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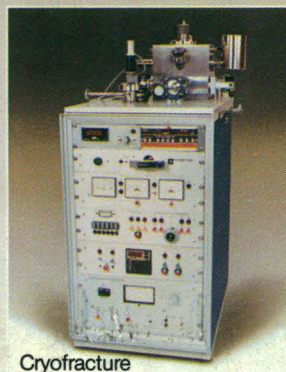
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