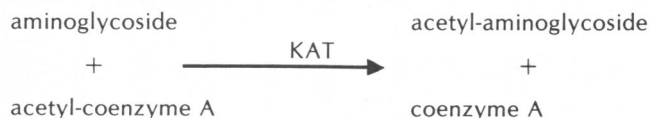


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0844 Kanamycin 6'-Acetyl Transferase (E. coli)

Prep: Solution in buffered 50% glycerol, approx. 20 units per ml.

Activity: Min. 20 units/mg protein. One unit catalyzes the acetylation of 1 nanomole of kanamycin per minute at 30°C, pH 5.7 (Ask for procedure E844)

10 units \$30.00

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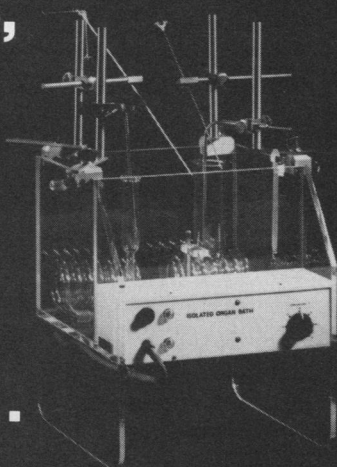
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Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year. Advertising closing for a particular Friday issue is Wednesday, 3 1/2 weeks before. Advertising is accepted only in writing; no abbreviations. Also, personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, or handicap.

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1515 Massachusetts Ave., NW
Washington, D.C. 20005

POSITIONS WANTED

Algal Ecologist: Environmental/evolutionary approach; chlorinated hydrocarbons; exciting red tide toxin proposal; publications; teaching experience. R. Michaels, Ecology and Evolution Department, State University of New York, Stony Brook, N.Y. 11794. 4/20, 27; 5/4, 11

Biochemist. Ph.D. Enzyme, nucleic acid purification; restriction enzymes; translation; hybridization; cell culture. Seeks academic, government, industrial position in health related research. Box 124, SCIENCE. X

Biochemist/Pharmacologist. M.S./M.A. Training and research experience in protein biochemistry, neurochemistry, and CNS pharmacology. Seeking research or allied position in industrial, academic, or institutional setting. Box 131, SCIENCE. X

Biologist/Biochemist. Ph.D. 1970. Developmental, cellular biologist; nucleic acid biochemist. Seven years of teaching; numerous publications; demonstrated grantsmanship. Seeks relocation to Northeast in research oriented, intellectually stimulating environment (university, government, or industry). Box 132, SCIENCE. 4/20, 27

Biostatistician/Systems Analyst—Master's with strong background in biological, environmental, and health related aspects of data and computer systems analysis. Desires position in natural science, environmental, scientific areas. L.M.S., 232 Utz Lane, Hazelwood, Missouri 63042. X

Chemist/Biochemist. Ph.D. Experience: drugs of abuse and male reproduction, CNS drugs and neurotransmitters, RIA, RRA, pharmacological screening of new compounds, organic synthesis and various laboratory techniques. Research/administration. Box 133, SCIENCE. X

Geneticist/Cytogeneticist. Ph.D. 1977. Postdoctoral research experience in genetics of recombination, ultrastructural studies of oogenesis in *Drosophila* and microsporogenesis in maize. Publications. Seeking research or research/teaching position. Box 126, SCIENCE. X

POSITIONS WANTED

Pharmacologist/Toxicologist. Ph.D. Extensive experience in psychopharmacology, neurotoxicity, and drug safety evaluation. Ancillary experience in environmental toxicology. Diverse teaching experience in neuroscience, pharmacology, and drug abuse. Desires stable position in academia or government. Box 134, SCIENCE. X

Reproductive Biologist. Ph.D. Desires teaching/research position (no postdoctoral) in reproduction, endocrinology, or physiology; experience, publications. Box 135, SCIENCE. 4/20, 27

POSITIONS OPEN

Three positions are available for spring 1979 in the Division of Toxicology and Physiology. (i) **ANALYTICAL IMMUNOCHEMIST** in a 3-year project on immunochemical analysis of pesticides. The position is at the **ASSISTANT RESEARCH SCIENTIST** level and there is provision for full-time technical assistance. Preference will be given to applicants with experience in small molecule immunochemistry. (ii and iii) Additional positions in the fields of **XENOBIOTIC METABOLISM** in mammals and **CHEMICAL MEDIATION** in insects at the **POSTGRADUATE RESEARCH** level. Applicants are expected to have a strong background in biochemistry and/or organic chemistry. Candidates should indicate what position they are interested in and submit curriculum vitae and bibliography to: B. D. Hammock or R. E. Talcott, Division of Toxicology and Physiology, Department of Entomology, University of California, Riverside, Calif. 92521. An Affirmative Action/Equal Opportunity Employer.

ANATOMY FACULTY POSITIONS

The University of Puerto Rico School of Medicine has several positions available for individuals competent to teach gross anatomy. These are tenure-track positions at assistant and associate professor levels. We are particularly interested in persons with research interests in primatology or comparative anatomy. Research utilizing the facilities of the Caribbean Primate Research Center will be particularly encouraged. Persons with research interests other than these are nevertheless encouraged to apply. Applications will be received until all vacancies are filled. Applicants should submit their curriculum vitae, three references, and a letter describing their research and teaching interests to: Dr. C. B. G. Campbell, Head, Department of Anatomy, School of Medicine, University of Puerto Rico, G.P.O. Box 5067, San Juan, Puerto Rico 00936.

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ANIMAL PSYCHOPHYSICS. Ph.D. Research position testing auditory function of chinchillas. Position will be part of an interdisciplinary team. Send curriculum vitae and names of three references by 15 May 1979 to:

Donald Henderson, Ph.D.
Department of Otolaryngology
State University of New York
Upstate Medical Center
750 East Adams Street
Syracuse, New York 13210

An Affirmative Action/Equal Opportunity Employer

ASSISTANT DIRECTOR NEUROSCIENCE PROGRAMS

Faculty position. Applicant must have a doctorate or its research equivalent in one of the basic sciences associated with neurological disciplines; previous teaching and administrative experience preferred; an M.D. helpful but not required. Significant research experience in the neurophysiology or neuropharmacology of pain, cerebral blood flow, and/or genetic disorders relating to the nervous system preferred. Teaching responsibilities will be at the undergraduate, graduate, and postgraduate levels. Primary appointment will be in the Department of Surgery with associate appointment in the basic science department of specialty, with level of appointment commensurate with applicant's experience.

Send curriculum vitae including bibliography to:

Henry D. Garretson, M.D., Ph.D.
Department of Surgery
University of Louisville
P.O. Box 35260
Louisville, Kentucky 40232

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

POSITIONS OPEN

ANATOMY—Junior faculty position, to teach veterinary gross anatomy in a department with strong interests in evolutionary biology and behavior. Applicants with training in functional morphology especially desired. Interested persons should send curriculum vitae, statement of research interests, representative reprints, and three letters of recommendation to: Search Committee, Laboratories of Anatomy, Department of Animal Biology, The School of Veterinary Medicine, University of Pennsylvania, Philadelphia, Pa. 19104. An Affirmative Action/Equal Opportunity Employer.

One-year appointment. Ph.D., **ASSISTANT PROFESSOR** to teach a laboratory course in anatomy of higher plants, a field course in taxonomy of higher plants, and general biology. Send curriculum vitae, transcripts, and three letters of reference by 5 May to: Dr. W. R. West, Department of Biology, University of Richmond, Richmond, Va. 23173.

An Affirmative Action/Equal Opportunity Employer

ASSISTANT PROFESSOR OF BIOCHEMISTRY AT VANDERBILT UNIVERSITY

The Department of Biochemistry invites applications from highly qualified individuals for a faculty position at the rank of assistant professor. The primary requirement is promise of excellence in teaching and research, but preference will be given to applicants with demonstrated competence, including relevant postdoctoral experience and publications in the biochemistry of cell surface receptors and enzymes in relation to growth regulation in eukaryotic cells. The position will be available 1 September 1979, but some flexibility in starting date is possible.

Applicants should submit curriculum vitae including a list of publications, a brief description of their proposed research, and the names of three references to: Chairman, Department of Biochemistry, Vanderbilt University Medical Center, Nashville, Tennessee 37232. Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.

Applications are invited for two faculty positions, tenure-track, in the Department of **BIOCHEMISTRY** at the rank of **ASSISTANT** or **ASSOCIATE PROFESSOR** which are anticipated to be available in fall 1979. Applicants should have postgraduate experience and be capable of developing an independent research program. The department has a preference for persons with research interest in the following areas: genome organization and regulation of gene expression in eukaryotic cells, membrane and protein biochemistry, prostaglandin biosynthesis and function, metabolic regulation and hormonal induction processes. Teaching responsibilities include participation in medical biochemistry instruction and in teaching graduate students. Please send curriculum vitae, description of intended research program, and at least two letters of recommendation to:

Search Committee, Department of Biochemistry
The University of Texas
Health Science Center at Dallas
5323 Harry Hines Boulevard
Dallas, Texas 75235

An Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR, MEDICAL MICROBIOLOGIST (tenure-track) starting 1 August 1979 or January 1980. Responsibilities are to teach an undergraduate course in pathogenic microbiology; present a graduate level course reflecting the interests of the applicant, such as host-parasite relationships, immunobiology, tumor immunology, mechanisms of pathogenesis, anaerobic microbiology, and so forth; to supervise M.S. and Ph.D. students; and contribute to a strong research program. Postdoctoral experience in research preferred. Send inquiries, curriculum vitae, and references by 1 June 1979 to: Dr. Albert Benedict, Department of Microbiology, University of Hawaii, Honolulu, Hawaii 96822. An Equal Employment Opportunity/Affirmative Action Institution which encourages applications from ethnic minorities and women.

