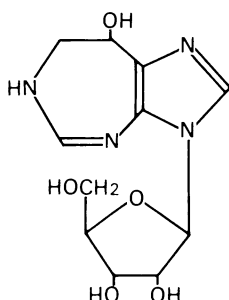


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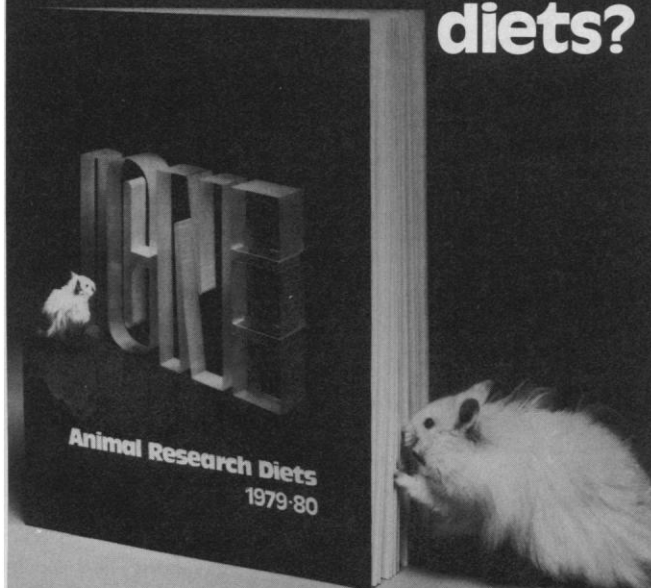
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The AAAS Calendar for 1979, the second in an annual series, is beautifully adorned by spectacular and unusual color and black & white covers from Science. This useful wall calendar is ideal for noting your appointments and remembering important dates in science. In a 12" X 13" format, the 1979 Calendar presents high quality reproductions on a glossy, heavy paper stock.

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POSITIONS WANTED

Biologist/Manager. Ph.D. Six plus years of experience involving aquatic project management, consulting, aquaculture, and bioassay as administrator and scientist. Seeks new position. Box 357, SCIENCE. X

Immunologist/Experimental Rheumatologist. Ph.D. microbiology. Experience in animal models of arthritis and inflammation, endotoxins, host resistance to endotoxins, anti-inflammatory agents, and aging research. Postdoctoral training. Publications. Seeks research, teaching, or industrial position. Box 370, SCIENCE. X

Lipid Biochemist. Ph.D. with active and funded research program, extensive research experience in lipid enzymology, purification of lipids and lipid carriers, 20 plus publications; seeks industry or institute research position. Box 366, SCIENCE. 12/1, 8

Ph.D. Neurophysiologist/Electrophysiologist with experience in histology for light and electron microscopy and tissue culture of neurons. Desires graduate and/or undergraduate teaching position with opportunities for research and development of student research programs. Salary and rank negotiable. Box 361, SCIENCE. X

Ph.D. Pharmacologist, Pharmacist. Experienced in animal pharmacology and toxicology, clinical drug investigations, pharmacy, regulatory compliance, biomedical writing, professional services, NIH grants and contracts, and teaching. Box 367, SCIENCE. X

Research Assistant. M.D. 1970. Surgical experience with research experience in biochemistry, physiology, pathology, and electron microscopy work. Seeks a research assistant position. Box 362, SCIENCE. X

Scientific Photographer. Ten years of still photography experience at large university. Good biological background includes master's degree. Especially interested in biological and agricultural fields. Box 350, SCIENCE. 12/1, 15

POSITIONS WANTED

Ph.D., M.V.Sc., M.Sc. (Pharmacology), D.V.M. (Gold Medalist). Published 35 papers, three review articles, 12 abstracts in the field of autonomic-, auto-coid-, smooth muscle-, immunopharmacology. Presently visiting professor at the University of Montreal, Canada. Looking for a suitable faculty (teaching/research) position. Available 1 June 1979. Salary negotiable. Box 369, SCIENCE. X

Protein Chemist/Immunochemist. Ph.D. 1968. Expertise in coagulation, fibrinolysis, kinine, fibrinogen structure. Versatile experience on isolation, purification, chemical analysis by modern biochemical and immunological techniques including radioimmunoassay. Will relocate. Box 364, SCIENCE. X

Synthetic Organic Chemist. Ph.D. 1971. Five years of industrial experience in controlled drug and pesticide release via microencapsulation and films. Seeks industry, government, or academia. Box 359, SCIENCE. X

Systems Ecologist. Recent Ph.D. Teaching and research experience at major universities. Strong publishing record in aquatic, wetland, and systems ecology. Seeking research/teaching relocation. Box 365, SCIENCE. X

Technician. Ph.D. with 4 years of experience seeks laboratory technician job in mycology, plant taxonomy, or ecology. Box 368, SCIENCE. X

Vertebrate Paleontologist. Ph.D. Eight years as department head in major African museum. Publications. Teaching experience. Seeks museum/academic position. Box 363, SCIENCE. 12/1, 8

POSITIONS OPEN

ANATOMISTS (two). Assistant professor level. Ph.D. or M.D. with postdoctoral research experience who shows evidence of developing an active research program. Research area open but some preference given to developmental and cell biology, pulmonary and reproductive biology. Teaching responsibility confined to one semester. New Jersey Medical School has moved to new health science campus and the department has new facilities with well-equipped laboratories. Salaries are highly competitive. One position available in the spring. *Applications from women and minority candidates are encouraged.* Interested individuals should submit curriculum vitae before 15 January 1979 to: **Dr. Anthony V. Boccabella, Chairman, Department of Anatomy, College of Medicine and Dentistry of New Jersey, New Jersey Medical School, 100 Bergen Street, Newark, N.J. 07103. Affirmative Action/Equal Opportunity Employer.**

TWO ANATOMY POSITIONS

Associate and assistant professors with research interest in reproductive biology or cell biology to teach in gross anatomy or histology/embryology. Send curriculum vitae, publication list, description of research interests, and names and addresses of three references to: **Dr. Harold Brody, Department of Anatomical Sciences, Schools of Medicine and Dentistry, State University of New York at Buffalo, 317 Farber Hall, Buffalo, New York 14214.**

An Equal Opportunity/Affirmative Action Employer

ASSISTANT. A postdoctoral position is available immediately to study the control of plasmid gene expression. Applicants must have a Ph.D. in biochemistry and several years of experience in enzymology, microbiology, and in the handling of nucleic acids. Salary: \$13,500. Send curriculum vitae and two letters of reference to: **Dr. D. Dubnau, Public Health Research Institute, 455 First Avenue, New York, N.Y. 10016.**

An Equal Opportunity Employer

BIOLOGY. ASSISTANT PROFESSOR. Offer courses in genetics, cell biology, and introductory biology, 12 semester hours. Ph.D. required; consideration given to candidates in final stages of dissertation; college teaching experience desired; broad biological background. \$12,000 to \$14,500. Send résumé and three letters of reference to: **Dr. Stuart Goff, Assistant Dean of Sciences, Keene State College, Keene, N.H. 03431. Deadline: 8 January 1979. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

AQUATIC ECOLOGIST FOR ENVIRONMENTAL STUDIES

Ph.D. or equivalent in ability and experience, to supervise ongoing study of the effects of a coastal power generating station on mysid shrimps. Duties include overseeing five technicians in field collections and laboratory work, planning research, analyzing data, and writing technical reports and scientific papers. Experience with plankton or crustacean population biology desirable. Salary from \$20,000 to \$24,000 plus fringe benefits. Send résumé and names of three referees to:

Marine Ecological Consultants
of Southern California
533 Stevens Avenue, Suite D-57
Solana Beach, California 92075

University of South Carolina seeks **Ph.D. ARCHEOLOGIST** for associate director, Institute of Archeology and Anthropology. Minimum of 5 years of research experience in North American archeology and 3 years of administrative experience. Position is three-fourths administrative and one-half research in a full-time research facility conducting contract archeology, environmental impact studies, research grants, and statewide inventory in prehistoric, historic, and underwater programs. Deals with public, federal, state, and local agencies and is a part of university community. Hard money university position. *An Equal Opportunity/Affirmative Action Employer.* Salary competitive. Send application and curriculum vitae to: **Robert L. Stephenson, Institute of Archeology and Anthropology, University of South Carolina, Columbia, South Carolina 29208.**

ASSISTANT PROFESSOR, Ph.D. or M.D., with experience in electrophysiological and anatomical research in the central nervous system, to collaborate with group conducting electrophysiological and clinical research in the physiology and physiopathology of the vestibular system.

ASSISTANT PROFESSOR, Ph.D. or M.D., with experience in sensory physiology, to collaborate with research group working on the physiology and anatomy of the inner ear and related sensory organs. Send curriculum vitae to: **Vicente Honrubia, M.D., Division of Head and Neck Surgery, University of California at Los Angeles, Los Angeles, Calif. 90024. An Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR—BIOLOGY/HEALTH

Damavand College, a college for women in Tehran, Iran, has a possible opening in introductory biology and health, beginning 23 August 1979. Instruction is in English. Teaching experience in health is preferred. Please send curriculum vitae and three recommendations to: **Dr. John F. Moore, Chairman, Department of Biology, Damavand College, P.O. Box 1326, Tehran, Iran.**

ASSISTANT PROFESSOR OF GENETICS WASHINGTON STATE UNIVERSITY

Tenure-track position for geneticist with potential to develop an outstanding research program and with interest in teaching at the graduate level and in an introductory genetics course. Applicants with research in cellular or molecular plant biology including cell culture are particularly sought, but those in other areas of research will also be seriously considered.

Screening of applicants will begin on 15 January 1979. Curriculum vitae, description of research plans, and three letters of reference should be sent to: **Dr. Andris Kleinhofs, Search Committee Chairman, Genetics Program, Washington State University, Pullman, Wash. 99164.**

The University is an Equal Opportunity/Affirmative Action Employer. Applications from members of minority groups, women, and/or handicapped persons are encouraged.

NORTHWESTERN UNIVERSITY Department of Geological Sciences

A new, regular assistant professorship is available September 1979. All applicants with strong quantitative backgrounds in the geological sciences should forward, as soon as possible, their curriculum vitae, list of publications, and a statement of research interests and goals to:

**E. H. Timothy Whitten, Chairman
Department of Geological Sciences
Northwestern University
Evanston, Illinois 60201**

Northwestern University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

The **SECTION OF CELL BIOLOGY**, Yale University Medical School, invites applications for two positions of **ASSISTANT PROFESSOR** available on 1 July 1979 or earlier. One of these positions could be converted to a position of associate professor (without tenure).

Candidates with research interests in the structure, biochemistry, and function of cellular membranes, in membrane interactions in exocytosis and endocytosis, in membrane biogenesis, or in the morphology and chemistry of cell surfaces will be favored, but outstanding candidates with other interests will be also considered.

The new assistant professors will be expected to participate in the teaching of cell biology-histology to medical students, especially in the teaching of a histology laboratory to small groups of students. Previous experience in laboratory teaching is not required, but would be welcome. Participation in the teaching of graduate students is also expected. For the possible position of associate professor, an adequate background in cell biology-histology is required.

Those interested should send applications to: **Dr. G. E. Palade, Section of Cell Biology, Yale University Medical School, 333 Cedar Street, New Haven, Conn. 06510**, before 15 February 1979. Curriculum vitae, a list of publications, a summary of current research interests, and the names of three references should accompany the application.

Yale University is an Equal Opportunity/Affirmative Action Employer.

Applications are invited for appointment as **ASSISTANT PROFESSOR in the Environmental Engineering Program**. Specialization in biological or physical processes in water and wastewater treatment is desired. Duties will include teaching in both graduate and undergraduate courses as well as development of an active program of research and scholarship. Send curriculum vitae and list of three references to: **Dr. Joseph S. Devinny, Search Committee, BHE 213, University of Southern California (USC), University Park, Los Angeles, Calif. 90007**. *USC is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF HEMATOLOGY/ONCOLOGY AND ASSISTANT PROFESSOR OF ENDOCRINOLOGY/METABOLISM

The Department of Pediatrics, University of Massachusetts Medical School, is seeking candidates at the assistant professor level. Qualifications include strong research interests with capabilities in teaching and patient care, and with Board-certification in pediatrics and subspecialty Boards where applicable. Send curriculum vitae and names of three references to: **James B. Hanshaw, M.D., Department of Pediatrics, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, Massachusetts 01605**. *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR, IMMUNOLOGY

Immunologist/immunogeneticist required at assistant professor (and postdoctoral fellow) level to join others in a medical school immunology group. Special research strengths of this group are a good HLA laboratory (international workshop standard), complement allotyping, collaborative relationships with the blood bank, biochemical genetics, cytogenetics and with clinical investigators, plus the availability of large families. Our group is also involved in teaching, in a clinical immunology diagnostic laboratory, and with a transplantation program. For more information please write, preferably sending detailed curriculum vitae plus any relevant reprints, to: **Dr. W. H. Marshall, Professor of Immunology, Faculty of Medicine, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1B 3V6**.

