

Personnel Placement

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Positions Wanted: 40¢ per word; \$4 extra for use of box number. \$10 minimum charge, per insertion. Prepayment required. This rate is available only to individuals; personnel agencies, companies, colleges, and universities take display rate for all advertising.

Display (Positions Open, Market Place, and so forth): \$5.80 per millimeter; \$145 minimum charge, per insertion (covers 25 millimeters on single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads under 103 millimeters (4 inches). No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all other ads.

SCIENCE is published weekly, on Friday. Copy must be received in writing by Wednesday, 3½ weeks before Friday issue date required. Send copy for all positions wanted ads and display ads under 5 inches to:

SCIENCE, Room 207
1515 Massachusetts Ave., NW
Washington, D.C. 20005
Telephone: 202-467-4456

Send copy for display ads, 1/6 page and larger, to:

Scherago Associates, Inc.
1515 Broadway
New York, N.Y. 10036
Telephone: 212-730-1050

Blind ad replies should be addressed as follows:

Box (give number)
SCIENCE
1515 Massachusetts Ave., NW
Washington, D.C. 20005

POSITIONS WANTED

Anthropologist: Ph.D. 1977. Interdisciplinary background. Hormone/behavior research in man. Radioimmunoassay experience. Seeks postdoctoral/research associate position in endocrinology/reproductive biology/psychiatry/psychosomatic medicine. Box 120, SCIENCE. X

Aquatic Ecologist: M.S.; expertise in freshwater benthic invertebrate taxonomy and applied aquatic ecology. Three years of industrial power plant biological monitoring experience. Seeking teaching or government/industrial position. Salary, location open. Box 122, SCIENCE. X

Biochemist/Cell Biologist: Ph.D. 1975 in microbial membrane isolation and characterization (biochemical and ultrastructural), teaching experience; 2 years of postdoctoral experience in mammalian lipid biochemistry (normal and neoplastic cultured epithelial cells). Seeking research or academic position. Prefers New England area. Box 101, SCIENCE. X

Botanist/Phycologist/Ecologist. Experienced in marine and freshwater algal-phytoplankton taxonomy and ecology, including primary productivity. Ph.D.; publications. Seeks academic/industrial position. Box 119, SCIENCE. 4/7, 28; 5/19

Director (Ph.D., biological orientation) and **EM Service Engineer** (B.S., electrical engineering). Interested in setting up and/or operation of electron microscopy center. Both with extensive experience with TEM, SEM, and x-ray in teaching/training and research in multi-disciplines. Box 118, SCIENCE. X

Earth Scientist. Employment interests, credentials, and ice-sheet-tectonics synthesis are detailed in *SUBDUE THE EARTH* (Delacorte). R. F. Walworth, P.O. Box 11711, St. Petersburg, Fla. 33733. Telephone: 813-360-4947. 4/7, 14, 21, 28; 5/5, 12, 19, 26; 6/2

Electron Microscopist/Virologist. M.D. Seeks research position. Postdoctoral fellow at NIH for 3 years working on virus-cell interaction and pathogenesis of viral diseases. Expertise in TEM, SEM, freeze-fracture, and immunohistochemistry. Box 123, SCIENCE. X

Nutritionist, Ph.D. Background in obesity and cardiovascular disease, laboratory animal and clinical research; experience in management consulting and college teaching. Prefers technical nutrition position in Washington, D.C. area. Box 121, SCIENCE. X

POSITIONS WANTED

Epidemiologist. Dr.P.H. with M.P.H. (biostatistics) and 8 years of biostatistical experience in pharmaceutical industry. Dissertation on long-term health effects of a natural disaster. Presently senior medical biostatistician. Desires position utilizing epidemiology training and offering supervisory or management responsibilities. Academic training in both chronic disease epidemiology and disaster epidemiology. Box 94, SCIENCE. X

Immunologist—Microbiologist. M.S. 1975. Research laboratory manager from 1975 to present. Publications. Wishes to relocate to north-central Ohio (Lorain County) area. Seeks part-time or full-time research or teaching position. Experience in immunology, tumor biology, virology, and bacteriology. Available August 1978. Box 124, SCIENCE. X

Natural Resource Statistician. Ph.D. 1975. Strong background in sample design, survey methodology, and data analysis. Five years of experience in natural resource and agriculture surveys with federal government. Experienced teacher. Sound programmer experienced in statistical packages. Seeking responsible position in survey organization collecting natural resource or agriculture information. Box 110, SCIENCE. 4/7, 14

Phycologist, M.D. 1977. Seeks research or teaching position. Has college teaching and research experience with publications and training in scanning and transmission electron microscopy. Curriculum vitae and references upon request. Box 88, SCIENCE. X

POSITIONS OPEN

ACADEMIC CLINICAL PSYCHOLOGIST
Position available for academically oriented Ph.D. in clinical psychology at the instructor or assistant professor level to assume significant teaching responsibilities within a newly formed doctoral program in clinical psychology, stressing the relationships between the neurosciences, neuropsychology, and behavior. Research encouraged. Salary negotiable. Many fringe benefits. *Affirmative Action/Equal Opportunity Employer.* Contact: Michael Alan Taylor, M.D., Acting Chairman, Department of Psychology, School of Graduate and Postdoctoral Studies, University of Health Sciences/The Chicago Medical School, Building 50, North Chicago, Illinois 60064.