Two **ASSISTANT PROFESSORS OF PHARMACOLOGY/TOXICOLOGY**—Two **NEW** tenure-track positions. Responsibilities include instruction in the professional and graduate (M.S.-Ph.D.) offerings of the department and the establishment of a funded research program. Available as of 1 July 1979. Send curriculum vitae, transcripts, and three or more references to: Dean John L. Colaizzi, Rutgers-College of Pharmacy, Box 789, Piscataway, N.J. 08854. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR MICROBIOLOGY/CELL BIOLOGY UNIVERSITY OF FLORIDA

Applications are invited from qualified individuals with demonstrated experience in plant cell tissue culture for a tenure-track position in the Department of Microbiology and Cell Science. Salary will be \$20,000 or more, commensurate with qualifications. Postdoctoral experience is preferred. Individuals working in the areas of biochemical genetics and molecular biology are particularly solicited. Broad experience and expertise in plant developmental systems are desirable, to enable the individual to interact with other scientists in related fields. The responsibilities include the development of a vigorous research program utilizing plant tissue culture techniques to explore molecular and subcellular phenomena involved in plant development. The successful applicant will be expected to seek and obtain outside funding for ongoing support. After the program becomes established, part of the responsibility will be to provide advice and consultation to other scientists in the general area of plant tissue culture. Submit curriculum vitae, a statement describing current research activities and detailing future plans, and at least three letters of recommendation to: **Dr. Paul H. Smith, Professor and Chairman, Department of Microbiology and Cell Science, 1059 McCarty Hall, University of Florida, Gainesville, Florida 32611.** *The University of Florida is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR-VERTEBRATE ECOLOGIST—Department of Zoology, University of Maine at Orono. Position to begin 1 September 1979. Salary: \$13,000. Ph.D. required. Anticipated teaching responsibilities: part of undergraduate vertebrate biology course, alternate year avian biology and mammalogy, and graduate level community ecology. Conduct research in community ecology, with emphasis on birds and/or mammals. Send credentials, reprints, and three letters of reference to: **Dr. Franklin L. Roberts, Chairman, Department of Zoology, University of Maine, Orono, Maine 04469.** Deadline for receipt of applications: 20 May 1979. *An Affirmative Action/Equal Opportunity Employer.*

ASSOCIATE CHIEF OF STAFF RESEARCH AND DEVELOPMENT

The Veterans Administration (VA) Medical Center, Shreveport, Louisiana, is seeking an associate chief of staff for research and development. This medical center is fully integrated with Louisiana State University Medical Center-Shreveport and the associate chief of staff for research and development will have a faculty appointment. This medical center currently has approximately 15,413 NSF research space, 18 funded programs, and 16 employees. Primary responsibilities will be to administer the research program, although clinical and teaching responsibilities are possible. Preference will be given to physicians who have demonstrated interest in research. *This VA Medical Center is an Equal Opportunity Employer.* If interested, please send curriculum vitae and a letter of inquiry to:

Dr. Ronald B. George (151)
Chairman, Search Committee for Associate Chief of Staff for Research and Development
VA Medical Center
510 East Stoner
Shreveport, Louisiana 71130

The Department of Otolaryngology of Harvard Medical School at the Massachusetts Eye and Ear Infirmary seeks a qualified applicant for the position of **ASSOCIATE CLINICAL DIRECTOR OF THE AUDITORY EVOKED RESPONSE LABORATORY**. The applicant must have a Ph.D. or other doctoral degree in a discipline related to the neurosciences, an M.S. or M.A. degree in audiology or equivalent knowledge of acoustical equipment, and a working experience of computers for data processing. This individual will be responsible for the daily operation of a Clinical Evoked Response Laboratory and in addition will be expected to conduct clinical or basic research in an associated area. One year of postdoctoral experience in auditory evoked response techniques, preferably with experience in auditory physiology, is required. Qualified applicants are requested to submit curriculum vitae to: **Joseph B. Nadol, Jr., M.D., Department of Otolaryngology, Massachusetts Eye and Ear Infirmary, 243 Charles Street, Boston, Mass. 02114.**

Harvard University, with the Massachusetts Eye and Ear Infirmary, is an Equal Opportunity Employer with an Affirmative Action program and encourages applications from women and members of minority groups.

20 APRIL 1979

POSITIONS OPEN

ASSISTANT PROFESSOR OF PHARMACOLOGY AND TOXICOLOGY

Faculty position available approximately 1 July 1979. Candidates should have Ph.D. or M.D. and at least 1 year of postdoctoral experience. Preference will be for research experience in pharmacology related to one of the following areas: hypertension, cellular or biochemical aspects of cardiac function, central nervous regulation of the cardiovascular system, the respiratory system, toxicology, or pharmacokinetics. Duties will include graduate and professional school teaching, direction of Ph.D. candidates, and independent research. Applicants should submit curriculum vitae including complete bibliography and request at least two letters of reference be sent to: **Dr. William W. Fleming, Department of Pharmacology and Toxicology, West Virginia University Medical Center, Morgantown, W.Va. 26506.** Applications should be received by 10 May 1979. *West Virginia University is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF PHYSIOLOGY

The Department of Biology at Clark University invites applications for a tenure-track position in physiology. Candidates with postdoctoral experience in cellular, organismal and/or neurophysiology with experience in ultrastructural techniques are preferred. The candidate should be prepared to conduct an independent research program and teach an introductory physiology course for majors and other appropriate courses at the undergraduate and graduate levels. Deadline date for applications is 15 May. Applications should include curriculum vitae with career objectives and names of at least three references and be submitted to: **Dr. V. Ahmadian, Chairman, Biology Department, Clark University, Worcester, Mass. 01610.** *Clark University is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged.*

A post as **ASSISTANT PROFESSOR OF PHYSIOLOGY** in the Department of Otolaryngology is available in collaboration with investigators at the Massachusetts Eye and Ear Infirmary. Familiarity with the anatomy and physiology of the ear is required. An interest in acoustic trauma would be advantageous. Applicants should have a Ph.D. in physiology with medical school teaching experience. Send curriculum vitae, including a list of publications and names of three references, to: **Nelson Y. S. Kiang, Director, Eaton-Peabody Laboratory of Auditory Physiology, Massachusetts Eye and Ear Infirmary, 243 Charles Street, Boston, Mass. 02114.**

ASSISTANT PROFESSOR, Department of Psychology, Vanderbilt University, beginning September 1979. Candidates must have completed all requirements for the Ph.D. degree with specialization in one of the following areas: cognitive, developmental, perception, or sensory physiology. Strength in quantitative methods and design is required. Send curriculum vitae, three letters of recommendation, and examples of research productivity by 1 June 1979 to: **Richard D. Odom, Department of Psychology, 134 Wesley Hall, Vanderbilt University, Nashville, Tennessee 37240.** *Vanderbilt University is an Equal Opportunity/Affirmative Action Employer and as such we are vigorously seeking professionally and academically qualified candidates who are women and/or members of ethnic minority groups.*

ASSOCIATE DEAN FOR GRADUATE STUDIES AND RESEARCH THE UNIVERSITY OF HOUSTON COLLEGE OF OPTOMETRY

We are seeking applications from individuals with proven research and administrative ability. Responsibilities will include directing an existing program leading to a Ph.D. in physiological optics, encouraging the continued development of clinical and basic science research within the college, as well as organizing and carrying out a sustained personal program of vision research.

Faculty rank, tenure, and salary will be awarded commensurate with experience.

Interested persons should direct their résumés and/or inquiries to:

James W. Walters, O.D., Ph.D.
University of Houston
College of Optometry
Houston, Texas 77004
Telephone: 713-749-4102

The University of Houston is an Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR, ZOOLOGY

Ph.D. in zoology with comparative anatomy competency; \$14,030 per academic year. Teach undergraduate and an occasional graduate course. Submit credentials with three letters of recommendation by 15 May to:

Robert W. Bernhardt, Chairman
Department of Biology
West Chester State College
West Chester, Pa. 19380

An Equal Opportunity/Affirmative Action Employer

NATIONAL SCIENCE FOUNDATION ASSOCIATE PROGRAM MANAGER OF DIVISION OF EARTH SCIENCES

The National Science Foundation, Division of Earth Sciences, is seeking qualified applicants for associate program manager, Ocean Sediment Coring Program. This position is excepted from the competitive civil service, and is equivalent to a GS-13/14 position (\$27,435 to \$42,171). A Ph.D. in the earth sciences or a closely related field, or an M.S. degree in the engineering sciences is desirable, plus a minimum of 3 years of specialized experience in the above is required. Equivalent experience in the administration of large, multidisciplinary research or engineering programs may be substituted for the degree. A broad general knowledge of offshore research and technology in the deep ocean environment is also required. Applications for this vacancy will be accepted until the position is filled. All qualified individuals will be considered, including those interested in a leave of absence from their current position. Submit SF-171 to: **Personnel Management Branch, National Science Foundation, 1800 G Street, NW, Room 212, Washington, D.C. 20550.** For further information telephone: **E. Paul Broglio, 202-632-4107.** *The National Science Foundation is an Equal Opportunity Employer.*

BEHAVIORAL NEUROCHEMIST. The University of California, Irvine, College of Medicine, Department of Pharmacology, invites applications for the position of **associate adjunct professor**. Ph.D. in neuroscience or biophysics and 5 to 10 years of demonstrated excellence in research required. Duties: establish computerized laboratory for research in behavioral pharmacology, and teaching and supervision of medical and graduate student research. Professional expertise in behavioral methods, biomedical electronics and computer programming. CNS pharmacology and neurochemistry essential. *All qualified candidates welcome; minorities and women encouraged to apply.* Send curriculum vitae and three references to: **Thomas L. Nelson, M.D., University of California, College of Medicine, Irvine, Calif. 92717.** Closing date: 21 May 1979.

BIOCHEMIST. Research position. Experience essential in steroidal chemistry and in other related natural products. Supply a complete résumé and two letters of recommendation. Small, expanding firm in the South with excellent fringe benefits. **Box 130, SCIENCE.**

BIOCHEMISTRY

Applications are invited for a temporary faculty position for 1979-1980 academic year. Responsibilities will be negotiable, depending upon the qualifications of the applicant, but will include teaching of undergraduate lecture and/or laboratory courses. A Ph.D. and teaching experience in biochemistry are required. Research collaboration with permanent faculty is possible.

Résumé, description of research interests, and names of three references should be sent promptly to: **Dr. Malcolm A. Rougvie, Department of Biochemistry and Biophysics, Iowa State University, Ames, Iowa 50011.** *Iowa State University is an Equal Opportunity/Affirmative Action Employer.*

BIOINORGANIC POSTDOCTORAL. A 1-year appointment is available starting immediately; second year optional. The research is primarily on the biochemistry and function of vanadium in human tissues. Interested persons should send a résumé and names of three references to:

Professor Kenneth Kustin
Department of Chemistry
Brandeis University
Waltham, Mass. 02154

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

BIOLOGICAL NMR SPECTROSCOPIST. The Purdue Magnetic Resonance Laboratory (a Research Resource supported by the Division of Research Resources, NIH) has an opening for an **operations director** beginning April 1979. Qualifications: extensive experience in NMR spectroscopy of biological or organic systems using high-field superconducting solenoid spectrometers, NMR electronics, and computer programming. A Ph.D. degree is desirable but not necessary. The appointment will be in a professional service position (nontenure) with the starting salary from \$15,000 to \$20,000, depending on qualifications. Duties include routine scheduling and maintenance of two spectrometers, assisting internal and external users in designing and carrying out experiments, and instrumental development. Collaborative research will be encouraged. Write, enclosing curriculum vitae, a summary of research interests, and the names of three references, to: **Professor John L. Markley, Purdue University Biochemical Magnetic Resonance Laboratory, Department of Chemistry, Purdue University, West Lafayette, Indiana 47907.** *Purdue University is an Equal Opportunity/Affirmative Action Employer.*

Biologics Program Coordinator

Merck Sharp & Dohme Research Laboratories, an industry leader in development of pharmaceutical and biological products, is currently seeking several individuals to join the Evaluation and Analysis Section of our Virus and Cell Biology Research Area.