ASSISTANT PROFESSOR—WILDLIFE ECOLOGY. Tenure-track, 12-month position starting 1 July 1979. Research, advising, teaching wildlife conservation, wildlife habitat management; 75 percent teaching, 25 percent research. Requires Ph.D. in wildlife or related ecological area. Prefer person interested in mammalian research, quantitative ecology, and habitat management. Send inquiries to: **J. J. Dinsmore, Department of Animal Ecology, Iowa State University, Ames, Iowa 50011**. *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSOCIATE SCIENTIST

D.V.M. positions available for tumor immunologist with virology or immunochemistry background. Applicants must have several years of experience in research of immune mechanism in laboratory animals. Salary range: \$12,000 to \$15,000. Submit replies to: **Box 373, SCIENCE**

BIOCHEMIST—To direct lipid analysis laboratory, teach lipid metabolism, and conduct research in lipid transport and atherosclerosis. This is a full-time, tenure-possibility position. Assistant professor with postdoctoral experience preferred, but extensive experience in the field would qualify for instructorship. Salary commensurate with education and experience. Send curriculum vitae and letters of recommendation to: **Dr. Peter Kuo, Department of Medicine, College of Medicine and Dentistry of New Jersey, Rutgers Medical School, P.O. Box 101, Piscataway, N.J. 08854**. *Equal Opportunity/Affirmative Action Employer, M/F.*

The Department of Biochemistry, Wayne State University School of Medicine, Detroit, Mich. 48201, invites applications for a **FACULTY POSITION**. The successful applicant should be experienced in protein crystallography and will be expected to teach graduate and medical students. Rank will be at the assistant professor level or higher depending on qualifications. Please send curriculum vitae and names of three references to: **Dr. D. Tsernoglou** at the above address. *The University is an Affirmative Action Employer.*

BIOCHEMIST

Position available in our research products division for a Ph.D. with extensive experience in enzyme purification and nucleic acids chemistry. Send reply with curriculum vitae to:

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300 Park Avenue South
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BIOCHEMIST

Postdoctoral positions available immediately for studies on the primary structures of isoferritins from normal and malignant cells and on rate limiting aspects of their biosynthesis. Send résumé to: **Dr. James W. Drysdale, Department of Biochemistry and Pharmacology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, Mass. 02111**. *Tufts is an Affirmative Action Employer.*

SCHOOL OF NATURAL SCIENCES AND MATHEMATICS

BIOLOGY ASSISTANT/ASSOCIATE PROFESSOR, tenure-track, for August 1979. Ph.D. in zoology and teaching experience at college level required. Application deadline: 1 January 1979.

Application procedure—apply to: **Dean of the School of Natural Sciences and Mathematics, Slippery Rock State College, Slippery Rock, Pa. 16057**. The position requires submission of a résumé, transcript, and three letters of recommendation to be received by the application deadline indicated. *Slippery Rock is an Affirmative Action/Equal Opportunity Employer.*

CELL BIOLOGIST

The Department of Biology at the University of California at Riverside has a faculty position at the level of assistant professor available 1 September 1979. Primary teaching responsibilities will be in the area of cell biology both at the undergraduate and graduate levels. Candidates must have postdoctoral experience and show evidence of ability to initiate and sustain a productive high quality research program. The department is especially interested in candidates with research experience in biochemical, genetic and/or electron microscopical approaches to the study of cell ultrastructure, morphogenesis, cell surfaces, and cell interactions. Applicants should provide curriculum vitae, reprints, and a brief description of research and teaching interests. Additionally, at least three letters of support should be sent. *The University of California is an Equal Opportunity/Affirmative Action Employer. Applications are invited from all qualified individuals, especially women and members of minority groups.* Send applications to:

**W. L. Belser
Chairman of the Search Committee
Department of Biology
University of California
Riverside, Calif. 92521**

POSITIONS OPEN

BIOLOGY—BOTANY. 1 September 1979. Assistant professor (preferred) or instructor; doctorate for assistant professor; consider ABD instructor level. Specialization: botany (field botany, plant anatomy, general botany, ecology); also general introductory courses. Seek flexibility in teaching areas and approach in undergraduate, innovative curriculum in liberal arts setting. Expected salary: \$13,000 to \$13,500; 9 months; specific dependent upon qualifications and doctorate. College is small, coeducational, 4-year, with approximately 1300 students. Department has five full-time members, plus one half-time, averaging 80 to 100 undergraduate majors. Contact: **Dr. Inez Hull, Chairperson, Biology Department, Whittier College, Whittier, California 90608**. *An Equal Opportunity Employer.*

The Emergency Care Research Institute (ECRI) has positions for **BIOMEDICAL ENGINEERS** as **HEALTH DEVICES** and risk management project officers.

- **HEALTH DEVICES** project officers test and evaluate medical devices and systems, investigate equipment hazard, and provide consultation to the health care community. We publish a monthly journal, **HEALTH DEVICES**, which is used by more than 2500 hospitals.
- Risk management project officers develop and implement our Technology Risk Assessment Program to which over 80 health care facilities currently subscribe.

Applicants should have a bachelor's or master's engineering degree and be able to express themselves effectively and concisely both verbally and in writing. Experience in a health care facility is desirable.

For more information, contact: **Harvey Kostinsky** at ECRI, telephone: **215-825-6000**.

BIOMEDICAL ENGINEER/BIOPHYSICIST/PHYSIOLOGIST

Ph.D. with postdoctoral and independent research experience required to investigate collaboratively either the microcirculation or physical regulators of the cells in the connective tissues supporting teeth. Academic rank and salary consistent with experience. Enquiries to: **Dr. A. H. Melcher, MRC Group in Periodontal Physiology, 4384 Medical Sciences Building, University of Toronto, Toronto, Ontario, Canada M5S 1A8**.

BIostatistician—Epidemiology Program, Cancer Center of Hawaii, beginning 1 February 1979. Applicant must have Ph.D. with at least 3 years of experience in related postdoctoral biomedical research. Some experience in computer programming and data file manipulations is desirable. Responsibilities include initiation of research activities, as well as collaboration with epidemiologists and clinicians in their research work. An interest in extending applied statistical methodologies in epidemiological cancer research is desirable. Salary negotiable. Send curriculum vitae and three references to: **Chairman, Search Committee, Epidemiology Program, Cancer Center of Hawaii, Biomedical Sciences, D-102, Honolulu, Hawaii 96822**. *The University of Hawaii is an Equal Opportunity/Affirmative Action Employer.*

CHAIRPERSON IN BIOLOGY

Rank open, tenure-track, to begin 1 July or 1 September 1979. Chairperson will be expected to lead the department toward increased emphasis in molecular, cellular, and developmental biology. Teaching competence in animal physiology and one of the following: developmental biology, cell biology, or genetics. In addition, the chairperson will be expected to develop an active program of research involving students. Established record of quality in teaching and research and potential for administrative leadership essential. Send résumé, transcripts, and three letters of recommendation by 1 February 1979 to: **Henry Woodard, Chairman, Search Committee, Beloit College, Beloit, Wisconsin 53511**. *Beloit College is an Equal Opportunity/Title IX Employer, M/F.*

Position open. Experienced **ELECTRON MICROSCOPY TECHNICIAN**. Must have training and experience to be capable of administering departmental EM laboratory and of training of other technical personnel and graduate students in EM technology. Salary will be commensurate with qualifications. Contact: **Earl G. Hamel, Jr., Department of Anatomy, University of Alabama in Birmingham, University Station, Birmingham, Alabama 35294**. *The University of Alabama in Birmingham is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

CHAIRPERSON Department of Biological Sciences North Texas State University

Nominations and applications are invited for chairperson of a 23-member department within a growing university of 17,000 students, adjacent to the Dallas-Fort Worth Metroplex. Initial appointment is for 4 years, but may be renewed for one additional 4-year term. Candidates should provide evidence of ongoing scholarly achievements in teaching and research, and have the ability to provide administrative leadership in developing and managing department and interdisciplinary programs. The area of research expertise is open and rank and salary are negotiable. Send curriculum vitae and five letters of support before 1 January 1979 to:

Dr. David R. Redden, Chairman, Search Committee
Department of Biological Sciences
North Texas State University
Denton, Texas 76203

An Equal Opportunity/Affirmative Action Employer

CHAIRMAN OF DEPARTMENT OF MATHEMATICS AND STATISTICS STEPHEN F. AUSTIN STATE UNIVERSITY

Applications invited for position of chairman of Department of Mathematics and Statistics. Stephen F. Austin is a state-supported, multidisciplinary university enrolling approximately 10,500 students. Located in Nacogdoches, Texas, a town of approximately 30,000, Stephen F. Austin offers a wide range of bachelor's and master's degrees and one doctorate.

Department has faculty of 21, 12 doctorate; it offers B.S. and M.S. degrees in pure mathematics, mathematics teaching, and statistics. Chairman retiring after extended period of service.

Qualifications include:

- 1) Earned doctorate,
- 2) Proven leadership and administrative capability, and
- 3) Demonstrated teaching excellence, research accomplishments, and other qualifications for appointment at a senior rank.

Salary: competitive, 12-month appointment. Duties begin in fall semester of 1979. Letter of application, résumé, three letters of recommendation, and placement credentials postmarked by 15 February 1979.

Dr. R. G. Dean
Chairman of Search Committee
Department of Mathematics and Statistics
Stephen F. Austin State University
Nacogdoches, Texas 75962

An Affirmative Action/Equal Opportunity Employer

University of Texas Southwestern Medical School (Dallas) invites application for **CHAIRPERSON**, Department of Pharmacology. The department is responsible for teaching medical and graduate students general and molecular pharmacology and for conducting research. Candidates are expected to have demonstrated investigative excellence recognized at a national level, academic leadership, and a high degree of administrative ability.

Send application, including curriculum vitae and bibliography, to: **Search Committee, Department of Microbiology, Southwestern Medical School, Dallas, Texas 75235.** The University of Texas is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR OF NONPROFIT ORGANIZATION

The trustees of the Bureau of Social Science Research, a 30-year-old nonprofit social science research organization in Washington, D.C., invite applications for director. Desired qualifications include advanced degree in one of the behavioral sciences; a distinguished record of research contributions; familiarity with academic and nonacademic institutions and agencies involved in social research, private and public funding agencies, social science associations, and policy bodies; ability to plan and promote research programs; and experience in the administration of social science research operations.

Please send applications and nominations by 28 February 1979 to: **Search Committee, Bureau of Social Science Research, 1990 M Street, NW, Washington, D.C. 20036.**

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

LINCOLN COLLEGE New Zealand CHAIR IN ENTOMOLOGY (Agricultural Zoology)

The Council of Lincoln College, University College of Agriculture, invites applications for the chair in entomology, resulting from the impending retirement of Professor R. A. Harrison.

Applicants should hold an advanced degree in science or agricultural science and have an established record of research and/or teaching in some branch of agricultural zoology.

The successful applicant will be appointed as head of department and will be responsible to the college principal for the administration of the department.

The appointment will be made within the existing range of professorial salaries, NZ\$23,012 to NZ\$29,188 per annum, the commencing salary being determined by the College Council.

Expenses of appointment reimbursed up to specified limits. New Zealand government superannuation is available.

Further details and general conditions of appointment are obtainable from: **Secretary General, Association of Commonwealth Universities (Appointments), 36 Gordon Square, London WC1H 0PF, England, or from the Registrar of the University.**

Applications close on 15 January 1979.

UNIVERSITY OF GLASGOW CHAIR OF GENETICS

Applications are invited for the chair of genetics which will become vacant on 1 March 1979.

Further particulars may be had from: **Secretary of the University Court, Room 18, The University of Glasgow, Glasgow, G12 8QQ, Scotland,** with whom applications (15 copies) giving the names and addresses of three referees, should be lodged on or before 15 December 1978.

In reply please quote Ref. No. 4268CS.

CLINICAL BIOCHEMIST, M.D.-Ph.D., or chemical pathologist, to direct biochemistry laboratories in a modern, progressive, university-affiliated department of pathology and laboratory medicine. There are two or three additional doctoral positions in biochemistry, one M.S., and approximately 30 medical technicians. There is a simultaneous faculty appointment at Northwestern University. Teaching opportunities include residents in pathology and laboratory medicine, medical, and medical technician students. Effective liaison with the clinical staff is very important. Previous academic and administrative experience is required. Interested candidates please send curriculum vitae, a statement of personal goals, and names of three references to: **H. Friederici, M.D., Department of Pathology and Laboratory Medicine, Evanston Hospital, 2650 Ridge Avenue, Evanston, Ill. 60201.** *Equal Opportunity/Affirmative Action Employer.*

DIRECTOR, LOS ANGELES COUNTY NATURAL HISTORY MUSEUM

Applications are invited for the position of director, Los Angeles County Natural History Museum, which includes the satellite Page Museum of La Brea Discoveries.

Candidates should have a record of research or scholarly achievement, preferably a Ph.D. degree in either of a field of natural science (life or earth sciences) or history. Administrative experience in a museum or a similar institution is required. Ability to secure endowments and grants is expected. The candidate must work with diverse governances and deal effectively with the public.

The director is responsible to the museum Board of Governors, a private support Foundation Board of Trustees, and the elected Board of Supervisors of Los Angeles County. The director supervises 200 plus full-time employees including 43 curatorial personnel. Principal divisions in the museum are earth sciences, life sciences, history, education, and exhibitions.

Salary will depend upon experience and qualifications.