These individuals will join a team involved in the planning and monitoring of clinical trials of our various biological products, and in analyzing results from these trials. These are excellent career opportunities in a highly stimulating, interdisciplinary work environment.

Interested individuals should have a Ph.D. in epidemiology, biostatistics, or preventive medicine. Undergraduate work in one of the biological sciences would be helpful.

Our compensation and benefits package is excellent. Applicants should send curriculum vitae to:

Vaughn L. Swope

Merck Sharp & Dohme Research Laboratories

Division of Merck & Co., Inc.
West Point, Pa. 19486

An Equal Opportunity Employer

BIOLOGY. One-year opening for Ph.D. in physiology. Duties will include teaching general physiology in the fall and human anatomy and physiology plus a portion of general zoology in the spring. Send application, curriculum vitae, and three letters of reference by mid-May to: **D. G. Dillery, Department of Biology, Albion College, Albion, Michigan 49224.**

BIOLOGY. Ph.D. (biology or zoology), areas of teaching competence including, but not limited to general zoology, comparative anatomy, invertebrate zoology, embryology, animal histology and possibly genetics or populations. Tenure-track, assistant professor. Résumé, transcripts, and minimum of three letters by 15 June 1979 to: **Pat H. Lewis, Search Committee, Department of Science and Mathematics, Wesleyan College, Macon, Georgia 31201.**

CYTOGENETIC TISSUE CULTURE TECHNOLOGIST (RESEARCH ASSOCIATE). B.S. degree or above in a field related to cytogenetics or cellular biology, extensive background in cytogenetics, especially experience in amniotic fluid tissue culture and banding procedures are required. Experience in photomicrography, darkroom procedures, and training in biochemical assays are helpful. Salary open. Send résumé to: **Harold Chen, M.D., Birth Defects Center, Department of Pediatrics, Louisiana State University School of Medicine in Shreveport, P.O. Box 33932, Shreveport, La. 71130.** *An Equal Opportunity Employer.*

POSITIONS OPEN

KINGDOM OF SAUDI ARABIA KING ABDULAZIZ UNIVERSITY FACULTY OF MEDICINE AND ALLIED SCIENCES

Required September 1979 in Department of Biology:

- 1) **Professor, associate and assistant professors** (male or female). Qualifications:—Ph.D. or equivalent.
- 2) **Lecturer** (male or female). Qualifications—M.Sc. or equivalent.

Teaching experience an advantage.

Responsibilities include undergraduate teaching and curriculum development.

Attractive salaries, travel expenses, and housing.

Applicants should enclose curriculum vitae and addresses of two referees in an envelope marked **BIOLOGY** and send as soon as possible to:

The Dean
Faculty of Medicine and Allied Sciences
King Abdulaziz University
P.O. Box 1540
Jeddah, Saudi Arabia

Candidates selected for consideration will be sent further details on request.

CHAIRPERSON—ANATOMY

The University of Vermont College of Medicine is seeking an individual to chair its Department of Anatomy who has a proven record of excellence in research and demonstrated expertise in teaching. The department has teaching commitments in the School of Allied Health as well as in the Graduate College. Please submit complete curriculum vitae, including current grant support and university committee work. The application deadline is 15 May 1979. In addition, four letters of reference should be forwarded to: **Chairman, Anatomy Search Committee, University of Vermont, College of Medicine, Given Building, Burlington, Vermont 05405.**

An Affirmative Action Employer

UNIVERSITY OF WASHINGTON CHAIRPERSON DEPARTMENT OF GENETICS

Nominations and applications are invited for the position of chairperson, Department of Genetics, in the College of Arts and Sciences at the University of Washington. The person should have a distinguished record of scholarship and be able to supply leadership to a vigorous department, which has strong ties to departments in the health and biological sciences.

Send nominations and applications prior to 25 May to:

Ernest M. Henley, Chairman, Search Committee
Department of Physics, FM-15
University of Washington
Seattle, Washington 98195

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

DEPARTMENT CHAIRPERSON

The Department of Resource Development, Michigan State University, is a multidisciplinary unit of the College of Agriculture and Natural Resources. Founded in 1937, it offers B.S., M.S., and Ph.D. programs in community and regional development, environmental policy and law, resource economics and policy, and natural resource management. A person of demonstrated stature and competence is sought to lead the professional staff of 21 into the next decade. Contact: **Professor M. H. Steinmueller, Department of Resource Development, Michigan State University, East Lansing, Mich. 48824** by 4 May 1979. *Equal Opportunity/Affirmative Action Employer.*

DIRECTOR, NATIONAL MUSEUM OF NATURAL HISTORY Smithsonian Institution

Applications are being accepted until 1 June 1979 for the position of director, National Museum of Natural History, Smithsonian Institution, Washington, D.C. The present salary for this position ranges from \$44,756 to \$47,500 per annum. For further information, including copy of the official position announcement, contact: **Smithsonian Institution, The Search Committee, Office of Personnel Administration, Box 2500, 900 Jefferson Drive, SW, Washington, D.C. 20560.**

Applicants should submit Standard Form 171 to the above address.

The Smithsonian Institution is an Equal Opportunity Employer.

POSITIONS OPEN

UNIVERSITY OF OTAGO Dunedin, New Zealand

CHAIR OF PREVENTIVE AND SOCIAL MEDICINE (COMMUNITY HEALTH)

The University Council invites applications for appointment to the chair of preventive and social medicine.

Professorial salaries for medically qualified staff, which are regularly reviewed, provide for a professorial salary within the range of N.Z.\$30,365 to N.Z.\$33,865 per annum, including a N.Z.\$365 per annum cost-of-living allowance.

Further particulars are available from: **Secretary-General, Association of Commonwealth Universities (Appointments), 36 Gordon Square, London WC1H 0PF, England,** or from **D. W. Girvan, Registrar, University of Otago, Dunedin, New Zealand.**

Applications quoting Reference A.79/6 close in New Zealand and London on 31 May 1979.

The Department of Psychiatry at the University of Michigan has a faculty opening as **CHIEF OF THE PSYCHIATRY SERVICE** in our Dean's Committee Veterans Administration Hospital. Must have Boards in psychiatry with documented evidence of research and teaching skills, as well as administrative and clinical competence. Reply to: **Box 128, SCIENCE, Code 700F0.** *A nondiscriminatory, Affirmative Action Employer.*

CHIEF GENETICIST to lead research department to discover novel breeding systems in higher plants. Experience in significant and productive research and its management. Knowledge of plant breeding and molecular biology. Apply to: **Paul E. Waggoner, Director, The Connecticut Agricultural Experiment Station, Box 1106, New Haven, Connecticut 06504.** Telephone: 203-789-7214. *An Equal Opportunity/Affirmative Action Employer.*

CONSUMER SCIENCE. Faculty position, tenure-track, Ph.D. Physical sciences applied to problems in such areas as safety, health, toxicology, energy conservation and utilization. Noncredit extension teaching and research. Open 1 July 1979. Apply by 20 May to: **Dr. M. E. Purchase, Search Committee Chair, Box 327X, Van Rensselaer Hall, Cornell University, Ithaca, N.Y. 14853.** *Equal Opportunity Employer.*

Ecological modeling and statistics applied to environmental problems. Anticipated opening. Approximately half-time teaching and half-time research/grant preparation. One-year position with continuation based on ability to attract resources. Starting salary approximately \$17,000. Send letter, résumé, and three letters of reference by 14 May to: **Dean Philip Nanzetta, Faculty of Natural Sciences and Mathematics, Box 7440, Stockton State College, Pomona, N.J. 08240.** *Stockton is an Equal Opportunity/Affirmative Action College.*

Field-oriented ecologist/geographer with background in ecosystem ecology, forest hydrology, or vegetation geography. Anticipated 1-year position at the assistant professor level (approximate \$14,500 salary). To teach field courses at intermediate- or advanced-level and introductory courses for environmental studies majors and nonmajors. Send letter, résumé, and three letters of reference by 14 May to: **Dean Philip Nanzetta, Faculty of Natural Sciences and Mathematics, Box 7440, Stockton State College, Pomona, N.J. 08240.** *Stockton is an Equal Opportunity/Affirmative Action College.*

ELECTRON MICROSCOPIST/SUPERVISOR

Person to supervise large teaching EM facility. Will provide instruction at all levels: students, research staff, faculty. Opportunity exists for formal teaching. Position immediately available and guaranteed through 30 December 1980, but may be extended. Résumés and letters of recommendation should be sent to: **Professor Mark Mooseker, Yale University, Department of Biology, 1100 Kline Biology Tower, New Haven, Conn. 06520.**

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

CYTOGENETICIST

Position available for a cytogeneticist with background in experimental cytogenetic research. The individual will be responsible for developing programs concerned with mechanisms of sister chromatid exchange formation. Position requires extensive knowledge of biochemistry, biophysics, tissue culture, and cytogenetics. Salary range: \$17,500 to \$21,800. Level of appointment depends upon qualifications of the individual. Interested individuals should send a letter of application outlining research interests, complete curriculum vitae, and names of three references to: **Dr. Sheldon Wolff, Chairman, Search Committee, Laboratory of Radiobiology, University of California, San Francisco, California 94143**, by 15 May 1979.

The University of California, San Francisco, is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

THE UNIVERSITY OF FLORIDA

invites applications and nominations for the combined position of

DEAN OF THE GRADUATE SCHOOL, AND DIRECTOR OF SPONSORED RESEARCH

The University of Florida awards more than 1500 graduate degrees annually including 300 doctoral degrees. These are awarded in 90 fields of graduates from 17 colleges. The Graduate School is responsible for the development and coordination of all graduate programs.

The Division of Sponsored Research is responsible for the administration and promotion of university-wide research programs sponsored by federal, state, and private agencies. The Division of Sponsored Research coordinated programs in 1977-1978 of approximately \$50,000,000.