Send inquiries or applications (with two copies of résumé) to: **Ed N. Harrison, Chairman of the Search Committee and President of the Board of Governors, Los Angeles County Natural History Museum, 900 Exposition Boulevard, Los Angeles, California 90007.**

The Museum is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DEAN, NATURAL SCIENCES AND MATHEMATICS UNIVERSITY OF MASSACHUSETTS AMHERST

Academic, administrative, and fiscal responsibility for Departments of Biochemistry, Botany, Chemistry, Computer and Information Science, Geology/Geography, Mathematics/Statistics, Microbiology, Physics/Astronomy, Polymer Science and Engineering, and Zoology. Departmental spokesman to chancellor and vice-chancellor for academic affairs, Amherst campus. Established scientist or mathematician. Administrative experience, funding-source knowledge, concern for instructional and research excellence, fiscal and personnel decisiveness, sensitivity to changing educational scene. Academic appointment in appropriate department. The university is state-supported, with 18,000 undergraduates and 5,000 graduates. Nominations and/or applications of qualified candidates with curriculum vitae and three references by 1 January 1979 to: **Chairman, Search Committee, c/o Vice-Chancellor for Academic Affairs, 362 Whitmore Building, University of Massachusetts, Amherst, Mass. 01003.** *An Affirmative Action/Equal Opportunity Employer.*

DEAN, ALLIED HEALTH SCIENCES UNIVERSITY OF HEALTH SCIENCES/ THE CHICAGO MEDICAL SCHOOL

Dean sought for School of Related Health Sciences in small, private university devoted to educating health professionals; master's programs in physical therapy, immunohematology, and health services administration; baccalaureate programs in physical therapy, medical technology, and radiological sciences. Qualifications: doctorate, experience in allied health administration, teaching, and curriculum development. Send résumé by 1 February 1979, to: **Jean M. Alberti, Ph.D., Chairperson, Dean's Search Committee, University of Health Sciences/The Chicago Medical School, North Chicago VA Hospital, Building 51, North Chicago, Illinois 60064.** *Affirmative Action/Equal Opportunity Employer.*

DEAN/DIRECTOR THE OHIO STATE UNIVERSITY, MANSFIELD CAMPUS

The dean/director gives leadership to developing, promoting, and supporting the academic programs and research opportunities, is responsible for preparing and administering the Ohio State University (OSU) budgets for the Mansfield Campus, and serves as the principal liaison representative of the university and the North Central Technical College which is located on the same campus. The appointee must have an earned doctorate, must receive an appointment to a senior faculty rank, and must have appropriate prior administrative experience. Teaching experience and evidence of scholarship are strongly preferred. The OSU Mansfield Campus, one of four regional campuses of The Ohio State University, is located in Mansfield, Ohio, a city of approximately 57,000 (15 percent minority) population. The attractive 600-acre campus has 42 full-time faculty, approximately 1100 regular students, and a \$12 million physical plant. Academic offerings include 2-year programs in most disciplines, baccalaureate degree and graduate programs in elementary education, and many courses for nontraditional students. Appointment on a 12-month basis begins on or before 1 July 1979. Salary is competitive and commensurate with qualifications. Applications with curriculum vitae and three letters of reference must be received on or before 29 December 1978. Send to: **John T. Mount, Vice President for Regional Campuses, The Ohio State University, 1050 Carmack Road, Columbus, Ohio 43210.** *An Equal Opportunity/Affirmative Action Employer.*

DIRECTOR, VISIBILITY LABORATORY AND PROFESSOR, SCRIPPS INSTITUTION OF OCEANOGRAPHY. Senior scientist with experience in environmental optics, remote sensing, and image processing to lead extramurally funded research division employing 30 and to teach graduate courses related to the marine environment. Split appointment: two-thirds faculty, one-third research. Salary to approximately \$40,000 for 11 months, depending on qualifications. Send curriculum vitae by 30 December to: **Professor W. H. Munk, A-025, Visibility Laboratory Search Committee, Institute of Geophysics and Planetary Physics, University of California, San Diego, Calif. 92093.** *The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

DEAN OF ADVANCED PROFESSIONAL STUDIES AND RESEARCH

SEARCH REOPENED

This is a new position available 1 July 1979 or earlier. Initial efforts are to be directed toward development of a major center for research, scholarship, professional studies, and public service. The dean will direct the center and coordinate research and related activities. The dean will maintain research involvement, assist personnel in preparing proposals for external funding, and be responsible for management of grants and contracts. Qualifications include earned doctorate, administrative experience with grant management, proven research ability, and demonstrated effectiveness in obtaining grants. The salary range will be \$32,000 to \$37,000.

Send application, curriculum vitae, and three written recommendations before 8 January 1979 to:

Dr. Gordon Thomas
Search Committee
Eastern New Mexico University
Portales, New Mexico 88130

An Equal Opportunity/Affirmative Action Employer

DIRECTOR, ADDICTION STUDIES PROGRAM.

Administrative and teaching-research position, associate/full professor level. Addiction studies is a 2-year, multitrait course of study leading to M.S. Ph.D./equivalent required with demonstrated competence in administration, clinical experience, research expertise, grantsmanship, and teaching excellence at graduate level. Send curriculum vitae, representative publications, names of three references, and cover letter stating why this program would be of interest to: **Chair, Search Committee, Addiction Studies, Health Sciences Center, University of Arizona, Tucson, Arizona 85724.** *An Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.*

ECONOMIC GEOLOGY, CRYSTAL CHEMISTRY, CHEMICAL GEOLOGY THE JOHNS HOPKINS UNIVERSITY

The Department of Earth and Planetary Sciences of Johns Hopkins University anticipates making a nontenured appointment in economic geology, crystal chemistry, or chemical geology, starting September 1979. Applicants should have a demonstrated capacity for innovative research in one of these areas and an ability to relate his/her specialty to geological problems. Duties will include graduate and undergraduate teaching and supervision of graduate research. Applications should include a complete résumé and the names of at least two referees and should be sent to: **Dr. George W. Fisher, Chairman, Department of Earth and Planetary Sciences, Johns Hopkins University, Baltimore, Md. 21218.**

Johns Hopkins is an Equal Opportunity Employer

GEOPHYSICAL FLUID MECHANICS THE JOHNS HOPKINS UNIVERSITY

The Department of Earth and Planetary Sciences at Johns Hopkins University anticipates making a nontenured faculty appointment in the area of atmospheric or oceanic dynamics, starting September 1979. Candidates should have a demonstrated capacity for innovative research, an interest in a wide range of areas of geophysical fluid mechanics, and an ability to teach at both graduate and undergraduate levels. Applications should include a complete résumé, list of publications, and names of at least two referees, and should be sent to: **Dr. George W. Fisher, Chairman, Department of Earth and Planetary Sciences, The Johns Hopkins University, Baltimore, Md. 21218.**

Johns Hopkins is an Equal Opportunity Employer

Applications are invited for a **FACULTY POSITION** in occupational therapy—physical dysfunction component—to begin 1 July 1979. Preference will be given to Ph.D. applicants having an interest in collaborating with occupational therapists to develop and conduct research related to physical disabilities. Research opportunities in the medical school's excellent facilities are available. Appointee will be expected, in addition, to develop and teach graduate courses and act as M.S. theses adviser. Send curriculum vitae, reprints, a statement of research plans, and three references to: **Dr. Ruthan Kannekter, Program in Occupational Therapy, Washington University, 4567 Scott Avenue, St. Louis, Missouri 63110.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

SIMON FRASER UNIVERSITY BRITISH COLUMBIA, CANADA DEPARTMENT OF BIOLOGICAL SCIENCES ENTOMOLOGIST

The Department of Biological Sciences invites applications for a tenure-track position in entomology. The successful applicant will be expected to develop a strong research programme and to participate in the teaching programme at both the undergraduate and graduate level including courses in the master of pest management programme. Candidate must have a Ph.D. degree in entomology or related subjects; preference may be given to individuals with teaching and research experience in agricultural pest management. The position is available, subject to budgetary constraints, from 1 September 1979. The initial appointment is for a period of 2 years, renewable. Salary will depend on experience; the base salary for the assistant professor rank currently is \$18,604 per annum.

Applications, including an up-to-date curriculum vitae, reprints of published research, and the names of three referees, should be sent to: **Dr. M. MacKauer, Chairman, Department of Biological Sciences, Simon Fraser University, Burnaby, British Columbia, Canada, V5A 1S6.** Deadline for receipt of applications is 31 January 1979 or when position is filled.

EXECUTIVE DIRECTOR—National Advisory Committee on Oceans and Atmosphere (NACOA), Department of Commerce, GS-1301-17/18, \$47,500 per annum. NACOA reviews the progress of national efforts in atmospheric, coastal zone, and marine areas and reports annually to the President and the Congress. The committee also reviews the mission and activities of the National Oceanic and Atmospheric Administration (NOAA) and reports to the Secretary of Commerce. The executive director directs the staff of scientists and administrative personnel which supports the committee. Qualifications: applicants must be highly qualified by experience and training in one or more areas in marine or atmospheric science and technology and must have demonstrated executive and leadership capability. As permanent representative of NACOA in Washington, incumbent must be articulate, dynamic, and able to deal responsibly with all levels of government, the public, and academia. Applicants should submit a Federal Personal Qualifications Statement (SF171) by 15 December to: **NOAA, Personnel Division, AD411, 6001 Executive Boulevard, Rockville, Maryland 20852, attention: Larry Salas.**

FACULTY—POSTDOCTORAL POSITION

An assistant professor/postdoctoral research associate position is available. Responsibilities include full-time teaching for one semester each year; balance of year spent on research on interaction of cytoplasmic proteins with plasma membranes. Appointment is for 2 years with starting salary of \$12,000. Send résumé and two letters of recommendation to: **Dr. Bruce Jacobson, Department of Biochemistry, University of Massachusetts, Amherst, Mass. 01003.** *An Affirmative Action/Equal Opportunity Employer.*

THREE FACULTY POSITIONS—Two associate or full professors in organic chemistry or related chemical research area. One tenure-track assistant professor in analytical chemistry. Applicants for the tenured associate or full professorships should have an established research program of high quality and be experienced teachers at the undergraduate and graduate level. Applicants for all positions must be committed to excellence in research and teaching. A complete curriculum vitae, which includes a documented summary of past accomplishments and future research plans, should be submitted to: **Dr. Gordon Harris, Chairman of the Search Committee, Chemistry Department, State University of New York at Buffalo, Acheson Hall, Buffalo, New York 14214.** *Qualified female and minority applicants are encouraged to apply.* Deadline for applications is 31 January 1979.

The State University of New York at Buffalo is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

Seven **FACULTY POSITIONS** available at the instructor through professor level in the Department of Ophthalmology of the University of Michigan Medical School and Affiliated Hospitals. Reply to: **Box 371, SCIENCE.** Code 300F0, 400F0, 500F0, 600F0, 700F0, 800F0, 900F0. *A nondiscriminatory, Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITION Thayer School of Engineering Dartmouth College

Applications are invited for a faculty position at the assistant professor level in the area of biomedical and electrical engineering, beginning September 1979. Applicants should have a background in systems theory and electrical engineering and be prepared to teach courses in these areas at both undergraduate and graduate levels. Additional information will be sent upon request.

Interested applicants should submit a résumé and at least three references to: **Professor Calman Gold, Thayer School of Engineering, Dartmouth College, Hanover, N.H. 03755.** Closing date for applications is 1 February 1979. *Dartmouth College is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and members of minority groups.*

FACULTY POSITION Thayer School of Engineering Dartmouth College

Applications are invited for a faculty position at the assistant professor level in applied mechanics and mechanical design beginning September 1979. The successful applicant will be required to establish an applied, experimental research program, teach courses at both the undergraduate and graduate levels, and advise masters and doctoral students in these areas. Industrial experience is desired, but it is not a requirement. Qualified individuals should send their résumé and a list of three references to: **Professor Kenneth A. Jones, Thayer School of Engineering, Dartmouth College, Hanover, N.H. 03755.** Closing date for applications is 1 February 1979. *Dartmouth College is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and members of minority groups.*

FACULTY POSITION AVAILABLE

Physiologist, visiting professor, spring term, 1979, 6-month appointment only. Salary negotiable and competitive. Preferably senior with broad experience in clinical physiology. Duties: to serve as teaching resource individual to medical school. Send curriculum vitae and three names of reference by 1 January 1979, to: **Chairman, Biology Department, University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, Missouri 64110.** *The University of Missouri is an Equal Opportunity Employer.*

FACULTY POSITION IN PHYSICAL OCEANOGRAPHY OR QUANTITATIVE ECOLOGY

A faculty position in physical oceanography or quantitative ecology is vacant at the Port Aransas Marine Laboratory of the University of Texas Marine Science Institute.

The faculty position is in the Department of Marine Studies of the University of Texas at Austin, with residence and research activities at the Port Aransas Marine Laboratory.

The successful applicant will be expected to develop a broad-based program in physical oceanography or quantitative ecology and train graduate students.

Send curriculum vitae and names of three references to: **Chairman, Faculty Search Committee, Port Aransas Marine Laboratory, University of Texas Marine Science Institute, Port Aransas, Texas 78373.** *An Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION IN CELL BIOLOGY

Assistant professorship open for a cell biologist with specific training in protein biochemistry and ultrastructural approaches to the analysis of cell structure and function: for example, microtubules, microfilaments, or membrane structure. Candidates must have a Ph.D. or M.D., a minimum of 2 years of postdoctoral training, and demonstrated productivity in original research. The successful candidate will be expected to establish a strong independent research program and train graduate students. Undergraduate-graduate student teaching responsibilities include advanced cell biology. Applicants should send curriculum vitae, bibliography, a brief description of future research and teaching interests, career objectives, and names of three referees by 15 January 1979 to: **Dr. Susan A. Gerbi, Cell Biologist Search Committee, Division of Biology and Medicine, Brown University, Providence, Rhode Island 02912.**

Brown University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

GENETICS PROGRAM COORDINATOR and GENETIC ASSOCIATES. The Michigan Department of Public Health is establishing a statewide genetic disease program. Seeking a program coordinator with a Ph.D. in human genetics and 3 years of experience relating to the delivery of genetic disease services. Salary range: \$20,000 to \$25,000. Seeking four genetic associates with a master's degree in genetic counseling and 1 year of experience in activities relating to genetic diseases. Salary range: \$13,700 to \$17,000. Send résumé by 15 December 1978 to: **R. G. Rice, M.D., Chief, Bureau of Personal Health Services, Michigan Department of Public Health, P.O. Box 30035, Lansing, Michigan 48909.** An Equal Opportunity Employer.

GEOLOGICAL OCEANOGRAPHY POSTDOCTORAL POSITION

Applications are invited for a research associate (postdoctoral) position in the Department of Oceanography, University of Washington, to carry out theoretical or experimental research on continental shelf sediment transport processes and near bottom physical oceanography in conjunction with ongoing programs. Ph.D. required. Background in geological oceanography, coastal physical oceanography, and boundary layer fluid mechanics is desirable. Send complete résumé and four letters of reference to: **Dr. Dora P. Henry, Chairman, Faculty Recruitment Committee, Department of Oceanography, WB-10, University of Washington, Seattle, Wash. 98195.** Deadline is 1 February 1979. *The University of Washington is an Equal Opportunity/Affirmative Action Employer.*

TEXAS A & M UNIVERSITY DEPARTMENT OF GEOLOGY

At least three openings at the assistant and associate professor level will be available for September 1979. Salary and rank are dependent upon experience; Ph.D. degree is required. Special areas of interest are: high or low temperature geochemistry, sedimentology, mineralogy-petrology, engineering geology, hydrology, or remote sensing. Send résumé and three letters of reference to: **Dr. Robert Stanton, Geology Department, Texas A & M University, College Station, Texas 77843.** An Affirmative Action/Equal Opportunity Employer.

DEPARTMENT OF MEDICAL GENETICS Faculty of Medicine THE UNIVERSITY OF BRITISH COLUMBIA

Applications are invited for the headship of the Department of Medical Genetics in the Faculty of Medicine. Curriculum vitae, together with the names of three referees, should be forwarded to: **Dr. David S. Lirenman, Chairman, Selection Committee for the Headship of Medical Genetics, Associate Dean and Director, Continuing Medical Education, Woodward I.R.C. Building, University of British Columbia, Vancouver, British Columbia, Canada V6T 1W5,** before 15 January 1979.

CHEMISTRY DEPARTMENT HEAD—Nominations and applications are invited for the position of head of the Department of Chemistry, Kansas State University (KSU), effective 1 July 1979. Candidates should have demonstrated excellence in research and teaching with a proven record of external research funding. The successful applicant would be expected to carry out an active research program complementing present programs, be an effective administrator of the department (20 faculty in analytical, inorganic, organic, and physical chemistry), and give leadership in developing new programs and proposed construction. Applications must include curriculum vitae, summaries of research, and names of three reference persons. Nominations and completed applications must be made by 1 January 1979 to: **Dr. R. N. McDonald, Department of Chemistry, Kansas State University, Manhattan, Kansas 66506; telephone: 913-532-6680.** KSU is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

IMMUNOLOGIST/MICROBIOLOGIST

Assistant professor position for Ph.D. with postdoctoral experience in immunology. Candidate must be able to conduct an active research program complementing departmental interests in molecular and cellular biology. Teaching obligations include courses in immunology and a course in basic microbiology. Starting date: fall 1979. Salary open. Send curriculum vitae and names of three references to: **Chairman, Search Committee, Department of Botany and Microbiology, 770 Van Vleet Oval, Norman, Oklahoma 73019,** by 1 March 1979. *The University of Oklahoma is an Equal Opportunity Employer.*

INSECT ECOLOGY

The Department of Ecology and Evolutionary Biology, University of California, Irvine, invites applications for a faculty position in insect ecology. Preference will be given to persons active in experimental research with phytophagous insects and with skills in such areas as population ecology, nutrition, physiology, biochemistry, and population genetics. The position begins July 1979 at assistant or associate professor rank. *All qualified candidates are welcome; women and minorities are encouraged to apply.* Send curriculum vitae, publications, statement of interest and qualifications, and three letters directly from references to:

**Dr. Peter R. Atsatt
Chair of the Search Committee
Department of Ecology and Evolutionary Biology
University of California
Irvine, California 92717**

The closing date for applications is 15 February 1979.

INSECT GENETICIST—RESEARCH LEADER. To assume leadership of an established research group investigating insects of agricultural and veterinary importance. Salary based on qualifications and experience. GS-13/14 level position. For information, contact: **L. E. LaChance, Director, Metabolism and Radiation Research Laboratory, P.O. Box 5674, State University Station, Fargo, N.D. 58105.** Telephone: 701-237-5771, extension: 5401. For application forms, contact: **James Knox, North Central Region Administrative Office, USDA/SEA/AR-1, 2000 West Pioneer Parkway, Peoria, Ill. 61614.** An Equal Opportunity Employer.

INVERTEBRATE ZOOLOGIST

A tenure-track position will be available in fall 1979 in the Department of Biology at the assistant professor level.

Applications must have the Ph.D. degree or equivalent with: (i) some postdoctoral experience in their area of expertise, (ii) the ability to establish an independent research program, and (iii) a background sufficient to teach an upper level undergraduate course in invertebrate zoology with fieldwork.

The department desires applications from individuals with active research interests in field-oriented invertebrate zoology in the area of either physiology or ecology.

Interested applicants should submit complete curriculum vitae and three letters of reference to: **Chairman, Search Committee, Department of Biology, Box 1812, Station B, Vanderbilt University, Nashville, Tenn. 37235.**

An Equal Opportunity/Affirmative Action Employer

MEDICAL TECHNOLOGIST—ASCP

St. Catherine Hospital, located 30 miles southeast of Chicago loop, has an immediate day opening in the Chemistry Department for an individual with experience in instrumentation. We offer an excellent salary and benefit package. Please send résumé to:

**St. Catherine Hospital
4321 Fir Street
East Chicago, Ind. 46312
Equal Opportunity Employer, M/F**

POSITION

A position is available in the Department of Biochemistry, University of Oregon Health Sciences Center, for a postdoctoral fellow to pursue research on specific problems related to metabolism of sulfur amino acids in brain and other tissue. The salary range for this current position is \$14,000 per year, depending on experience and other qualifications. Send résumé and the names and addresses of three references to: **Dr. J. H. Fellman, Department of Biochemistry, University of Oregon Health Sciences Center, 3181 S.W. Sam Jackson Park Road, Portland, Oregon 97201.**

POSITIONS OPEN

MAMMALIAN CYTOGENETICIST

The Biology Division at the Oak Ridge National Laboratory has an opening for a mammalian cytogeneticist to assume a research associate position. Candidate must have training or research experience equivalent to a Ph.D. in the field of mammalian mutagenesis and cytogenetics, including characterization of the various stages of mouse spermatogenesis. Particular attention will be given to individuals with a combination of research skills in meiotic and mitotic chromosome technique, in vivo DNA repair assays, translocation, dominant lethal and specific locus tests, and molecular dosimetry procedures in germ cells. Salary: \$1450 to \$1750 per month. Send résumé to: **Union Carbide Corporation, Nuclear Division, Oak Ridge National Laboratory, Employee Relations, P.O. Box X, Oak Ridge, Tennessee 37830.** An Equal Opportunity Employer.

MAMMALOGIST

Cornell University is seeking an assistant professor (tenure-track) to teach a one-semester course in mammalogy every year and to participate in an introductory vertebrate biology course in alternate years. Additional duties include participating in graduate-level courses and could include curating the mammal collection. We are particularly interested in applicants with interests in **PALEOBIOLOGY, SYSTEMATICS, or PHYSIOLOGY**, but mammalogists with other specializations are also invited to apply. Interested applicants should send their curriculum vitae, copies of representative publications, a letter outlining future research plans, and the names of three references to: **Chairperson, Mammalogy Search Committee, Section of Ecology and Systematics, Langmuir Laboratory, Cornell University, Ithaca, N.Y. 14853.** Applications must be received by 15 February 1979. *Cornell University is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.*

MARINE FINFISH AQUACULTURIST. Ph.D. to conduct basic research programs. Send résumé and references to: **Director, N.Y. Ocean Science Laboratory, Montauk, N.Y. 11954.** An Equal Opportunity/Affirmative Action Employer.

MEDICAL EDUCATION. Academic research-teaching position available in Department of Research in Medical Education. Preference given to individual with established research record in area of medical behavioral ecology. Responsibilities include: (i) teaching in a recently established Ph.D. program, and (ii) organizing and directing health-care research and health-care research training in naturalistic environments. Academic rank and salary commensurate with training and experience.

Send résumé to: **Richard E. Gallagher, Ph.D., Director, Division of Educational Services and Research, Wayne State University School of Medicine, Detroit, Mich. 48201.** Wayne State University is an Equal Opportunity/Affirmative Action Employer.

NEUROANATOMIST DEPARTMENT OF PHYSIOLOGY-ANATOMY UNIVERSITY OF CALIFORNIA BERKELEY

Invites applications and nominations for the position of assistant professor of anatomy which will become available 1 July 1979. The successful candidate must be able to assume primary teaching responsibility for one undergraduate and one graduate neuroanatomy course in alternate years, and to participate in the department's teaching program in the anatomical sciences. Preference will be given to applicants with two or more years of postdoctoral training and research competence in developmental and/or functional anatomy of the nervous system. Candidates will be evaluated on the basis of their dedication to excellence in teaching and research, and their capacities to develop a vigorous and independent research program in neurobiology. Interested individuals should reply by letter, explaining their qualifications, with current curriculum vitae and a list of three more persons who could act as referees, to: **Search Committee, Department of Physiology-Anatomy, 2549 Life Sciences Building, University of California, Berkeley, California 94720.** Deadline for applications and nominations: 1 January 1979. *The University of California is an Affirmative Action Employer.*

POSITIONS OPEN

MICROBIOLOGIST or **BIOCHEMIST** to do research in mitochondrial biogenesis and membrane biochemistry and to coordinate a course in microbiology for nurses. Rank and salary dependent upon qualifications. Send curriculum vitae to: **Dr. Morton M. Weber, St. Louis University Medical Center, c/o Personnel Services, 3556 Caroline Street, St. Louis, Mo. 63104.**

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

MOLECULAR BIOLOGIST

A tenure-track assistant professor is being sought for fall 1979. The successful candidate will be expected to initiate and maintain a vigorous research program on molecular aspects of **cellular differentiation, eukaryotic gene regulation**, or a closely related area. Teaching of an undergraduate course and a graduate course in the area of specialty is expected. Substantial initial research support will be provided. Deadline for receiving applications is 31 January 1979. Send curriculum vitae, three letters of recommendation, statement of future research objectives, and publications to: **Michael R. Felder, Molecular Biologist Search Committee, Department of Biology, University of South Carolina, Columbia, S.C. 29208.** *The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.*

NEUROSCIENCES PROGRAM UNIVERSITY OF OREGON

The University of Oregon intends to make three appointments in a new Interdisciplinary Program in Neuroscience. Two positions will be in the Biology Department and one in the Chemistry Department. Although junior positions are envisaged, applications from more senior candidates will be considered. Applicants should have an active research program as well as an interest in training students. Qualified persons should contact: **Chairman, Neuroscience Search Committee, Department of Biology, University of Oregon, Eugene, Oregon 97403.** Application deadline is 15 February 1979. *The University of Oregon is an Equal Opportunity/Affirmative Action Employer.*

Recent **Ph.D.** with background in photochemistry of seawater and organic reactions needed to develop research program on photochemical processes in the ocean with special reference to organic compound and metal reactions. Send résumé and names of three references to: **Dr. James Carpenter, RSMAS, University of Miami, 4600 Rickenbacker Causeway, Miami, Florida 33149.** Application deadline 31 December 1978. *An Equal Opportunity/Affirmative Action Employer.*

DEPARTMENT OF PHARMACOLOGY SCHOOL OF MEDICINE CASE WESTERN RESERVE UNIVERSITY

The Department of Pharmacology has faculty positions available at all levels. Postdoctoral research experience is required. The primary qualification is the potential of the applicant to establish a strong, independent research program. The area of research is open, but particular consideration will be given to persons whose interest is in molecular pharmacology, membrane structure and function, and/or immunopharmacology. New faculty will also be expected to actively participate in the teaching activities of the department.

Applications should include curriculum vitae, reprints of up to three recent publications, the complete addresses of at least three references, and a brief description of future research interests. Submit to: **Dr. M. E. Maguire, Faculty Recruitment Committee, Department of Pharmacology, School of Medicine, Case Western Reserve University, Cleveland, Ohio 44106.**

The University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION. Biochemist to study the interaction of membrane-active chemicals with biological membranes. Research background in membrane or protein biochemistry desirable. Salary up to \$12,500. Send curriculum vitae and names of three references, before 15 December 1978, to: **Dr. Terry L. Miller, Department of Agricultural Chemistry and Environmental Health Sciences Center, Oregon State University, Corvallis, Oregon 97331.** *An Equal Opportunity/Affirmative Action Employer, in compliance with Section 504 of the Rehabilitation Act of 1973.*

POSITIONS OPEN

UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

Applications are solicited for faculty positions in: **PHARMACOLOGY (#135)—Assistant professor**; responsibilities include: teaching medical, dental, allied health, and graduate students, conducting independent cardiovascular research. Requirements: Ph.D. in pharmacology or M.D. and 1 or 2 years of postdoctoral training required. **PHYSIOLOGY (#137)—Associate professor or professor**; responsibilities include: teaching and research in cardiovascular, neural, or renal physiology. Requirements: Ph.D. or M.D. and two or more years of postdoctoral training.