Candidates should have achieved distinction in their own disciplines and have administrative experience in a large university system. In addition, they must have a commitment to quality graduate training and a strong research program.

Applications and nominations should include résumés and the names of three references. To insure full consideration, credentials should be submitted by 15 May 1979 to: **Dr. Wayne H. Smith, Chairman, Search and Screen Committee, G-027 McCarty Hall, IFAS, University of Florida, Gainesville, Florida 32611**.

An Equal Opportunity/Affirmative Action Employer

DIVISION DIRECTOR NATIONAL SCIENCE FOUNDATION

The Division of Strategic Planning and Policy Analysis is seeking a qualified individual as division director. The division director's responsibilities consist of recommending policy, budgetary and management options on wide-ranging topics, participating in the development of long-term planning, supervision of policy studies, and directing a small program of extramural awards on policy and management subjects of interest to NSF. This position is currently excepted from the competitive civil service and will become part of the Senior Executive Service of the federal government on 13 July 1979. The salary range for the position is \$44,756 to \$47,500 per annum. Health, life insurance, and leave benefits are also available. Applicants should have a master's, Ph.D., or its equivalent in science policy, public administration, or a specific field of science. Prior experience in science policy and management as well as in preparation of policy analysis reports and planning materials is necessary. How to apply: submit SF-171, Statement of Personal Qualifications, or curriculum vitae to: **National Science Foundation, Division of Personnel and Management, Executive and Managerial Personnel Branch, Announcement #FMPB 79-5 1800 G Street, NW, Washington, D.C. 20550**. Applications must be received by 1 June 1979. For further information telephone: **Teddy Haessig-Dyer, 202-632-4124**.

FACULTY ASSOCIATE IN PATHOLOGY is sought for work on the pathophysiology and pathology of myocardial injury in isolated heart preparations. Expertise is required in performing physiological experiments as well as transmission, scanning, and electron microscopy. The candidate should have at least 1 year of postdoctoral research experience. Replies should be sent with curriculum vitae and brief biographical description within 1 month to: **Personnel Department, University of Texas Health Science Center at Dallas, 5323 Harry Hines Boulevard, Dallas, Texas 75235**. *An Equal Opportunity Employer. M/F/H.*

POSITIONS OPEN

EM TECHNICIAN—Immediate opening for experienced technician to supervise electron microscope laboratory including two transmission and two scanning electron microscopes. A thorough knowledge of electron microscopy and a willingness to assume responsibilities associated with general operations of the laboratory are essential. Send résumé and three letters of recommendation to: **Dr. Rex L. Lowe, Department of Biological Sciences, Bowling Green State University, Bowling Green, Ohio 43404**. *Equal Opportunity/Affirmative Action Employer.*

ELECTRON MICROSCOPY TECHNICIAN—Position in jointed Developmental and Molecular Genetics Sections open immediately. Projects envisaged involve quantitative studies of DNA heteroduplexes and protein-DNA complexes. Send résumé and names of three references to: **Dr. Michael Yarmolinsky, Cancer Biology Program, Frederick Cancer Research Center, P.O. Box B, Frederick, Maryland 21701**.

IDAHO STATE UNIVERSITY

The Department of Biology at Idaho State University (ISU) is accepting applications for anticipated vacancies in the areas of: (i) **ENTOMOLOGY-IN-VERTEBRATE ZOOLOGY** and (ii) **POPULATION ECOLOGY/HUMAN REPRODUCTION AND DEMOGRAPHY**. These positions represent sabbatical replacements, and will probably be funded at \$13,500 each by state funds for the 1979-1980 academic year only. Aspirants must hold a doctoral degree, and should forward letters of application, evidence of teaching competence, official transcripts, and names of three references to: **Dr. R. C. Anderson, Chairman, Department of Biology, ISU, Pocatello, Idaho 83207**, before the closing date of 11 May 1979. *Idaho State is an Affirmative Action/Equal Opportunity Employer. Women and minorities are especially encouraged to apply.*

ENVIRONMENTAL STUDY (Two Positions)

Environmental scientists or engineers in applied R & D. Strong background in chemistry and mathematics desired in addition to biology. An aquatic study position will include biomonitoring and wetland responses to industrial releases. A terrestrial study position will involve support for requirements of the Resource Conservation and Recovery Act, management of industrial and municipal-type wastes and the fate of toxic materials in terrestrial ecosystems. Some experience in contract management would be useful in either position. U.S. citizenship and Ph.D. or equivalent accomplishment are required. Refer to this advertisement, and submit curriculum vitae, transcripts, and three letters of recommendation by 21 May 1979 to: **Professional and University Relations, E. I. du Pont de Nemours and Co., Inc., Savannah River Laboratory, Aiken, S.C. 29801**. *An Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION

Chemical oceanographer with interests that reinforce ongoing programs in estuarine and/or shelf processes and with a strong commitment to research and teaching. At least several years of experience beyond doctorate required. Rank and salary open. Located at Lewes Complex. Send résumé, names of three references, and research interests to: **Dr. Ronald J. Gibbs, College of Marine Studies, University of Delaware, Lewes, Del. 19958**.

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

FACULTY POSITIONS, ENVIRONMENTAL TOXICOLOGY/BIOLOGY

An expanding Division of Toxicology is seeking two qualified individuals for positions as assistant professors. A doctorate in toxicology, pharmacology, biochemistry, or related biological discipline plus 2 to 3 years of postdoctoral experience are required. One of the positions is for an individual with a background in the molecular aspects of oxidant-induced tissue injury; the other position is for an individual with a background in the genetic aspects of metabolic activation of xenobiotics with special emphasis on chemical carcinogens. Please send curriculum vitae including the names of three references to:

**Dr. Robert J. Rubin
Director, Division of Toxicology
Department of Environmental Health Sciences
Johns Hopkins School of Hygiene and Public Health
615 North Wolfe Street
Baltimore, Md. 21205**

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

FACULTY POSITION IN BIOCHEMISTRY

The Department of Biochemistry at the University of Texas System Cancer Center M. D. Anderson Hospital and Tumor Institute invites applications for an assistant professorship from qualified individuals with an interest in utilizing recombinant DNA techniques to study problems in mammalian gene expression. Please send curriculum vitae, list of publications, names of at least three references to be used for letters of recommendation, and a summary of research interests to: **Dr. Grady F. Saunders, Department of Biochemistry, The University of Texas System Cancer Center M. D. Anderson Hospital and Tumor Institute, 6723 Bertner Avenue, Houston, Texas 77030**. *An Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS IN ANATOMY AND PHYSIOLOGY

Full-time faculty positions are available in the Departments of Anatomy and Physiology beginning May and September 1979. Principal responsibilities in anatomy include gross anatomy and histology lecture and laboratory. Principal responsibilities in physiology will include instruction in human physiology lecture, laboratory, and research.

Research experience in neuroscience is preferred. Applicants must hold the Ph.D. or master's degree in the discipline. Send curriculum vitae and names of three references to:

**Academic Dean
Cleveland Chiropractic College
6401 Rockhill
Kansas City, Missouri 64131**

A **FACULTY POSITION** is available for an individual with a Ph.D. in physiology and demonstrable training and scientific accomplishments in the area of smooth muscle electrophysiology, mechanics and/or biochemistry. Only those who meet these qualifications should send curriculum vitae and selected reprints to: **Dr. Stanley G. Schultz, Professor and Chairman, Department of Physiology, University of Texas Medical School at Houston, P.O. Box 20708, Houston, Texas 77025**. *An Equal Opportunity/Affirmative Action Employer.*

GEOLOGY AND GEOPHYSICS UNIVERSITY OF CALIFORNIA, BERKELEY

An assistant professorship in geology is a vacancy to be filled during the 1979-1980 academic year in the Department of Geology and Geophysics. Candidates must have an expertise which will contribute to an integrated program of field and laboratory research and teaching. Individuals with interdisciplinary qualifications, experience, and interests are encouraged to apply. Research emphasis may span such fields as metamorphic geology, structure-stratigraphy-sedimentology, or tectonics. The position will involve teaching and research supervision in the field. The Ph.D. degree is required.

Applications should be submitted by 15 May 1979 to:

**T. V. McEvilly, Chairman
Geology and Geophysics
University of California
Berkeley, Calif. 94720**

and should include the names of three academic referees.

The University of California is an Affirmative Action Employer.

HEAD, DIVISION OF ENVIRONMENTAL HEALTH ENGINEERING

Multidisciplinary Department of Environmental Health Sciences seeks tenure-track professor with strong academic background to head the Division of Environmental Health Engineering. Earned Ph.D. or equivalent, B.S. degree in engineering, demonstrated research capability, strong teaching ability, and experience in the formulation of policy in environmental management. Broad orientation to environmental health, including water and wastewater treatment, air pollution control, occupational safety and industrial engineering, solid waste disposal and management of hazardous materials. Appointment begins 1 September 1979. Send résumé, bibliography, and names of three professional references to: **Dr. Gareth M. Green, Chairman, Department of Environmental Health Sciences, Johns Hopkins School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, Md. 21205**. *The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITION—IMMUNOLOGY. Doctorate required. Applicants must have experience and background: (i) to participate in a team-taught medical microbiology and immunology course, (ii) to offer advanced graduate courses in cellular immunology, and (iii) to direct doctoral research programs. Must have vigorous independent research program. Candidates from a medical environment preferred. Available July 1979. Forward curriculum vitae, list of publications, brief discussion of career goals, and three letters of recommendation to: **Byron Burlingham, Department of Microbiology, East Carolina University, Greenville, N.C. 27834.** Closing date: 15 May 1979. *An Equal Opportunity/Affirmative Action Employer.*

THE UNIVERSITY OF BRITISH COLUMBIA Position of Head of the Department of Physiology

Head, Department of Physiology of the Faculty of Medicine University of British Columbia, Vancouver, British Columbia.

The person appointed would be responsible for directing and developing the teaching and research programs of the department. Individuals with a Ph.D. and/or M.D. as well as substantial academic experience are invited to apply for the position.

Starting date and salary subject to negotiation.

Applications, accompanied by detailed curriculum vitae and the names of two individuals for references, should be directed to: **Dr. W. A. Webber, Dean, Faculty of Medicine, University of British Columbia, Vancouver, B.C., Canada V6T 1W5.**

HORTICULTURE. The Department of Plant Science, Macdonald College, Faculty of Agriculture, McGill University, invites applications for a tenure-stream position at the assistant professor level, tenable 1 June 1979. A Ph.D. in horticulture with a strong background in pomology and physiology, production and fruit culture is required. The successful candidate is expected to participate in undergraduate courses and to develop an active research and teaching program at the graduate level. Salary will be in the assistant professor scale depending on experience. A complete curriculum vitae and the names of three referees should be sent to: **Professor W. F. Grant, Chairman, Selection Committee, Department of Plant Science, Macdonald Campus, McGill University, Ste. Anne de Bellevue, Quebec, Canada H9X 1C0.** Deadline for receipt of applications is 15 May or when the position is filled.