Applicants should send curriculum vitae, identifying vacancy number for which they are applying, to: **Dr. Thomas N. Lynn, Dean, College of Medicine, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, Okla. 73190.** *We are an Equal Opportunity Employer.*

BERKELEY—PHYSICS

The Physics Department of the University of California, Berkeley, expects during the next 2 years to be making one or two appointments at the assistant professor level. Preferred areas of research are astrophysics, atomic and plasma physics, condensed matter physics, nuclear physics, and particle physics, with some priority given to theoretical condensed matter physics, experimental plasma physics, and theoretical particle physics.

Applicants should write before 1 February 1979, to: **Chairman of the Physics Department, University of California, Berkeley, Calif. 94720,** giving curriculum vitae, publication list, and references. *The University of California is an Affirmative Action Employer.*

PLANT ECOLOGIST. Assistant or associate professor level. Ph.D. required. Candidates may have research interests in either terrestrial or aquatic habitats, but should have a broad background in ecology with particular emphasis on physiological aspects. Duties include undergraduate and graduate teaching, development of a research program, and training of graduate students. Curriculum vitae, reprints, a summary of future research plans, and three letters of recommendation should be sent to:

**Dr. Jan Savitz
Chairman, Search Committee
Biology Department
Loyola University of Chicago
6525 North Sheridan Road
Chicago, Illinois 60626**

An Equal Opportunity/Affirmative Action Employer

PLANT ECOLOGY. The Biology Department, University of Utah, seeks applications for a regular faculty position in whole plant biology, emphasis in physiological (biochemical) ecology or evolutionary ecology. Rank and salary will be negotiable according to experience. Interested applicants should submit curriculum vitae, a summary of professional goals, and names of three people who have agreed to give references. Candidates should also include reprints/preprints of no more than two papers which best represent their research achievements and interests. We are specifically seeking candidates with a broad biological interest, who show exceptional achievement and/or promise in both research and teaching. Send applications before 14 January 1979 to: **Dr. William R. Gray, Chairman, Faculty Recruitment Committee, Biology Department, University of Utah, Salt Lake City, Utah 84112.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL APPOINTMENTS

The Ames Laboratory of the U.S. Department of Energy has a number of vacancies for postdoctoral fellows in the fields of chemistry, physics, metallurgy, and engineering. The appointments would be for 1 year, renewable for a second year if mutually agreeable. In some instances there may be a possibility for continued employment beyond the 2-year postdoctoral appointment if circumstances warrant.

Interested persons should submit a complete résumé, along with the names and addresses of three professional references, to:

**Ames Laboratory
Personnel Office
127 Spedding Hall
Iowa State University
Ames, Iowa 50011**

An Equal Opportunity Employer

POSITIONS OPEN

PLANT ECOLOGIST

The University of California, Berkeley, Department of Botany, invites applications for a tenure-track assistant professor position (pending final budgetary approval), beginning with the 1979-1980 academic year. The research interests of the candidate should be in physiological plant ecology but a broad base in ecology is essential. Teaching at all levels (undergraduate and graduate) may be anticipated, including a contribution to general biology or botany.

Applicants should send curriculum vitae, statement of research and teaching objectives, relevant reprints and manuscripts, to: **H. G. Baker, Chairperson, Ecologist Search Committee, Department of Botany, University of California, Berkeley, California 94720.** Applicants should also arrange for at least three letters of reference to be sent to the same address. The closing date for receipt of applications will be 15 January 1979.

The University of California is an Affirmative Action Employer.

POPULATION BIOLOGIST

The Department of Biology at the University of California at Riverside invites applications for a faculty position in population biology beginning 1 September 1979. Candidates must show evidence of ability to initiate and sustain a productive, high-quality research program and show enthusiasm and skill in teaching at both the undergraduate and graduate levels. Teaching duties would include an introductory population biology course and a graduate field course. Appointment will be made at the assistant professor level. Applicants should send curriculum vitae, statement of teaching and research interests, reprints, and letters from three referees. *The University of California is an Equal Opportunity/Affirmative Action Employer. Applications are invited from all qualified individuals, especially women and members of minority groups.* Send applications to:

**Irwin W. Sherman, Chairman
Department of Biology
University of California
Riverside, California 92521**

POPULATION BIOLOGIST

The Department of Biology of Princeton University is seeking applicants for a position at the assistant professor level. Preferential consideration will be given to candidates whose interests overlap and complement those of existing members of Princeton's population biology group: Gould, Horn, May, and Terborgh. Appropriate areas are: the ecology and adaptive behavior of animals and plants, population dynamics, sociobiology, and biogeography. Field experience and a wide ranging interest in organisms are desirable qualifications. Evidence of exceptional promise in research is essential. Teaching duties will consist of one undergraduate and one graduate level course and counseling students in research. Applicants should send curriculum vitae, a statement of research experience and interests, and three letters of recommendation to: **Dr. John Terborgh, Department of Biology, Princeton University, Princeton, New Jersey 08540.** *Equal Opportunity/Affirmative Action Employer, M/F.*

POSTDOCTORAL FELLOW

Laboratory with active program in the study of hormone receptor/antibody interactions has an opening for an individual with experience in hormone receptor separation and purification. Although funds for the position at the M.R.C. Canada Postdoctoral Fellowship rate of \$13,000 are available, the successful candidate would be encouraged and assisted in applications for his/her own fellowship support. Applications should include curriculum vitae and previous research experience. The applicant should request three referees to send letters of support to: **Dr. N. R. Farid, Faculty of Medicine, Memorial University of Newfoundland, Health Sciences Centre, 300 Prince Philip Drive, St. John's, Newfoundland, Canada A1B 3V6.**

POSTDOCTORAL OPPORTUNITIES now available for behavioral studies on effects of both drugs and toxic substances on schedule-controlled behavior and on cardiovascular functions. Background in chemistry, toxicology, pharmacology, physiology, or behavior. Send curriculum vitae and names of three references to: **W. H. Morse, Laboratory of Psychobiology, Harvard Medical School, 25 Shattuck Street, Boston, Mass. 02115.**

POSITIONS OPEN

POSTDOCTORAL PHYSIOLOGIST

The Divisions of Nuclear Medicine and Cardiology at the University of California, Los Angeles, School of Medicine, are seeking a postdoctoral physiologist with primary interest in myocardial metabolism. The position involves research for the noninvasive measurement of myocardial metabolism by means of positron emission tomography and radioactive labeled metabolic indicators. Applicants should submit curriculum vitae and names of three references to: **Laboratory Personnel Officer, Laboratory of Nuclear Medicine and Radiation Biology, 900 Veteran Avenue, Los Angeles, California 90024. An Equal Opportunity/Affirmative Action Employer.**

The Division of Nuclear Medicine, Department of Internal Medicine, at the University of Michigan, has a **POSTDOCTORAL POSITION** available for an individual with a Ph.D. in biochemistry or pharmacology. Applicants with experience in protein chemistry and enzymology are preferred. The postdoctoral scholarship, sponsored by NIH, is part of an ongoing program in cancer research training in nuclear medicine. The individual will have an opportunity to interact with biochemists, nuclear pharmacists, organic chemists, and physicians. The research involves the development of tissue-specific enzyme inhibitors as potential imaging agents. The position is available immediately and the appointment is up to 3 years. Candidates should send curriculum vitae, a summary of pertinent experience, and names of three individuals who may be contacted for references to: **Dr. Michael C. Tobes, W5614 University of Michigan Hospital, Division of Nuclear Medicine, Ann Arbor, Michigan 48109. A nondiscriminatory, Affirmative Action Employer.**

POSTDOCTORAL POSITION. Available immediately. Research associate with Ph.D. is being sought to participate in a study of the regulation of hepatic glucose production. Background in the biochemistry of carbohydrates and lipids is desirable. Send curriculum vitae and names of references to:

**Dr. Stanley Blumenthal
VA Medical Center
Irving Avenue and University Place
Syracuse, New York 13210**

**Department of Developmental and Cell Biology
University of California, Irvine**

POSTDOCTORAL POSITIONS—available immediately:

Neurobiologists (two), to study neuronal specificity in invertebrates; microelectrode experience desirable. Contact: **H. Koopowitz or R. Josephson.**

Cell biologist, to study the biology and immunology of tumor metastasis; will involve the development of animal models. Contact: **G. Nicholson.**

Cell immunologist, to work on project developing monoclonal cell lines. Contact: **M. Berns.**

Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.

**Department of Developmental and Cell Biology
University of California, Irvine
Irvine, California 92717**

Two **POSTDOCTORAL POSITIONS**, available immediately: interaction of combined modalities of hyperthermia, chemotherapeutic agents, and ionizing radiation on cell kinetics and cell survival in synchronous mammalian cells in culture, and in Chinese hamster normal and tumor tissues in vivo. Background in radiation biology, hyperthermia, or mammalian cell culture required. Salary commensurate with experience, renewable for 2 or 3 years. Please send résumé and names of three references to: **Dr. D. B. Leeper, Laboratory of Experimental Radiation Oncology, Department of Radiation Therapy, Thomas Jefferson University Hospital, Philadelphia, Pa. 19107. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION IN MEMBRANE PROTEIN BIOCHEMISTRY available immediately. The project involves biochemical studies of cell surface proteins that regulate immune responses. A working knowledge of biochemical techniques such as electrophoresis and peptide mapping is required. Some immunology background preferred. Two-year salary and benefits guaranteed. Send curriculum vitae and three letters of reference to: **Dr. Jack Silver, Department of Cellular and Developmental Immunology, Scripps Clinic and Research Foundation, 10666 North Torrey Pines Road, La Jolla, California 92037. An Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION Neurobiology

RESEARCH ASSOCIATE position for 1 to 3 years available to start immediately or in the next 9 months for Ph.D. or M.D. with background or interest in neurobiology to work on abnormal physiology (blood flow, axonal transport, deoxyglucose metabolism, ultrastructural changes, conduction, and so forth) induced in the optic nerve by intraocular pressure, cerebrospinal fluid pressure, transection of axons, or other insults simulating human disease. Includes work on primates, but can include experiments in other species, other nerves, or in vitro studies to answer questions relevant to glaucoma, papilledema, or optic atrophy. Facilities for angiography, autoradiography, fluorescence microscopy, intracellular recording, electron microscopy, and so forth available. Stipend: \$10,000 to \$15,000, depending on background. Send curriculum vitae to: **Dr. Douglas R. Anderson, Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami School of Medicine, P.O. Box 016880, Miami, Florida 33101. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION IN BIOMECHANICS. Position available for a person with a strong background in cardiovascular physiology and elasticity theory to develop mathematical models in the area of cardiac mechanics. Salary: \$12,000. Investigators with current funding are also encouraged to apply. Send résumé to: **Dr. Israel Mirsky, Department of Medicine, Harvard Medical School and Peter Bent Brigham Hospital, 721 Huntington Avenue, Boston, Mass. 02115. Harvard University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION in physiology or biochemistry for research on CO₂ kinetics in red cells and the functional relationship between hemoglobin and carbonic anhydrase. Please send curriculum vitae and names of three references to: **Dr. D. N. Silverman, University of Florida College of Medicine, Box J-267 JHMC, Gainesville, Florida 32610.**

POSTDOCTORAL POSITION IN MOLECULAR VIROLOGY

Postdoctoral position available anytime after 1 January 1979. Research concerning the molecular virology of herpesviruses. Applicants should have experience in biochemistry and virology. Salary open. Send curriculum vitae and names of three references to: **Dr. Albert S. Kaplan, Department of Microbiology, Vanderbilt University, School of Medicine, Nashville, Tenn. 37232. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available immediately for candidate capable of independent research and with experience in collagen biochemistry. The position is for 2 years with a starting salary of \$11,500 to \$12,500. Send curriculum vitae with names of three references to: **Dr. F. W. Keeley, Research Institute, The Hospital for Sick Children, 555 University Avenue, Toronto, Canada M5G 1X8.**

POSTDOCTORAL POSITIONS. Biosynthesis of alkaloids and antibiotics, stereochemistry of enzyme reactions. Applicants should have experience in organic synthesis. Experience in one of the following desirable: (i) tracer methods, (ii) enzymology, and (iii) plant tissue culture. Starting salary: \$9,500 to \$10,000. Send curriculum vitae and names of two references to: **Dr. Ronald Parry, Department of Chemistry, Rice University, Houston, Texas 77001.**

POSTDOCTORAL POSITIONS (two) available now for biochemists/cell or molecular biologists to study the synthesis and assembly of cell wall components in algae and the isolation/characterization of mRNA during wheat seed development. Salary dependent upon experience. Send résumé and names of references by 15 December to: **Dr. Ralph S. Quatrano, Department of Botany, Oregon State University, Corvallis, Ore. 97331. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS: one position involves research to be carried out at the Oak Ridge National Laboratory, the other at the University of Tennessee. Both involve studies of coal organic structure and reactivity. Available immediately. Send résumé and three letters of recommendation to: **John Larsen, Department of Chemistry, University of Tennessee, Knoxville, Tenn. 37916.**

An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION available for research in immunochemistry (general area of immunoglobulin structure and effector functions with biochemical-biophysical orientation). Some participation in teaching medical and graduate students. Research productivity should be demonstrated. Salary: current NIH stipend level. Curriculum vitae and names of three references to:

**Dr. Jeffrey L. Winkelhake
Department of Microbiology
The Medical College of Wisconsin
P.O. Box 26509
Milwaukee, Wis. 53226**

POSTDOCTORAL POSITIONS. Veterans Administration Medical Center (VAMC) is inviting applications from postdoctoral-level scientists to assist with research programs in the areas of: (i) molecular mechanisms of chemical mutagenesis and carcinogenesis, and (ii) metabolism of chemical toxicants. Applicants should have training in chemistry, pharmacology, or biochemistry. Interested persons should send curriculum vitae and three names for reference to: **Dr. K. D. Straub, ACOS for Research, VAMC, 300 East Roosevelt Road, Little Rock, Ark. 72206.**

POSTDOCTORAL POSITION now open for freshwater biologist to conduct field and laboratory work on the benthos of oligotrophic lakes. Familiarity with macrophyte and algal taxonomy, in situ productivity techniques, and SCUBA certification are desirable. Work will require residence at our field laboratory during part of the year. This position will contribute to the Adirondack Lakes Project, an integrated study of aquatic ecosystems in a region affected by acid precipitation. Submit curriculum vitae, publications list, and three professional references to: **Dr. George R. Hendrey, Department of Energy and Environment, Building 318, Brookhaven National Laboratory, Associated Universities, Inc., Upton, New York 11973. An Equal Opportunity Employer, M/F.**

POSTDOCTORAL POSITION—Available immediately for individual with background in physiology or biochemistry. Studies involved cardiac dynamics, myocardial mechanics, coronary artery dynamics, cardiac muscle protein chemistry. Funding according to NIH postdoctoral guidelines. Applicants must be U.S. citizens or have permanent or immigrant visa. Contact: **Rita A. Carey, Ph.D., Cardiology Section, Temple University Health Sciences Center, 3400 North Broad Street, Philadelphia, Pa. 19140. An Equal Opportunity/Affirmative Action Employer.**

MIT POSTDOCTORAL AND PREDOCTORAL RESEARCH POSITIONS

Several positions are available for research in genetic toxicology with emphasis on mechanisms of chemical mutation of human cells. Strong background in chemistry is desired of predoctoral researchers, and molecular biology of postdoctoral researchers. Please send résumés to: **Professor William G. Thilly, Room E18-666, Massachusetts Institute of Technology, Cambridge, Mass. 02139. MIT is an Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE, Ph.D. or M.D. with a strong background in cellular immunology and experience in B and T cell biological assay and enumeration techniques. Salary: \$19,600; up to 3-year appointment. Please send curriculum vitae and names of three references to: **Personnel-Reference #67, New York State Institute for Basic Research in Mental Retardation, 1050 Forest Hill Road, Staten Island, New York 10314. Affirmative Action/Equal Opportunity Employer, M/F/H.**

The Department of Psychological Sciences at Purdue University has an opening for a **FULL PROFESSOR OF PSYCHOBIOLOGY** in 1979. We are looking for an established investigator who has already made a contribution to the study of the relation between brain and behavior. Investigators who now hold the rank of associate or full professor (or the equivalent) are eligible to apply. Please send curriculum vitae and three letters of recommendation to: **Dr. Gerald S. Wasserman, 1291 Cumberland Avenue, West Lafayette, Indiana 47906. Purdue University is an Equal Opportunity/Affirmative Action Employer.**

WATER RESOURCES CENTER
is seeking applicants for

SOIL SCIENTIST, Ph.D in soil physics, soil science, or related field. Significant training and experience in field and laboratory techniques, particularly determination of hydrologic parameters of vadose zone. Knowledge of theoretical aspects of vadose zone transport phenomena, including numerical methods. Appreciation for agricultural aspects (irrigation, drainage, and so forth) of soil science, soil chemistry, and vadose zone as link between surface water and groundwater.

WATER RESOURCES ENGINEER, Ph.D in civil engineering, hydrology, or water resources engineering. Minimum of 3 years of research experience in related field.

HYDROGEOLOGIST (geothermal), Ph.D or M.S. in hydrogeology, geophysics, geology, engineering, or related fields. Experience in or knowledge of various field techniques including geophysical techniques, exploratory drilling and heat flow measurements, and well logging.

WATER RESOURCE ECONOMIST, Ph.D in resource economics or closely related field. Engineering background desirable. Training in modeling, systems analysis, operation research, simulation, and econometrics. Three years of experience in resource economics research including water resource modeling. Published in refereed journals.

ENVIRONMENTAL ENGINEER, Ph.D in civil or environmental engineering. Minimum of 3 years of experience in water and wastewater quality control, water reuse, and water quality modeling and management.

All positions require ability to independently conduct research, secure grant and contract funding, and qualify for security clearance, and excellent oral and written skills in English. Teaching interests desirable. Salary dependent upon qualifications and experience. Send application, referencing position title, postmarked by 15 January 1979 to: T. Harrison, Desert Research Institute, University of Nevada System, P.O. Box 60220, Reno, Nevada 89506. *Affirmative Action/Equal Opportunity Employer.*

**SUPERVISORY
RESEARCH PHYSICIST**

GS-1310-15

Salary: \$38,160 to \$47,500 per annum

This is a career Civil Service position. Serves as head, Physics Division, responsible for the management and coordination of 45 personnel engaged in physics research. Areas of research are thin film physics, electron structure of solids, radio-frequency microwave technology, quantum optics and semiconductors, advanced optics technology, quantum surface dynamics, and physical optics. Candidates should have national recognition in one or more of these areas and possess an advanced degree or equivalent in the physical sciences. Work site located in a small desert community close to Sierra Nevada recreation areas.

Applicants should send an SF-171, Personnel Qualifications Statement, or résumé to:

NAVAL WEAPONS CENTER
China Lake, Calif. 93555
Attention: Civilian Personnel Department
Code 092-381-5

If you are interested in more information on this position, please telephone (collect): Joe Helgersen at 714-939-2514.

An Equal Opportunity Employer

SHELF SEDIMENT DYNAMICS PROGRAM

LETTERS OF INTENT are solicited for the initial phase of a long-range study of sediment dynamics of the continental shelf. A general plan for a **Shelf Sediment Dynamics Program** has been developed by an ad hoc committee and the preliminary phase for the preparation of a scientific proposal has been funded by NSF/IDOE.

Scientific goals of the **Shelf Sediment Dynamics Program** include the theoretical and quantitative investigation of modern sedimentary processes and the quantification of depositional facies development for interpreting the sedimentary record of continental shelves. The primary emphasis during the initial phase of the program will be on in situ measurements of near-bottom flow and particle fluxes at a selected site on a U.S. coast. Concurrent, and supporting physical oceanographic, sedimentologic, and stratigraphic measurements are also encouraged. Relevant theoretical and laboratory studies of sediment transport mechanics and sediment-organism interactions will be considered as well. Copies of the preliminary plan of the program are available (see below).

Investigators interested in participating in the program must submit a **LETTER OF INTENT** outlining a 2-year study related to the goals of the program. Submissions should not exceed five pages, including a tentative budget. In addition, curriculum vitae should be attached. The closing date is 15 January 1979. Letters of intent will be reviewed by the ad hoc committee and a panel of external reviewers. Investigators selected will be invited to provide detailed proposals for inclusion in the coordinated proposal by 15 March 1979. It is anticipated that funding will be available in June 1980.

Direct all inquiries, requests for the Program Plan, and Letters of Intent to: Professor Richard W. Sternberg, Department of Oceanography WB-10, University of Washington, Seattle, Washington 98195, telephone: 206-543-7932.

**CSIRO
RESEARCH SCIENTIST/POSTDOCTORAL RESEARCH FELLOW
(TWO POSITIONS)
DIVISION OF ATMOSPHERIC PHYSICS
ASPENDALE, VICTORIA**

CSIRO has a broad charter for research into primary and secondary industry areas. The organization has approximately 7000 employees, 2400 of whom are research and professional scientists, located in divisions and sections throughout Australia.

FIELD: Dynamical Meteorology/Dynamical Oceanography.

GENERAL: the Division of Atmospheric Physics is engaged in research in three broad areas: dynamical meteorology, radiation, and climate and atmospheric chemistry. The dynamical meteorology programme comprises individual research projects on a variety of topics including large-scale atmospheric circulations, the dynamics of stratified and rotating fluids, convection, mixing and entrainment, the atmospheric boundary layer and air/surface interaction. The programme also includes studies on the effects of regional and topographic factors on weather and climate and the circulations in the waters surrounding Australia.

Wherever possible the approach to these topics combines analytical, numerical, and laboratory modelling techniques, and field experiments. The division has an active and well-equipped geophysical modelling laboratory and, in addition to local computers, has access to the CSIRO's CYBER network. Interaction with the Australian Government Bureau of Meteorology, the Australian Numerical Meteorology Research Centre, and the CSIRO Divisions of Cloud Physics and of Fisheries and Oceanography is encouraged.

DUTIES: to conduct appropriate theoretical and experimental research on topics concerning the large-scale dynamics of the atmosphere or dynamical oceanography relevant to the Southern Hemisphere weather and climate.

QUALIFICATIONS: applicants should have a strong background in geophysical fluid dynamics and a Ph.D. or equivalent qualification, and postdoctoral experience demonstrating a high level of ability in self-motivated and original research.

SALARY: research scientist or senior research scientist: A\$14,829 to A\$21,543 per annum. Outstandingly qualified scientists should not be deterred from applying as appointment at a higher level would be considered.

TENURE: one appointment will be of indefinite tenure. For the other either an indefinite or a fixed-term appointment may be negotiated. Both carry superannuation benefits.

Applications stating full personal and professional details, the names of at least two referees, and quoting reference number 420/352 should reach:

**The Chief
Division of Atmospheric Physics
P.O. Box 77
Mordialloc, Victoria 3195
Australia**

by 30 December 1978.

1 DECEMBER 1978

IGT is a national leader in energy research. Due to steady growth the following positions are open:

biochemical sanitary engineer

MS with experience in methane fermentation or cellulose decomposition. Design and operation of fermenters for hands on research on conversion of biomass to methane via fermentation. Must be willing to locate in California.

microbiologist

MS/PhD with experience in anaerobic fermentation processes including methane genesis and/or degradation of cellulose biomass.

We offer attractive starting salaries commensurate with experience, excellent benefits, and an outstanding opportunity for advancement. Interview and relocation expenses paid for candidates outside of the Chicago area.

Please send resume with salary requirements to:



**Ms. A. Pruss
INSTITUTE OF
GAS TECHNOLOGY
IIT CENTER
3424 S. State St.
Chicago, IL 60616**

an equal opportunity employer m/f

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE

Recent Ph.D. in biochemistry to work in the area of protein phosphorylation-dephosphorylation reactions in glycogen metabolism. Specific projects involve the isolation and characterization of protein phosphatases of liver and skeletal muscle. Send curriculum vitae and names of three references to: **Dr. E. Y. C. Lee, Department of Biochemistry, University of Miami, Box 016129, Miami, Florida 33101.**

An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL RESEARCH POSITION available for study of the immunology of experimental leprosy. Candidates should have background in immunology but knowledge of leprosy is not required. Campus housing available. Apply to: **Dr. M. J. Leford, Trudeau Institute, Inc., P.O. Box 59, Saranac Lake, N.Y. 12983. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH TRAINING IN ENDOCRINOLOGY in the Departments of Medicine and Biochemistry for M.D.'s and Ph.D.'s. Areas of research include hormones and hypertension, calcium homeostasis, neuroendocrinology, peptide hormone receptors, steroid hormone receptors, insulin action, oral administration of peptides, and others. Apply to: **P. Mulrow, M.D., Department of Medicine, Medical College of Ohio, C.S. #10008, Toledo, Ohio 43699. We are an Equal Opportunity Employer, M/F.**

POSTDOCTORATE

Biochemist/chemist/pharmacologist. Recent Ph.D. in chemistry, biochemistry, or pharmacology to perform research into the metabolism and mechanism of action of colon specific carcinogens.

Salary in mid-teens range. Experience in HPLC, GC, MS, and NMR desirable.

Send curriculum vitae and reference to:

**Dr. E. S. Fiala
Division Molecular Biology
Naylor Dana Institute
for Disease Prevention
American Health Foundation
Dana Road
Valhalla, N.Y. 10595**

An Equal Opportunity Employer, M/F

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

Position available for **PROFESSOR** (chief, ambulatory care) in the Department of Internal Medicine. Responsibilities include patient care, administration, and teaching with opportunities for health services research. Reply to: **Box 372, SCIENCE. Code 6100B0. A nondiscriminatory, Affirmative Action Employer.**

YALE, DEPARTMENT OF PSYCHIATRY. Available 1 July 1979, associate director of a research ward. Board-eligible, experience in neurobiologic psychiatric research. Send curriculum vitae and names of three references to: **Stephen Fleck, M.D., Department of Psychiatry, Yale University, 25 Park Street, New Haven, Conn. 06519.**

An Equal Opportunity/Affirmative Action Employer

The **DEPARTMENT OF PSYCHOBIOLOGY**, University of California, Irvine, is seeking candidates for an assistant research series position for January 1979. Candidates must have a Ph.D. with extensive experience in electron microscopy and/or immunocytochemistry. Duties include direction of a large departmental histological facility. Work will be done in collaboration with faculty members with the possibility of independent research. Candidates should send curriculum vitae, summary of research experience, and have three letters of recommendation sent to: **Gary S. Lynch, Chair, Department of Psychobiology, University of California, Irvine, Irvine, California 92717.**

All qualified candidates are welcome: women and minorities are encouraged to apply.