INSTRUCTOR—Will collaborate in research on gene regulation and cyclic nucleotides. Recent Ph.D. preferred, with experience in protein purification and/or cyclic nucleotide-related enzymes. The position carries faculty benefits and is available 1 July 1979. Submit résumés to: **Bruce McL. Breckenridge, Department of Pharmacology, 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.*

INVERTEBRATE NEUROBIOLOGY

Postdoctoral position available for 2 to 3 years for biochemist/pharmacologist interested in studying cyclic nucleotides/protein phosphorylation in identified molluscan neurons. Curriculum vitae and three letters of reference to: **Dr. I. Levitan, Friedrich Miescher-Institute, P.O. Box 273, CH-4002 Basel, Switzerland.**

Several **JUNIOR AND SENIOR FACULTY POSITIONS** are available for individuals with Ph.D.'s in physiology and demonstrable scientific accomplishments in the areas of ion transport and electrophysiology of epithelial tissues; a familiarity with computer sciences is also desirable. Only those who meet these qualifications should apply. Curriculum vitae and selected reprints should be forwarded to: **Dr. Stanley G. Schultz, Professor and Chairman, Department of Physiology, University of Texas Medical School at Houston, P.O. Box 20708, Houston, Texas 77025.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL—BIOMEMBRANE THEORY

Applicant should have a very good background in physical chemistry including kinetic theory, and in mathematics. Previous experience in membrane physiology helpful, but not essential. Start fall 1979, or possibly sooner. Send curriculum vitae and names of at least three references to: **Franklin Offner, Technological Institute, Northwestern University, Evanston, Ill. 60201.**

POSITIONS OPEN

MICROBIOLOGY—IMMUNOLOGY FACULTY POSITIONS. Applications are invited for tenure-track positions in the Department of Microbiology at Emory University. Applicants should have two or more years of postdoctoral experience and commitments to both teaching and research. They must present evidence of current scholarly productivity and capacity to initiate and develop independent research programs in immunology, pathogenic microbiology, or plasmid biology using biochemical and molecular approaches. Rank is open but assistant professor is the likely level of appointment. Teaching duties include participation in graduate and undergraduate courses with emphasis on biomedical sciences. Supply complete résumé, statement of research plans, and summary of teaching experience. Have at least three letters of recommendation sent to: **Dr. John K. Spitznagel, Chairman, Department of Microbiology, Emory University, School of Medicine, Atlanta, Georgia 30322.**

An Equal Opportunity/Affirmative Action Employer.

MICROBIOLOGY. Regular faculty appointment: **instructor or assistant professor.** Successful candidate will be actively engaged in microbiological research and responsible for a one-semester, lecture/laboratory course in general microbiology, a one-semester lecture/laboratory course in a more specialized area such as microbial ecology, microbial physiology, symbiology or microbial development, and advanced seminar in an area of choice (as enrollments permit), and direction of undergraduate and M.S. research. Preference given to candidates with no more than 2 years of full-time teaching experience; Ph.D. or ABD required. Position available 1 September 1979; applications must be received by 11 May 1979. Send curriculum vitae, statement of teaching and research interests, all undergraduate and graduate transcripts, and three recent letters of recommendation to: **Christopher Watters, Ph.D., Chairman, Department of Biology, Middlebury College, Middlebury, Vermont 05753; telephone: 802-388-2802.** *An Equal Opportunity Employer.*

MICROBIOLOGIST DEPARTMENT OF BIOLOGICAL SCIENCE FLORIDA STATE UNIVERSITY

An assistant professorship is available in the area of microbiology effective September 1979.

The appointee will be expected to teach undergraduate and graduate courses in microbiology, supervise the research activity of graduate students, and maintain an active, independent research program. The department is a large broadly based biological science unit with cooperation and interaction with numerous related interdisciplinary programs including a basic medical science program.

Applicants should send curriculum vitae, reprints, and names of three professional references to: **A. Gib DeBusk, Chairman, Department of Biological Science, Florida State University, Tallahassee, Florida 32306.** Letters from references will be requested directly by us.

We are an Affirmative Action/Equal Opportunity Employer and welcome applications from women and minority group members.

The Zoology Department seeks a **NEUROBIOLOGIST** whose research complements that of existing faculty. These presently include: growth and reformation of neuronal connections by regenerating snail and cockroach neurons; determinants of neuronal survival in the frog; genetic approaches to excitable systems of paramecium, *Drosophila*, and mice. This is a non-tenure-track assistant professorship with possible extension to 5 years from September 1979. Send résumé and names of three references to: **Dr. J. L. Denburg, Zoology Department, University of Iowa, Iowa City, Iowa 52242.** *An Equal Opportunity Employer.*

NEUROCHEMIST

The Department of Pathology, Albert Einstein College of Medicine, Bronx, New York 10461, invites applications for the position of assistant professor of pathology, to participate full-time in ongoing research on aging of human nervous system and dementia. Applicants must have Ph.D. in biochemistry, and at least 4 years of experience in research on neurotransmitters and receptors in human brain. Experience in enzyme purification and immunochemistry desirable. Record of relevant research productivity and teaching of neurochemistry are essential.

Send curriculum vitae and names of three references to: **R. D. Terry, M.D.,** at the above address. *An Equal Opportunity Employer*

POSITIONS OPEN

NEUROPHYSIOLOGIST

A position is being created for a postdoctoral research associate to participate in neurosurgical research concerned with CNS trauma. Emphasis is upon event related brain phenomena and EEG averaging. The position will be interdisciplinary with a strong neurosciences and computer orientation. Applicants possessing or about to receive a Ph.D. degree should send their curriculum vitae and names of three references to: **Dr. K. Shulman, Professor and Chairman, Department of Neurological Surgery, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, New York 10461.**

NEUROVIROLOGIST—Applications are invited by the Department of Pathology from investigators with established programs in the area of viral immunology and expertise in regard to the immunoregulatory effects of interferon. Candidates must possess an M.D. or Ph.D. degree and postdoctoral experience. Applicants must have demonstrated capability to carry out independent research and to contribute to the teaching of graduate and medical students in the areas of virology and immunology. Please send complete curriculum vitae, bibliography, brief summary of research interests, and names of three references to: **Robert D. Terry, M.D., Chairman, Department of Pathology, Albert Einstein College of Medicine, Bronx, N.Y. 10461.** *An Equal Opportunity Employer.*

UNIVERSITY HOSPITAL PATHOLOGIST WANTED

Assistant or associate professor of pathology at the University of Washington School of Medicine and associate pathologist at University Hospital. The incumbent will share responsibilities in surgical pathology and autopsy services, and teaching.

The applicant is expected to carry on his/her own research. The most desirable areas of research deal with problems of human disease seen in the surgical and autopsy materials. Experience in the application of contemporary cell and molecular concepts and methods to study of disease is desired of applicants for this position.

Board-certification is required for this position. *The University of Washington is an Affirmative Action/Equal Opportunity Employer.* Address application material, including curriculum vitae, bibliography, and letters of recommendation (under separate cover), to: **H. Thomas Norris, M.D., Director of Hospital Pathology, RC-72, University Hospital, 1959 N.E. Pacific Street, Seattle, Washington 98195.**

NATIONAL SCIENCE FOUNDATION DIVISION OF OCEAN SCIENCES PHYSICAL OCEANOGRAPHER

The National Science Foundation, Division of Ocean Sciences, is seeking qualified applicants for a rotating appointment to the position of program director in the Physical Oceanography Program. The position is excepted from the competitive civil service, and will have a duration of up to 2 years. The program provides support for scientists primarily from academic institutions to pursue fundamental research in physical oceanography. The selected candidate will carry out program planning, proposal evaluation, administration of research grants, and liaison with other federal agencies. Applicants should have a Ph.D. in physical oceanography, a related physical science, or the equivalent in experience plus 3 years of specialized experience in physical oceanography. Field experience in an academic institution program is highly desirable. Salary range is from \$27,453 to \$42,171 per annum, depending on qualifications and experience. Those interested in being considered for the position should send letters of interest and SF-171 or current résumé by 1 June 1979 to: **Division of Personnel and Management, Personnel Management Branch, National Science Foundation, 1800 G Street, NW, Washington, D.C. 20550.** For further information, telephone: **E. Paul Broglio, 202-632-4107.**

An Equal Opportunity Employer

A Ph.D. **PHYSICIST** of any research specialty, theoretical or experimental, is desired for a tenure-track teaching position starting 1 September 1979, at Parks College of Saint Louis University. The instructional duties will be primarily in physical science and introductory physics and mathematics. Teaching experience, at least as a teaching assistant in graduate school, is desirable. Please reply by 1 May 1979, to: **John E. Roberts, Chairman, Department of Science and Mathematics, Parks College of Saint Louis University, Cahokia, Illinois 62206.** *Saint Louis University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

The Clinical Research Service of the Tennessee Neuropsychiatric Institute is seeking a Ph.D. **PHARMACOLOGIST** with at least 2 years of postdoctoral experience in clinical pharmacokinetics and/or drug metabolism to implement existing clinical pharmacokinetic methodology and to develop new methodology for drug metabolism studies relevant to psychiatry. A working knowledge of gas chromatography/mass spectroscopy with computer programming is highly desirable. Applicants should forward their curriculum vitae to:

Joseph P. McEvoy, M.D.
Clinical Director
Clinical Research Service
Tennessee Neuropsychiatric Institute
1501 Murfreesboro Road
Nashville, Tenn. 37217

Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.

PHYSICAL OCEANOGRAPHER

OCEANROUTES, INC., a progressive international company, seeks professional individual to join its Environmental Services Division. Successful candidate will participate in oceanic R & D and related project work. Position requires strong background in ocean currents, numerical modeling, spectral and statistical methods, data analyses, and computer techniques. Experience with ocean waves, including knowledge of wind-wave generation, propagation and decay, as well as background in meteorology is highly desirable. Requires M.S. or Ph.D. in physical oceanography. Permanent position with excellent growth opportunities. Send résumé in confidence to: J. Buckles, OCEANROUTES, INC., 3260 Hillview Avenue, Palo Alto, Calif. 94304. *Equal Opportunity Employer.*

POSTDOCTORAL—Position with Harvard Medical School appointment, available in mid-1979 for 1 to 3 years for biochemical research on connective tissue. Background in biochemistry essential, experience in protein chemistry preferred. Send curriculum vitae with three references to: Dr. David Eyre, Department of Orthopedic Research, Children's Hospital Medical Center, 300 Longwood Avenue, Boston, Mass. 02115. *An Equal Opportunity Employer.*

POSTDOCTORAL FELLOW to work in area of three-dimensional nuclear medicine imaging and instrumentation with special emphasis on cardiac applications. Must be citizen, non-citizen national, or admitted for permanent U.S. residency. Position open immediately. Send résumé and telephone numbers of three references to: Dr. W. L. Rogers, Division of Nuclear Medicine, University of Michigan Medical Center, Ann Arbor, Michigan 48109. *A non-discriminatory, Affirmative Action Employer.*

POSTDOCTORAL POSITION available for biochemist to work on the mapping of ribosomal tRNA-binding sites by photochemical labeling and/or the analysis of ribosome assembly reactions by photoaffinity and fluorescence techniques. Experience in protein synthesis and macromolecular separations helpful. Support available for 1 to 3 years at a minimum of \$12,000 per year. Please send résumé and names of three references to: Dr. S. S. Hixson or Dr. R. A. Zimmermann, Department of Biochemistry, University of Massachusetts, Amherst, Mass. 01003. *An Affirmative Action/Equal Opportunity Employer*

POSTDOCTORATE RESEARCH ASSOCIATE

Ph.D. in electrophysiology and membrane physiology. Research in electrophysiology and membrane transport of airway smooth muscle. Practical skills in recording of membrane potentials and membrane physiology methodology; renewable for 2 or 3 years.

Send résumé and names of three references to: Dr. J. F. Souhrada, Pulmonary Physiology Laboratory, National Jewish Hospital and Research Center, 3800 East Colfax, Denver, Colorado 80206.

RESPIRATORY PHYSIOLOGIST

An opening from 1 July 1979 for a respiratory physiologist to participate in research in airway reactivity. Emphasis is on control of airway diameter during and after exercise, lung mechanics, and regulation of breathing. Experience along with knowledge of pulmonary function testing and on-line evaluation essential. Salary negotiable, depending on qualifications. Please send résumé and names of three references to: Dr. Joseph F. Souhrada, Pulmonary Physiology Laboratory, National Jewish Hospital and Research Center, 3800 East Colfax, Denver, Colorado 80206.

POSITIONS OPEN

POSTDOCTORAL POSITION VISIBILITY LABORATORY SCRIPPS INSTITUTION OF OCEANOGRAPHY UNIVERSITY OF CALIFORNIA, SAN DIEGO

Postdoctoral position available immediately for studies of the effects of suspended sediments on the penetration of solar (UV) radiation into natural waters. Experience in environmental optics and familiarity with radiative transfer processes preferred. Some knowledge of system modeling and computer programming desirable. Two-year appointment. Send curriculum vitae and references to:

Dr. Raymond C. Smith
Visibility Laboratory P-003
Scripps Institution of Oceanography
University of California, San Diego
La Jolla, California 92093

The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer. Closing date: 6 weeks from publication of ad.

POSTDOCTORAL POSITION VISIBILITY LABORATORY SCRIPPS INSTITUTION OF OCEANOGRAPHY UNIVERSITY OF CALIFORNIA, SAN DIEGO

Postdoctoral position available immediately for studies of remote sensing of oceanic optical properties. Experience in environmental (atmospheric and/or oceanographic) optics and computer programming preferred. Two-year appointment. Send application to:

Dr. Wayne H. Wilson
Visibility Laboratory P-003
Scripps Institution of Oceanography
University of California, San Diego
La Jolla, California 92093

The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer. Closing date: 6 weeks from publication of ad.

POSTDOCTORAL POSITIONS

Postdoctoral positions are available in the laboratory of Dr. Thoru Pederson to participate in a program dealing with hnRNA→mRNA processing, with particular reference to the ribonucleoprotein structure of hnRNA. The positions are initially for 2 years, at current NIH stipend levels. Candidates with strong academic backgrounds and training in contemporary cell biology are specifically sought. Send curriculum vitae, the names of three references, and a brief synopsis of thesis research to: Personnel Office, Dr. Thoru Pederson, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545.

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITIONS—One available immediately and another in July. Recent Ph.D. preferred in developmental biology or connective tissue biochemistry to work on cell differentiation and morphogenesis in mammalian embryos. Send résumé, three letters of reference, and description of research interests to: D. M. Kochhar, Department of Anatomy, Thomas Jefferson University, 1020 Locust Street, Philadelphia, Pa. 19107. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION to work on secretion of proteins across membranes. Background in protein synthesis or membrane biochemistry helpful. Send curriculum vitae and names of references to:

Dr. Bernard D. Davis
Bacterial Physiology Unit
Harvard Medical School
Boston, Mass. 02115

POSTDOCTORAL POSITION available immediately for a period of 2 to 3 years to study the structure, function, and biosynthesis of glycosylated and acetylated hemoglobins. Experience in protein chemistry desired. Salary \$12,000 to \$15,000 per annum. Send résumé and names of three references to: Dr. E. C. Abraham, Department of Cell and Molecular Biology, Medical College of Georgia, Augusta, Ga. 30901. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available July 1979 to study mechanochemistry of muscle contraction using a skinned fiber preparation. Familiarity with physical-chemical principles and some practical experience with electronics helpful. Good collaborative atmosphere. Please send résumé and references to: Dr. David Maughan, Department of Physiology and Biophysics, University of Vermont, Burlington, Vermont 05405.

POSITIONS OPEN

The International Potato Center, Apartado 5969, Lima, Peru, announces a **POSTDOCTORAL POSITION IN AGRONOMY**. Research duties will be concerned with optimizing potato production in tropical locations.

A candidate should have a Ph.D. degree in agronomy and be familiar with fertilizer, water, and crop management strategies appropriate to optimizing crop yields. Field experience with potato production while desirable is not essential.

The position is for a 3-year term and following an initial orientation in Peru, the successful candidate will be stationed in southeast Asia. The position offers an excellent opportunity to become familiar with international agriculture in developing countries in the tropics. Please contact: Dr. S. Sadik, Head, Department of Plant Physiology, for application forms (air mail).

The International Potato Center, Apartado 5969, Lima, Peru, announces a **POSTDOCTORAL POSITION in the utilization of true seed for the production of consumer potatoes**. Research will involve studies of pollination and fruit development, harvesting, seed extraction, dormancy, and germination.

The utilization of true seed as a means of propagating consumer potatoes is a relatively new and challenging field. The successful candidate must be innovative in research and have a sound botanical background. A knowledge of embryogenesis and seed physiology as part of a Ph.D. background would be essential.

The position is for a period of 3 years. A knowledge of Spanish is desirable but not essential. Please contact: Dr. S. Sadik, Head, Department of Plant Physiology, for application forms (air mail).

The International Potato Center, Apartado 5969, Lima, Peru, announces a **POSTDOCTORAL POSITION IN TROPICAL AGRONOMY**. Research emphasis will be on developing agronomic practices for growing potatoes in the hot humid tropics. A successful candidate would be expected to have a background in agronomy and soils. Duties would include assessment of selected genotypes for adaptation and management of plants grown from both tubers and true seed. Early concentration of work would be in selected sites in Peru with the possibility of associated work in Central America and the Philippines. Applicants must have a Ph.D. in agronomy. The assignment is for 3 years. A knowledge of potato culture and the Spanish language is not essential but desirable. Please contact: Dr. S. Sadik, Head, Department of Plant Physiology, for application forms (air mail).

POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY

Persons with expertise in biochemistry or genetics to study the mechanism of chemotactic behavior in *E. coli*. Research topics include gene product interactions involved in stimulus transduction and role of protein methylation in sensory adaptation. Available for 1 to 3 years from 1 July 1979. Send résumé and names of three references to: Dr. John S. Parkinson, Biology Department, University of Utah, Salt Lake City, Utah 84112.

POSTDOCTORAL POSITION immediately available for work on forced association of nitrogen-fixing bacteria with tissue cultures of cereals/grasses. Experience in plant tissue culture and/or microbiological techniques required. Applications, with résumé and three letters of recommendation, should be sent to: Dr. Indra K. Vasil, Department of Botany, University of Florida, Gainesville, Fla. 32611. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION IN BIOCHEMISTRY available immediately for research in areas concerning collagen, particularly basement membrane structure and metabolism, or synthesis and properties of collagen-like peptides. Stipend \$11,000 or more, depending on background. Support available for at least 2 years. Send curriculum vitae and letters of recommendation to: Dr. Elijah Adams, Department of Biological Chemistry, University of Maryland School of Medicine, 660 West Redwood Street, Baltimore, Md. 21201. *An Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH ASSOCIATES. Study of the effect of antioxidants on the metabolism of benzopyrene and its derivatives. Background in EPR spectroscopy and HPLC techniques or microbiological methods including the Ames test. Starting salary: \$12,000 per annum; position available summer 1979. Send résumé and two letters of reference to: Dr. P. D. Sullivan, Department of Chemistry, Ohio University, Athens, Ohio 45701. *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITION for an individual with expertise in biochemistry interested in research and training in the area of molecular endocrinology. Existing studies include ligand-binding kinetics (calf and human uterus), isolation and characterization, fluorescent estrogen interaction with the estrogen receptor, and modification of the receptor structure and function. Stipends: \$12,000 to \$14,000 per annum, depending upon qualifications. Send curriculum vitae and names of three references to: **Dr. A. C. Notides, Department of Pharmacology, University of Rochester, School of Medicine and Dentistry, 601 Elmwood Avenue, Rochester, N.Y. 14642.**

POSTDOCTORAL POSITION in transplantation immunology. Position available immediately to individual interested in career in investigations involving transplantation of bone marrow and solid organs in animal model systems. Emphasis on methods of immunosuppression, immune tolerance, and graft versus host disease in ongoing research program. Send curriculum vitae and three letters of reference to: **Dr. John H. Kersey, University of Minnesota, Box 609 Mayo, Minneapolis, Minn. 55455.**

POSTDOCTORAL POSITION in bone metabolism. Emphases on: organ culture studies of vitamin D metabolites and parathyroid hormone; calcium as an initiator of resorption; purification and characterization of a new bone-resorbing factor; application of a bone bioassay for 1,25-(OH)₂ vitamin D to selected clinical problems. Send curriculum vitae and names of three references to: **Dr. Paula H. Stern, Department of Pharmacology, Northwestern University, Chicago, Ill. 60611. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE

A 3-year position (C\$14,000 per annum) is available immediately for work on the physiology of a new strain of photosynthetic bacteria related to the development of commercial biomass/protein production. A technical assistant will be provided. Applicants with a suitable background in microbial physiology and biochemistry are invited to submit curriculum vitae and names of referees to: **E. B. Newman, Biology Department, Sir George Williams Campus, Concordia University, Montreal, Quebec, Canada H3G 1M8.**

POSTDOCTORAL RESEARCH POSITION

Available immediately for participation in several basic and clinical studies of investigational cancer chemotherapeutic compounds. Candidate should have extensive biochemical pharmacology and/or cell biology background. Send curriculum vitae and three letters of recommendation to: **Dr. Robert A. Newman, Department of Pharmacology, University of Vermont, Burlington, Vermont 05405.**

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POSTDOCTORAL OR SENIOR POSTDOCTORAL POSITION—Available immediately at a basic research institute in San Francisco. Research on the structure, reaction mechanism, and effect of suicide inhibitors of monoamine oxidase. Ph.D. in biochemistry or chemistry and good background in enzyme chemistry required. Salary from \$14,000 to \$17,200. Please send résumé, date of availability, and reference to: **Dr. J. Salach, (151S) Veterans Administration Medical Center, 4150 Clement Street, San Francisco, Calif. 94121.**

PREDOCTORAL AND POSTDOCTORAL TRAINING OPPORTUNITIES for qualified applicants in the areas of animal virology, biochemistry, cell and membrane biology, genetics, immunology, infectious diseases, oral biology, biology of aging, and molecular biology.

Send curriculum vitae and inquiries to:

**Dr. Kenneth J. Roozen, Vice-Chairman
Department of Microbiology
University of Alabama Medical Center
Birmingham, Alabama 35294**

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SYSTEMS ECOLOGIST—The Department of Environmental Engineering Sciences, University of Florida, Gainesville, Florida 32611, invites applications for a tenure-acquiring position at the assistant or associate professor rank. Must hold Ph.D. or equivalent, and must be especially strong in quantitative skills. Teaching and research in theory of systems, energy analysis, and ecological engineering. Contact: **Professor H. T. Odum, Search Committee Chairman.**

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POSITIONS OPEN

PREDOCTORAL POSITIONS: The Basic Science Departments of the College of Medicine offer a Ph.D. program in biomedical sciences with options in anatomy (developmental, neuroanatomy, and reproductive biology), biochemistry (molecular immunology-lymphokines, membrane enzymology, proteases-protein structure), biophysics (quantitative cytochemistry), microbiology (anaerobic bacteriology, immunology, bacterial physiology), pharmacology (neuropharmacology, toxicology), and physiology (molecular endocrinology-steroid receptors, electrophysiology of membranes, control of cell proliferation). Stipends available in selected areas. Send inquiries to: **Dr. Robert W. Rasch, Chairman, Department of Physiology, Box 19780A, East Tennessee State University, College of Medicine, Johnson City, Tenn. 37601. East Tennessee State University is an Affirmative Action/Equal Opportunity Employer.**

PROGRAM MANAGER (\$32,442 to \$47,500 per annum) National Science Foundation

The Division of Applied Research is seeking a qualified person who is interested in spending 2 years at the National Science Foundation during 1979-1981 as a program manager in the Applied Physical Sciences Program. The program manager conducts evaluation of research proposals in applied physical science, provides expert advice to the foundation on matters related to applied physical science, serves as liaison with programs in other federal agencies and the private sector. Aids in the development of plans for research support. This position is excepted from the competitive civil service. Salary is negotiable based on qualifications and experience. Health, life insurance, and leave benefits are available. Applicants should have a Ph.D. or its equivalent in applied physics, an engineering discipline, applied mathematics, or a related field, and at least 5 years of research experience beyond the Ph.D. level with a significant publication record. Must be able to deal with interdisciplinary applied research and be familiar with use of computers.

How to apply: submit curriculum vitae to: **National Science Foundation, DPM, EMPB, Announcement Number EMPB 79-2, 1800 G Street, NW, Washington, D.C. 20550.** For further information, telephone: **Catherine Hobek, 202-632-4124.** Deadline for submission: 31 May 1979.

PROJECT ASSOCIATE for multidisciplinary research on economic aspects of metals mining in Wisconsin, with focus on economic comparison of disposal versus byproducts for pyrite tailings. Skill in conducting research on policy issues, and communicating findings clearly and objectively at all levels, plus some knowledge of mining and/or environmental studies is required. Contacts with state agencies, legislators, local governments, industry, and researchers in Wisconsin and other states involved.

Contact: **Professor John Strasma, Department of Agricultural Economics, University of Wisconsin-Madison, Madison, Wis. 53706; telephone: 608-262-3653.** Curriculum vitae and statements of interest are welcomed at once.

The Department of Psychiatry at the University of Michigan is seeking a **PSYCHIATRIST** at the full professor level to become the director of our Youth Service. Should be psychodynamically oriented with broad teaching, clinical and research interests, and track record. Should have strong administrative background to be able to head a large inpatient (34 children, 18 adolescent), day treatment, and outpatient program (over 20,000 visits per year). Reply to: **Box 129, SCIENCE. Code 1500B0. A non-discriminatory, Affirmative Action Employer.**

RESEARCH ASSOCIATES. Ph.D. biochemistry or cell biology are immediately available for a minimum of 3 years. The research will involve studies of multi-enzyme systems in respiratory and tumor tissues which regulate the composition, synthesis, and secretion of cell surface antigens and mucin glycoproteins in these tissues. A second position is available to study the role of phosphorylation of soluble enzymes and membrane proteins in the mechanism of hormone action in kidney. Salaries for these positions range from \$12,500 to \$15,000, commensurate with experience. Send résumé and names of references to:

**Dr. Joseph Mendicino
Department of Biochemistry
University of Georgia
Athens, Georgia 30602**

POSITIONS OPEN

RADIATION PHYSICIST

The Department of Radiation Oncology and Biophysics, Eastern Virginia Medical School, seeks a radiation physicist at the associate professor/full professor level to direct a program of applied medical physics research. Applicants must possess a doctorate and have experience in teaching and research as well as background in computer usage in the field of physics in medicine. Responsibilities will include design and development of innovative treatment techniques for cancer patients, utilizing super-voltage external beams and implants. Collaboration with ongoing radiobiology and cancer research program is encouraged. Salary is negotiable, depending on experience and qualifications. Send curriculum vitae with bibliography, statement of research interests, and three references to: **Anas M. El-Mahdi, M.D., Sc.D., Professor and Chairman, Department of Radiation Oncology and Biophysics, Eastern Virginia Medical School, 660 Gresham Drive, Norfolk, Virginia 23507. An Equal Opportunity/Affirmative Action Employer.**

The Department of Biochemistry, Rice University, announces the availability of **RESEARCH POSITIONS** for programs of research in the areas of cholesterol biosynthesis, sphingolipid chemistry and metabolism, and stereochemistry of enzymatic reactions. Interested candidates should send résumé, transcripts, and names of three references to:

**Dr. G. J. Schroepfer, Jr.
Department of Biochemistry
Rice University
Houston, Texas 77001**

Rice University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE in geophysical data analysis. Full-time, nontenured, grant-supported position. Good background in Fortran computer programming necessary. Experience in time-series analysis and model-fitting techniques especially welcome. Apply with short résumé and names of three references by 1 May 1979 to: **Dr. Friedrich Schott, University of Miami, Rosenstiel School of Marine and Atmospheric Science, Meteorology and Physical Oceanography, 4600 Rickenbacker Causeway, Miami, Florida 33149. The University of Miami is an Affirmative Action/Equal Opportunity Employer.**

Two-year **RESEARCH ASSOCIATE** position, beginning September 1979. Recent Ph.D. to conduct research on behavioral pharmacology/physiology of psychomotor stimulants and hypnotic sedatives in primates. Send résumé and names of three references to: **Dr. L. D. Byrd, Division of Primate Behavior, Yerkes Regional Primate Research Center, Emory University, Atlanta, Ga. 30322. Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE—Ph.D. preferred. Photoaffinity labeled fatty acyl-CoA analogue to be synthesized to identify specific binding sites on enzymes of lipid metabolism. Experience with synthesis of 8-azidoadenine or other photoaffinity labels helpful. Salary: \$10,000 to \$12,000, depending on qualifications, up to 3 years; immediately available but no later than 1 September 1979. **Dr. Gary L. Powell, Department of Biochemistry, Clemson University, Clemson, S.C. 29631; telephone: 803-656-3059. An Equal Opportunity Employer.**

RESEARCH ASSOCIATE position available now for study of arterial chemoreceptors of the carotid body. Projects concern ultrastructure, catecholaminergic system, mechanisms of feedback control. Write: **Dr. Elliott Mills, Department of Pharmacology, Duke University Medical Center, P.O. Box 3813, Durham, N.C. 27710; telephone: 919-684-4276. Duke University is an Equal Opportunity Employer.**

RESEARCH ASSOCIATE

Endocrine research laboratory requires research associate with Ph.D. with a broad background in biochemistry, pharmacology, or endocrinology, and a demonstrable capacity for independent research. Present studies involve the cellular control mechanisms in thyroid physiology and function. Salary negotiable.

Send résumé to:

**Dr. Gerald Burke
Division of Endocrinology
Cook County Hospital
1825 West Harrison Street
Chicago, Ill. 60612**

THE WORLD HEALTH ORGANIZATION

requires an EDITOR for its Office of Publications at Headquarters, Geneva.

The incumbent will have editorial responsibility for the content, style and presentation of WHO publications, and will follow publications through all stages of preparation; on the basis of background texts or interviews, will write articles, reviews, publicity material, etc., for publication; may be required to serve as a précis, minute or report writer at meetings.

Applicants should have a university degree or equivalent, and experience in the editing of publications of a technical nature, in writing articles and/or preparing of records of international conferences. Excellent knowledge of English essential and good knowledge of French.

Applications, quoting reference VNP79/10, should be addressed to:



World Health Organization
Personnel
CH-1211 Genève 27

not later than 30 April 1979.

Only candidates under serious consideration will be contacted.

SENIOR POLYMER SCIENTIST

The Solar Energy Research Institute located in Golden, Colorado has immediate need for a Senior Polymer Scientist.

Qualified applicants must have a Ph.D. in Polymer, Physical, or Organic Chemistry with at least 6 years experience covering applied polymer research and development. Also, must have recent personal experience in mechanical and optical properties which relate to solar application of polymers.