QUANTITATIVE EXPERIMENTAL BIOLOGIST. Assistant professorships—1 July or 1 September 1979. Preference to applicants with active research interests. Minimum of 2 years of postdoctoral experience. Successful applicants expected to develop vigorous research program and teach undergraduate and graduate programs. Send résumé, research interests, and three references to: **Dr. Frank M. Fisher, Jr., Biology Department, Rice University, Box 1892, Houston, Texas 77001. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

PSYCHOPHARMACOLOGY/NEUROCHEMISTRY

A tenure-track position at the assistant professor level is available starting 1 September 1979. Applicants should be prepared to pursue an organized program of research and participate in both graduate and undergraduate instructional programs. Excellence of credentials in psychopharmacology/neurochemistry will be the primary consideration. Individuals who also have a background in behavior genetics and animal behavior are especially encouraged to apply. Please send curriculum vitae, publications, and three letters of recommendation to: **Psychopharmacology Search Committee, Department of Psychology, University of Texas at Austin, Austin, Texas 78712. An Affirmative Action/Equal Opportunity Employer.**

REED COLLEGE PSYCHOLOGY DEPARTMENT

The Department of Psychology at Reed College is seeking a psychologist to fill a 1-year appointment for the academic year 1979-1980 as visiting assistant or associate professor in psycholinguistics and computer instruction. We seek a person who will teach upper division courses in psycholinguistics half-time, and will spend half-time instructing faculty in social science, biology, and psychology to use the computer for experimental simulation and process modeling (for example, simulating behavioral situations, modeling ecological, psychological and social processes, and data analysis). This might be accomplished through a faculty study group, and by using already developed programs from other colleges in order to familiarize our faculty with the unusual opportunities presented by our new computer facility. Anyone interested in this position should send a letter of application, curriculum vitae, three letters of recommendation, and reprints of publications to: **Carol F. Creedon, Professor and Chairperson, Search Committee, Psychology Department, Reed College, Portland, Oregon 97202. Reed College is an Equal Opportunity Employer.**

RESEARCH ASSISTANT. Research involving molecular genetics of muscle development. Experience in quantitative biochemistry involving isolation and purifications of proteins on nucleic acids required. Background in immunochemistry useful. Educational level at master's or equivalent in experience. Person should be career oriented to the pursuit of scientific research in an exciting atmosphere. Send résumé, letters of reference, and salary requirements to: **Dr. Henry F. Epstein, Department of Neurology, Baylor College of Medicine, 1200 Moursund Avenue, Houston, Texas 77030.**

An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSISTANT PROFESSOR and postdoctoral positions (non-tenure-track) are available to study the structure and function of mitochondrial membranes. Appointment is for a minimum of 2 years. Applicants should send curriculum vitae and the names of three references to: **Dr. Ronald R. Fisher, Chairman, Department of Chemistry, University of South Carolina, Columbia, South Carolina 29208. An Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE IN VIROLOGY

Professional assistant with responsibilities in the supervision of well-established laboratory, studying the molecular biology of papovaviruses, especially viral genome expression in transformed cells. A minimum of 2 years of postdoctoral experience is required. Readiness to learn or knowledge of French essential. Canadian experience preferred. Salary ranging from \$13,735 to \$23,635, according to experience.

POSTDOCTORAL FELLOW IN VIROLOGY

Studies on the integration, excision and expression of the viral genome in polyoma transformed cells. Canadian experience preferred.

Appointments tenable from 1 April 1979. Send applications to: **Dr. Pierre Bourgaux, Département de microbiologie, Faculté de médecine, Université de Sherbrooke, Sherbrooke, Québec, Canada J1H 5N4.**

RESEARCH ASSOCIATE position for 2 years is available immediately to work in the area of metabolic regulation of liver carbohydrate metabolism in newborns of diabetic animals. Starting salary: \$11,000 to \$12,000, depending upon training and experience. Send curriculum vitae to: **Dr. M. S. Patel, Department of Biochemistry, School of Medicine, Case Western Reserve University, Cleveland, Ohio 44106. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

Position available—YERKES REGIONAL PRIMATE RESEARCH CENTER

REPRODUCTIVE BIOLOGY—Position available early 1979 for a Ph.D., preferably with background in endocrinology. Position involves independent and collaborative research into primate reproduction with emphasis on the great apes. D.V.M. (or equivalent) degree an advantage. Candidates will be expected to qualify for joint appointment with a university department. Send curriculum vitae, names of three references, and description of research interests by 30 December to: **Dr. Kenneth Gould, Yerkes Regional Primate Research Center, Emory University, Atlanta, Ga. 30322. Emory University is an Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSOCIATE POSITION available immediately. Pharmacologist/pathologist, Ph.D., to study effects of algal toxins on organ systems of laboratory animals. Salary: \$14,000 to \$17,000, 12 months, on NIH grant. Send résumé and three letters of recommendation to: **Dr. J. Wutoh, Principal Investigator, University of Maryland, Eastern Shore, Princess Anne, Md. 21853. An Equal Opportunity Employer.**

The University of California, San Francisco, Radiologic Imaging Laboratory has openings for a **RESEARCH SPECTROSCOPIST**, an **RF ENGINEER**, and an **IMAGE PROCESSING PROGRAMMER** to participate in research in nuclear magnetic resonance imaging. Send résumés to: **University of California, San Francisco, Radiologic Imaging Laboratory, 400 Grandview Drive, South San Francisco, Calif. 94080.**

SCIENTIST, SEM experience. One-year contract with possibility of permanent employment. B.S. minimum. \$17,000 to \$25,000 negotiable.

Contact: **Barry McCabe, Dade County Crime Laboratory, 1320 N.W. 14 Street, Miami, Fla. 33125; telephone: 305-547-7332.**

SENIOR EDITORIAL STAFF (chief deputy to editor) for *Technology Review*, Massachusetts Institute of Technology (MIT) magazine of science, engineering, and policy for semi-technical and professional audience. Should have strong background in science and/or technology plus 3 to 5 years of writing and editing experience for nontechnical audiences (magazine preferred). Résumés and samples to: **MIT Personnel Department (Position A78-70), 400 Main Street, Cambridge, Mass. 02139. An Equal Opportunity/Affirmative Action Employer.**

SENIOR SCIENTIST—ECOLOGIST. The Institute for Desert Research, Ben-Gurion University, is seeking a senior scientist to head and direct the development of a Desert Ecosystem Research Unit at its Sede-Boker Campus. Candidates with research interests in ecology and/or eco-physiology and with experience in administration will be given preference. The appointment will be made at the senior lecturer/professorial level and the salary set accordingly. Applications, including complete curriculum vitae and the names and addresses of three references, should be sent, no later than 1 January 1979 to: **Professor A. Richmond, Institute for Desert Research, Ben-Gurion University, P.O. Box 653, Beer Sheva 8420, Israel. Applications will be kept strictly confidential.**

STRUCTURAL BIOLOGIST

The Department of Biological Sciences, Carnegie-Mellon University, invites applications from individuals whose research interests include the use of biochemical and biophysical techniques to study biological structures. The candidate should have postdoctoral experience. The position is at the assistant or associate professor level. Responsibilities include teaching at the undergraduate and graduate level, and carrying out an active research program. The applicant should forward curriculum vitae, three or more letters of reference, and a brief résumé of research plans to: **Search Committee (A), Department of Biological Sciences, Carnegie-Mellon University, 4400 Fifth Avenue, Pittsburgh, Pa. 15213. Carnegie-Mellon University is an Equal Opportunity/Affirmative Action Employer. Please respond by 15 December 1978.**

The Department of Geology and Geophysics of the University of Utah announces the following faculty openings:

**STRUCTURAL GEOLOGIST—
TECTONOPHYSICIST
JUNIOR LEVEL**

The candidate should be well versed in the theory and use of modern techniques in structural geology and tectonophysics and should be willing to conduct field studies. We are looking for a person prepared to join a developing research program in regional tectonics. The position requires teaching at the undergraduate and graduate level, the supervision of graduate students and the pursuit of research in structural geology and/or tectonophysics. Ph.D. degree required.

**SEDIMENTARY GEOLOGIST
SENIOR LEVEL (Contingent Upon Funding)**

Applications are invited from individuals with interests in the area of sedimentology and/or stratigraphy of marine or transitional deposits. Additional interests in either tectonic aspects of sedimentary processes or chemical sedimentology would be desirable but not essential. The applicant should be an effective teacher at all levels and should have an established reputation for excellence in research. Ph.D. degree required.

**ORE DEPOSITS GEOLOGIST
SENIOR LEVEL (Contingent Upon Funding)**

Applications are invited from individuals with interests in the general area of ore genesis. Exploration experience is desirable. Applicants should have a strong theoretical background and an established research and publications record. The applicant must be qualified to teach graduate and undergraduate courses and to direct M.S. and Ph.D. thesis research. Ph.D. degree required.

For each of the above positions an applicant should submit a letter of application, a résumé, an expression of teaching and research interests, and the names of five professional references to: Dr. S. H. Ward, Chairman, Department of Geology and Geophysics, University of Utah, Salt Lake City, Utah 84112. Applications should be marked as **STRUCTURAL GEOLOGIST, SEDIMENTARY GEOLOGIST, or ORE DEPOSITS GEOLOGIST**. Applications should be submitted prior to 1 March 1979.

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

DIRECTOR

DIVISION OF SPONSORED RESEARCH

The University of South Florida, Tampa, Florida, is seeking applications for the position of director, Division of Sponsored Research, with an expected starting date of 1 September 1979. South Florida is one of the three doctoral-level institutions in the Florida State University System, with 20,600 undergraduate and 2,400 graduate students and a 1,000 member faculty.

The director of sponsored research reports directly to the vice president for academic affairs and works coordinately with the college deans. The salary is negotiable according to qualifications and experience, with a minimum beginning annual salary of \$36,000. Tenure-earning appointment in an appropriate academic department is available, subject to normal approval processes.

The director of sponsored research is the university's principal administrative officer regarding all grants and contracts for research and other scholarly projects. The incumbent should have had previous experience in the administration of grant- or contract-supported research and personal work experience involving contact with granting agencies at all levels of government, especially federal, and with private funding sources. The director provides informational and other support services to faculty members seeking support for their scholarly activities, administers a budget intended to stimulate faculty scholarly activity, chairs a faculty research council, and serves as a liaison between faculty members and administrative and support personnel during the actual performance of sponsored projects.

Apply and submit curriculum vitae to:

**H. D. Kimmel, Search Committee
Department of Psychology
University of South Florida
Tampa, Florida 33620**

Deadline for receipt of application is 15 January 1979.

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

Engineer

**INHALATION
TOXICOLOGY
ENGINEER**

Position available for individual with B.S. and 5 years or M.S. and 3 years experience in Environmental, Chemical or Mechanical Engineering. Direct experience in Inhalation Toxicology and Associated Chamber Design/Operation is important but not essential. Must have knowledge of particle sizing, air flow dynamics in chambers, aerosol generation and mode of presentation of the vapor phase. Will be responsible for the overall operation of chambers.

For further information, send resume including salary history, in confidence to:

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**MERRELL RESEARCH CENTER
PHARMACOLOGISTS
ANTI-INFLAMMATORY**

This opening calls for a qualified individual to lead a group effort in identifying new therapeutic compounds for the treatment of rheumatoid arthritis. Must be oriented toward the development of new animal models which would define new mechanisms of action.

Requirements would ideally include: • at least 3 to 5 years of experience, preferably industrial, • immunological background applicable to this area, and • keen interest in identifying and developing new compounds.

AUTONOMIC PHARMACOLOGY

This opening calls for a Ph.D. level research pharmacologist to conduct investigations on the autonomic nervous system with a view to developing new therapeutic compounds. Requirements would ideally include: • up to 2 years of postdoctoral, • familiarity with a number of in vivo and in vitro techniques, • good foundation in bioassay principles involving pre- and postsynaptic receptors, and • use of radiotracer techniques.

Merrell Research Center, in Cincinnati, offers excellent starting salaries and fringe benefits.

Reply in confidence, including curriculum vitae, to:
Dr. Richard C. Ursillo
Department of Pharmacology

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Salary is competitive and benefits are attractive. Send full particulars of experience and earnings record to: Mr. R. Benthien, Research Division Personnel,



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POSITIONS OPEN

STAFF ASSOCIATE

Seeking postdoctoral Ph.D. or M.D. for laboratory devoted to molecular genetics and developmental cell biology. Salary dependent on postdoctoral level. To begin on or after 1 July 1979.

Send curriculum vitae, résumé, and names of three referees who have direct knowledge of candidate to:

Deputy Director of Administration
Cancer Center/Institute of Cancer Research
701 West 168 Street
New York, New York 10032

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TOXICOLOGIST

Expanded emphasis in environmental health research makes tenure-track position available immediately for broadly trained toxicologist. Opportunity to develop strong graduate research activities in area of specialty and interact in multidisciplinary research. Ph.D. in toxicology, pharmacology, or other pertinent field. Prior academic/postdoctoral experience desired. Academic rank and salary commensurate with qualifications. Send résumé and three references to: Dr. Karen Yarbrough, Box 5165 Southern Station, University of Southern Mississippi, Hattiesburg, Miss. 39401. Telephone: 601-266-7269. *Equal Opportunity/Affirmative Action Employer.*

GRADUATE STUDY

PREDOCTORAL POSITIONS IN PHARMACOLOGY

The Department of Pharmacology, Loyola University Stritch School of Medicine, has positions available in its training program leading to the degree of doctor of philosophy. The research interests of the faculty include neuropharmacology, drug abuse, behavioural pharmacology, biochemical pharmacology, and toxicology. Tuition fees and stipends are available for successful applicants. The program commences on 9 July 1979; applications must be completed by 1 February. Further information may be obtained from: Dr. G. Henderson, Department of Pharmacology, Loyola University Stritch School of Medicine, 2160 South First Avenue, Maywood, Illinois 60153.

GRADUATE ASSISTANTSHIPS IN LIFE SCIENCES are available for M.A. and Ph.D. candidates with research interests in animal, aquatic, physiological, and plant ecology; bacterial and physiological genetics; cardiac, comparative, endocrine, and sensory physiology; cellular biology; immunobiology; mycology; neurobiology; parasitology; and virology. Contact: Chairman, Department of Life Sciences, Indiana State University, Terre Haute, Indiana 47809, for applications and information. *Indiana State University is an Equal Opportunity/Affirmative Action Employer.*

PROGRAMS

THE ROCKEFELLER FOUNDATION ANNOUNCES TWO INTERNATIONAL PROGRAMS at the BELLAGIO STUDY AND CONFERENCE CENTER Bellagio (Como), Italy

International conferences—Small conferences or working groups focusing on topics or problems of international significance.

Scholars in residence—An opportunity for scholars to work for approximately 4 weeks on individual projects.

The foundation provides the facilities of the center, located about 40 miles north of Milan, on a competitive basis to residents and conference organizers. It normally does not pay for related costs, such as transportation, of the participants in these two programs. For more information, write:

Susan E. Garfield, Coordinator
Bellagio Study and Conference Center
The Rockefeller Foundation
1133 Avenue of the Americas
New York, New York 10036

PROGRAMS

POSTDOCTORAL TRAINING PROGRAM IN ENVIRONMENTAL AND INDUSTRIAL TOXICOLOGY

Thomas Jefferson University has designed a unique 2-year program for holders of the Ph.D. in chemistry, biology, and related fields beginning July 1979. Program includes course work, research training, methodology, toxicologic evaluation, and field experience in industrial laboratories. It leads to the M.S. (professional) degree in toxicology. A limited number of positions provide postdoctoral level stipends (\$10,000 per year, plus tuition and health insurance). Program is also open to applicants sponsored by industrial firms. Apply to: R. C. Baldrige, Dean, College of Graduate Studies, Thomas Jefferson University, Philadelphia, Pa. 19107. Telephone: 215-928-8982.

TRAINEESHIPS

NIH PREDOCTORAL TRAINEESHIPS IN THEORETICAL BIOLOGY, NEUROSCIENCE, AND PHYSIOLOGY. Predoctoral traineeships for graduate study in theoretical biology, neuroscience, and physiology through the Graduate Groups of Anatomy, Biochemistry, Biology, Physiology, Psychology and others are available beginning 1 July 1979. Send inquiries to: Dr. R. E. Forster, Department of Physiology, University of Pennsylvania School of Medicine, Philadelphia, Pa. 19104.

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TRAINING IN PSYCHOSOCIAL EPIDEMIOLOGY, UNIVERSITY OF ILLINOIS AT THE MEDICAL CENTER, SCHOOL OF PUBLIC HEALTH

PREDOCTORAL AND POSTDOCTORAL TRAINEESHIPS leading to advanced degrees in public health are available for 1979 in a new NIMH-supported program in psychosocial epidemiology. Persons applying for this program must be firmly committed to long-term career goals involving academic or professional positions which entail a major commitment to research in psychosocial epidemiology. For further information write to: Leo Levy, Ph.D., Director, Project in Psychosocial Epidemiology, School of Public Health, University of Illinois at the Medical Center, P.O. Box 6998, Chicago, Illinois 60680.

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

FELLOWSHIPS

POSTDOCTORAL RESEARCH FELLOWSHIPS IN HUNTINGTON'S DISEASE

Applications are invited for a 1-year postdoctoral fellowship in clinical and/or basic research in studies relating to problems of Huntington's Disease. Applicants must have professional degree of M.D. or Ph.D. Candidates are welcomed whose field of interest is one of the following areas: basic sciences, including neuroscience, biochemistry, molecular biology, pathology, and pharmacology, or from such clinical specialties as neurology, psychiatry, and human genetics. Fellowship stipend is \$13,000. The fellowship may be done at any institution with adequate facilities. Application deadline is 15 January 1979. Awards will be announced by 15 February 1979, for fellowship to begin 1 July 1979. Send curriculum vitae and bibliography, at least two letters of recommendation, and a proposed research program to: The National Huntington's Disease Association, Suite 501, 1441 Broadway, New York, N.Y. 10018.

POSTDOCTORAL FELLOWSHIP. Immediately available for recent graduate to work on phospholipid metabolism in smooth muscle. Send curriculum vitae and references to: Dr. Ata Abdel-Latif, Department of Cell and Molecular Biology, Medical College of Georgia, Augusta, Ga. 30901. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIP available in 1979 for Ph.D. or M.D. in the field of neuroendocrinology/neurochemistry. Successful applicant will join ongoing research in normal and tumor biosynthesis of peptide hormones, particularly of vasopressin, oxytocin, and neuropeptides. Send curriculum vitae and names of three referees to: Dr. William G. North and Dr. Heinz Valtin, Department of Physiology, Dartmouth Medical School, Hanover, N.H. 03755.

FELLOWSHIPS

POSTDOCTORAL POSITION

Available for research on preimplantation mammalian embryos. Studies are on the biochemistry of embryo development as well as on micromanipulation of the embryo to alter differentiation. Apply with curriculum vitae to: R. L. Brinster, Laboratory of Reproductive Physiology, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, Pennsylvania 19104.

POSTDOCTORAL FELLOWSHIP IN CLINICAL IMMUNOLOGY. Program includes studies on (i) purine metabolism and immunodeficiency disease, and (ii) pharmacologic control of the immune response. Available 1 July 1979. Reply to: John H. Vaughan, M.D., and Dennis A. Carson, M.D., Research Institute of Scripps Clinic, 10666 North Torrey Pines Road, La Jolla, California 92037.

POSTDOCTORAL FELLOWSHIP IN PATHOLOGY OF MEMBRANES AND ORGANELLES

NIH traineeship available immediately for research in diabetes at the level of the pancreatic islet cell. Position offers interdisciplinary training in cell surface immunochemistry, cell culture, and electrophysiological and biochemical aspects of stimulus-secretion coupling in the pancreatic islet cells. Only U.S. citizens or permanent residents will be considered. Applications consisting of a statement of research interests, curriculum vitae, and three references, should be sent to: Dr. C. S. Pace, Diabetes Research and Training Center, University of Alabama Medical School, Birmingham, Ala. 35294. *An Equal Opportunity/Affirmative Action Employer.*

POLYMER SCIENCE AND ENGINEERING, UNIVERSITY OF MASSACHUSETTS AT AMHERST. Research fellowships will be awarded in 1979-1980 for studies toward a Ph.D. degree in the Polymer Science and Engineering Department. Each fellowship will pay \$5200 per year. The stipends are income-tax free and include a tuition waiver. Research and course programs are available in polymer synthesis, characterization, morphology, rheology, physics, and engineering. Applications by qualified students with a first degree in chemistry, physics, materials science, or engineering should be made to: Professor Richard J. Farris, Polymer Science and Engineering, University of Massachusetts, Amherst, Massachusetts 01003. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIP IN CANCER ETIOLOGY. Postdoctoral fellowships in cancer etiology are available at the Medical College of Virginia/Virginia Commonwealth University. Training will include cellular pharmacokinetics, tumor immunology and immunotherapy, tumor virology, and molecular biology. Training methods include individualized research, lectures, courses, seminars, and conferences. Only U.S. citizens or foreign nationals with permanent resident or immigrant visas will be considered. Send inquiry with brief résumé to: Dr. Page Morahan or Dr. Robert Taub, Cancer Etiology Training Grant, Program Co-Directors, Departments of Microbiology and Medical Oncology, P.O. Box 273, Medical College of Virginia, Richmond, Va. 23298.

POSTDOCTORAL FELLOWSHIP AVAILABLE IN OPHTHALMOLOGY/BIO MEDICAL ENGINEERING. Subject of research is the mathematical analysis of strabismus. Applicant should be familiar with mechanics, vector algebra, and computer programming. A knowledge of strabismus is helpful but not necessary. Inquiries to: Dr. David A. Robinson, Department of Ophthalmology, The Johns Hopkins Hospital, 601 North Broadway, Baltimore, Md. 21205.

GRADUATE TRAINING IN PHARMACOLOGY. Research training and course work leading to the Ph.D. degree and realistically designed for career opportunities in this expanding field are offered. Major departmental research programs include: molecular, cardiovascular, renal, and nervous system pharmacology; the toxicology of therapeutic and environmental agents including drugs of abuse; clinical pharmacology. A limited number of fellowships offering stipend and tuition are available. Early application for August 1979 is advised. Apply to: Director of Graduate Studies, Department of Pharmacology and Therapeutics, Medical School, State University of New York at Buffalo, 127 Farber Hall, Buffalo, N.Y. 14214. *An Equal Opportunity/Affirmative Action Employer.*

ENVIRONMENTAL SCIENTIST

San Francisco Peninsula

We are seeking an individual whose primary responsibilities will entail developing research programs and managing research contracts to achieve comprehensive assessment of alternative energy related technologies, establishing cost-benefit relationships, assessing impacts of regulations on technologies. Will act in liaison capacity with industry and government.

Candidates must have a PhD or equivalent in environmental economics, engineering, operations research, or an environmental discipline. A strong interest in environmental policy and impact assessment is required. Prefer two years experience managing or performing research in an environmental discipline. EPRI is a private non-profit R&D organization dedicated to developing technologies in environmentally acceptable ways. Please submit resume with salary history and requirements to Ms. Rosemary Dinelli.

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CHAIR IN HORTICULTURE

The Council of Lincoln College, University College of Agriculture, invites applications for the position of Professor of Horticulture and Head of the Department of Horticulture, Landscape and Parks. This Chair has become vacant on the appointment of Professor T. M. Morrison to the position of Director of the Queensland Agricultural College.

Applicants should hold an advanced degree in a field appropriate to any of the responsibilities of the Department which cover horticultural sciences, production, management, parks and recreation, and landscape architecture, and should have an established record in teaching and/or research.

The successful applicant will be appointed as Head of Department and will be responsible to the College Principal for the administration of his Department. Previous administrative experience will therefore be taken into consideration.

The appointment will be made within the existing range of professorial salaries, NZ\$23,012-NZ\$29,188 per annum, the commencing salary being determined by the College Council. Academic salary scales are at present under review.

Expenses of appointment reimbursed up to specified limits. New Zealand Government Superannuation is available.

Further details and General Conditions of Appointment are obtainable from the Secretary General, Association of Commonwealth Universities (Apts), 36 Gordon Square, London WC1H 0PF, or from the Registrar of the College.

Applications close on 15 January 1979.
Please quote Vacancy No. 78/60.

POSTDOCTORAL RESEARCH

The National Research Council will make approximately 250 awards for research in federal laboratories in 1979. The Research Associateship programs provide scientists and engineers opportunities for post doctoral research in fields of:

**ATMOSPHERIC &
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CHEMISTRY
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ENVIRONMENTAL SCIENCES
LIFE SCIENCES
MATHEMATICS
PHYSICS
SPACE SCIENCES**

Some programs are restricted to U.S. citizens. For information on specific research opportunities, program details, and application materials, write, giving research area of interest, to:

Associateship Office (JH 608-S3)
NATIONAL RESEARCH COUNCIL
2101 Constitution Avenue, N.W.
Washington, D.C. 20418

**National
Research
Council**

STAFF FELLOWSHIP

The National Institute of Environmental Health Sciences, National Institutes of Health, Public Health Service, invites applications for a two year appointment under the Staff Fellowship Program. The incumbent will participate in the research program of the Prostaglandin Group, Laboratory of Pulmonary Function and Toxicology, Intramural Research Program. The research program is studying the biosynthesis and metabolism of prostaglandins and related substance by pulmonary tissue and blood vessels as related to pulmonary and cardiovascular diseases. The position requires a Ph.D. or equivalent in either Biochemistry, Chemistry, Pharmacology or Physiology. Only candidates with experience and publications in the field of prostaglandins or lipid will be considered.

Salary range \$15,120 to \$28,823 per annum depending on qualifications. Letters of application with curriculum vitae, bibliography, and names and addresses of two references should be mailed by December 22, 1978, to:

D. Wayne Brooks
Personnel Office, NIEHS
**NATIONAL INSTITUTES
OF HEALTH**
P.O. Box 12233
Research Triangle Park, NC 27709

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—J. ROBERT OPPENHEIMER RESEARCH FELLOWSHIP—

In addition to our Laboratory's regular postdoctoral program, a special postdoctoral research fellowship will become available beginning about June, 1979. Named in honor of the first Director of the Los Alamos Scientific Laboratory, the program is intended to foster continuing interactions between the Laboratory and recent recipients of doctoral degrees who show clear and definite promise of becoming outstanding leaders in scientific research.

Appointments are considered in the physical sciences, the natural sciences, mathematics, and engineering.

The one to three year appointments carry an annual salary of \$25,000.00.

Closing date for the competition is December 31, 1978.

Inquiries should be directed to:
R. B. Brown, Employment Representative
Division—79-H
Los Alamos Scientific Laboratory
P. O. Box 1663
Los Alamos, New Mexico 87545


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