Responsibilities will include national planning and direction of in-house and subcontract research/development in polymers.

Qualified applicants are invited to submit detailed resumes including professional references and salary history (no phone calls). SERI will only consider applicants who provide materials requested above.

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Ph.D. with broad academic background in microbiology including a good foundation in fermentation and bacteriology. 0-5 years experience.

ENZYMOLOGIST:

Ph.D. in enzymology with solid foundation in enzyme and protein chemistry. 0-5 years experience.

All applicants should have strong academic records plus demonstrated ability to achieve creative, significant research results.

Send resume to: Mr. Pete Morrow, Dept. C1-596, Monsanto Company, 800 North Lindbergh Boulevard, St. Louis, Missouri 63166.

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POSITIONS OPEN

Part-time **RESEARCH POSITION**. Ph.D. physiologist to conduct and coordinate research on lipogenesis and fatty acid turnover in diabetes and cancer (20 hours per week); expertise in transport, tracer kinetics, nutrition, fat metabolism, cancer, and diabetes. Should have proven administrative and writing skills. Address response to: **Dr. Nome Baker, Tumor Lipid Research Laboratory 691/151N, VA Wadsworth Center, Building 115, Room 316, Los Angeles, Calif. 90073. Department of Medicine, UCLA, an Equal Opportunity/Affirmative Action Employer.**

International Council for Bird Preservation (ICBP) seeks person with sound ornithological and conservation background, interest in international conservation affairs, and demonstrated management experience for full-time **SENIOR EXECUTIVE POSITION** involving administration of organization and close cooperation with heads of other conservation bodies. Fluency in English and French, Spanish, or German, willingness to travel, residence in yet-to-be-determined European country required. Salary negotiable. Apply with full personal record to: **ICBP, c/o Smithsonian Institution, Washington, D.C. 20560.**

STAFF POSITION

Department of Biochemistry is seeking a biochemist, cell biologist, or biophysicist capable of developing an outstanding, independent research program involving lipids and membrane phenomena. Please send curriculum vitae, list of publications, statement of research interest, and names of three references to: **Dr. Martin Morrison, Department of Biochemistry, St. Jude Children's Research Hospital, Memphis, Tennessee 38101. We are an Equal Opportunity/Affirmative Action Employer.**

STAFF SCIENTISTS

The Environmental Studies Board, National Research Council, seeks candidates for two positions on a multidisciplinary study of environmental, socioeconomic, and international aspects of solar power satellite systems.

STAFF OFFICER

The staff officer will provide staff support for the committee and panels, organize meetings and plans, and assist in drafting and editing reports. Applicants should have a Ph.D. or equivalent in natural science or engineering relevant to satellite power systems, participation in multidisciplinary engineering/technological research, and effective communications skills.

SENIOR STAFF OFFICER

The senior staff officer will have similar duties to those described above and the same educational qualifications and skills. This person will also be responsible for liaison with other working groups and sponsors and should have a minimum of 5 years of relevant technological and administrative experience.

Please submit résumé and references to: **Environmental Studies Board, 2101 Constitution Avenue, NW, Washington, D.C. 20418.**

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VETERINARY PATHOLOGIST. Litton Bionetics, Inc., is a rapidly growing company in the field of medical research located in the suburban Maryland area close to NIH and AFIP. It supports programs in many areas of science, including analytical chemistry, clinical laboratory, immunology, genetics, cell culture, and in vitro carcinogenesis screening, with a staff of over 180 scientists. We currently have a position available for a full-time Board-eligible or Board-certified veterinary pathologist to join a staff which offers great breadth of experience in performing acute, subchronic, and chronic toxicity studies including carcinogenesis, teratology, and reproduction evaluation on mice, rats, hamsters, guinea pigs, dogs, cats, and nonhuman primates. Pathologist duties include performing and supervising necropsies, training technical and professional staff, evaluating histological material, and interacting with scientists in all other associated areas of scientific endeavor. Development of individual research interests will be encouraged and Board-eligible pathologist will be afforded time to study for the ACVP examination. Salary is negotiable and dependent upon experience. Please contact: **D. S. Loker, Manager, Industrial Relations, Litton Bionetics, Inc., 5516 Nicholson Lane, Kensington, Md. 20795; telephone: 301-881-5600, extension 181. Equal Opportunity Employer, M/F.**

POSITIONS OPEN

SENIOR GEOSCIENTIST

Study solidified nuclear waste reactions with rock media under hydrothermal conditions as part of a large safety study of geologic waste disposal.

Knowledge of thermodynamic/kinetic principles controlling waste-rock-groundwater reactions and experimental techniques to investigate geochemical behavior is required.

Experience in reaction/alterations of minerals and glasses in natural geohydrologic systems is desired. Ability to interface with and/or supervise scientists and technicians and present results of research at conferences and through the technical literature is important.

Please submit résumés, academic record, and salary requirements to: **E. P. Galbraith, BATTELLE-NORTHWEST, P.O. Box 999, Richland, Wash. 99352.**

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VERTEBRATE FUNCTIONAL MORPHOLOGIST (assistant professor). Ph.D. required. Teaching duties include a lower division course and individual or team teaching in upper division comparative anatomy/development. Competence in ichthyology desirable but not essential. Interaction with the physiology program in areas such as biomechanics, active participation in graduate training, and development of a funded research program are expected. Application materials (complete curriculum vitae, statement of professional goals, reprints, transcripts, and three letters of recommendation) must be received by 1 May 1979. Address materials to: **Morphology Search Committee, Department of Zoology, University of Montana, Missoula, Montana 59812. An Equal Opportunity/Affirmative Action Employer. Female and minority applications are encouraged.**

FELLOWSHIPS

FELLOWSHIPS IN IMMUNOLOGY

Postdoctoral positions are available under NRSA training program for U.S. citizens or permanent residents who hold the M.D. or Ph.D. degree. The major areas of research training are: immunogenetics, developmental immunobiology, complement biochemistry and biology, immunoglobulin structure and function, regulation of the immune response, and secretory immunity. Send curriculum vitae and the names of three references to: **John E. Volanakis, M.D., Division of Clinical Immunology and Rheumatology, University of Alabama in Birmingham, Birmingham, Ala. 35294. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION

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

POSTDOCTORAL TRAINING FELLOWSHIPS in the structure and function of extraocular muscle fibers. These positions are NIH-sponsored and immediately available. Traineeship in muscle ultrastructure (J. Davidowitz, preceptor) would emphasize serial morphometric analysis of fiber types. Traineeship in muscle function (D. J. Chiarandini, preceptor) would emphasize electrophysiology and contractility. Send curriculum vitae and names of three references to: **Jose A. Zadunaisky, Program Director, Department of Ophthalmology, New York University Medical Center, 550 First Avenue, New York, N.Y. 10016.**

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NEUROSCIENCE POSTDOCTORAL FELLOWSHIPS—Princeton University offers NIMH-supported postdoctoral training under the supervision of 13 faculty members in the Departments of Biology, Psychology, and Biochemistry. This year our recruiting efforts are concentrating on two projects: developmental neurobiology and behavior (Dr. M. Constantine-Paton and Dr. D. Kelley); and brain monoamine function (Dr. B. Jacobs and Dr. B. Hoebel). These are 2-year traineeships, with starting dates from 1 July 1979 to 30 June 1980. Curriculum vitae, statement of research interests, and three letters of recommendation should be sent either to: **Dr. Martha Constantine-Paton, Department of Biology, or Dr. Barry Jacobs, Department of Psychology, Princeton University, Princeton, N.J. 08544. An Equal Opportunity/Affirmative Action Employer.**

PERIODICAL SEARCH

Wanted for Science's archives. Original issues of 1880-1882 *Science* (subtitled "A Weekly Record of Scientific Progress"). The first issue was dated 3 July 1880; the last was dated 4 March 1882. We want to assemble a full set of the 82 published issues of this early journal, the forerunner of the present *Science*. If you have any issues of 1880-1882 *Science* that you would be willing to part with, please write: **Janet Kegg, Library, American Association for the Advancement of Science, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005, or telephone 202-467-4428.**

COURSES

MARINE BIOLOGY GRADUATE COURSES, also for advanced undergraduates or researchers needing to know marine organisms. In 13th summer. First session (25 June to 28 July)—Lower Invertebrates: Monday, Wednesday, Friday; Marine Algae: Tuesday, Thursday, Saturday. Second Session (30 July to 1 September)—Coelomate Invertebrates: Monday, Wednesday, Friday; Ichthyology: Tuesday, Thursday, Saturday. Faculty: B. B. Collette, National Marine Fisheries Service; N. W. Riser, Northeastern University; E. E. Webber, Keuka College. Apply to: **Dr. N. W. Riser, Marine Science Institute, Northeastern University, Nahant, Mass. 01908.**

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, behavioral pharmacology, biochemical pharmacology, and toxicology. Tuition fees and stipend are available for successful applicants. Preferred starting date: 9 July 1979. 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.**

TRAINEESHIPS

POSTDOCTORAL TRAINEESHIPS IN AUDITORY PERCEPTION AND AIDS FOR THE DEAF. Immediately available. Preference given to applicants with backgrounds in clinically oriented research who would benefit from further technical training. NIH-supported program with stipend range of \$10,000 to \$14,000 per year. U.S. citizens, nationals, or permanent residents. Send résumé, letter describing career goals, and dissertation abstract to: **L. D. Braidia, H. S. Colburn, or N. I. Durlach, Auditory Perception Laboratory, Room 36-747, Massachusetts Institute of Technology, Cambridge, Mass. 02139. An Equal Opportunity Employer.**

TRAINING PROGRAM

POSTDOCTORAL TRAINEESHIPS AVAILABLE

National Research Service Awards in the area of lipoprotein structure and metabolism and its relationship to cardiovascular disease are available at the Donner Laboratory, University of California, Berkeley. One traineeship immediately available, and two traineeships available in fall 1979. Traineeships carry an annual stipend of \$10,000 to \$13,200, depending on experience. We are interested in applicants with a strong background in any of the following areas: biochemistry, protein and/or lipid chemistry, membrane chemistry, enzymology, high-resolution electron microscopy, and ultracentrifugal techniques.

U.S. citizens and permanent residents are eligible to apply. Please send résumé, transcripts, and names and phone numbers of two references to:

**Dr. Trudy Forte
Donner Laboratory
Lawrence Berkeley Laboratory
University of California
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When the stars come out in Mexico, and other parts of Latin America, hordes of vampire bats do also. These bats (*Desmodus rotundus*) have been attacking cattle, bleeding them and acting as dangerous vectors of paralytic rabies.

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