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF SURGERY

The Department of Surgery at the University of Michigan is seeking candidates for a position in academic general surgery. The candidate should have completed a residency in general surgery at a university hospital in the United States or Canada, be certified by the American Board of Surgery or be eligible to take the qualifying examination of the American Board of Surgery, and have specialized training which qualifies him/her for laboratory research in a specific area of general surgery. The position will be based primarily at Ann Arbor Veterans Administration Hospital and Wayne County General Hospital. Both of these hospitals are affiliated with and staffed by the University of Michigan. This appointment would be at the instructor or assistant professor level. Candidates should be available on 1 July 1978. Send résumé to Box 113, SCIENCE. Code 500HO. A nondiscriminatory, Affirmative Action Employer

ACADEMIC POSITION

A position is available in the Lipid Research Clinic for a physician to participate in a large national clinical trial on the effect of hypocholesterolemic treatment on cardiovascular morbidity and mortality. A background or interest in cardiovascular disease and epidemiology is desirable. Opportunities exist for both laboratory and clinical research. Salary and academic rank commensurate with experience. Appropriate departmental affiliations can be arranged. Send curriculum vitae and letter of special interests to:

Peter O. Kwiterovich, M.D.
Lipid Research Clinic
Johns Hopkins Hospital
CMSC 1102
600 North Wolfe Street
Baltimore, Md. 21205

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

Applications are invited for positions in the **DEPARTMENT OF ANATOMY** at the University of South Dakota School of Medicine. Appointees will be required to assist in the teaching of one or more of the following: gross anatomy, microanatomy, or neuroanatomy, possibly with a small commitment to undergraduate (college level) teaching. Applicants should have demonstrated ability to conduct original research. Ph.D. or M.D. degree required; postdoctoral experience, prior teaching experience preferred. Salary and rank subject to qualifications and experience. Seed funding for research available. Starting date: 1 July to 15 August 1978. Closing date: 30 April 1978. Interested applicants should submit curriculum vitae, statement of research interest and experience, and names of three references to: **Department of Anatomy, School of Medicine, University of South Dakota, Vermillion, South Dakota 57069.** *Equal Opportunity Employer.*

University of South Carolina ANIMAL CARE DIRECTOR

Position open 1 July 1978 for Director of Animal Care and Animal Research Facilities. Appointment in School of Medicine. University-wide responsibility for all laboratory research animals and overall supervision of animal care staff. D.V.M. degree and research animal experience essential. Further information available upon request. Send detailed personal résumé and three letters of reference to: **Dr. Wallace D. Dawson, Chairman, Search Committee, Department of Biology, University of South Carolina, Columbia, S.C. 29208.** Closing date for receipt of applications is 1 May 1978.

Affirmative Action/Equal Opportunity Employer

ANIMAL SCIENCE DEPARTMENT CHAIRPERSON

Position available 1 September 1978. Applicants with: Ph.D. in animal, dairy, poultry, or veterinary science; experience in teaching, research, or extension; record of accomplishment in chosen field; interest in administration; appreciation for land grant philosophy; and ability to develop rapport with clientele groups in animal agriculture and related industries are invited to apply. Responsibilities include administration of teaching, research, extension and diagnostic activities, and farm operations of the department. Send letter of application, complete résumé, and three letters of reference by 21 April to: **Dr. James B. Marcum, Department of Veterinary and Animal Sciences, University of Massachusetts, Amherst, Mass. 01003. Telephone: 413-545-2137.** *An Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR to teach undergraduate courses in wood anatomy/identification and dendrology and graduate course in wood quality. Plan and carry forward research in general area of wood quality, including the effects of silvicultural and genetic manipulation of wood properties. Guide graduate students. Ph.D. degree completed or nearly completed. *Applicants' qualifications will be considered without regard to race or sex. Women and minorities are urged to apply.* Applications will be received until 30 April 1978. Write: **Donald G. Arganbright, Search Committee, Forest Products Laboratory, University of California, 47 and Hoffman Boulevard, Richmond, California 94804.** *University of California is an Equal Opportunity/Affirmative Action Employer.*

ANTHROPOLOGY DEPARTMENT seeks **ASSISTANT PROFESSOR** beginning 1 September 1978 specializing in biological anthropology (human evolution or primate ethology) or archeology (paleolithic or hunters-gatherers). Candidates will be considered less on the basis of specialty than on record of significant research and both graduate and undergraduate teaching ability. Send curriculum vitae and names of three references to: **Susan H. Lees, Chairman, Department of Anthropology, Hunter College, City University of New York, 695 Park Avenue, New York, N.Y. 10021.**

Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

GEOSCIENCE DEPARTMENT Hobart and William Smith Colleges

ASSISTANT PROFESSOR. Applications are invited for a faculty position to teach at the undergraduate level. Applicants should have the Ph.D. with a specialization in mineralogy, petrology, or structural geology, which will be the primary teaching responsibilities of the position. The successful applicant will be expected to initiate and develop research programs and also to participate in the colleges' general curriculum which incorporate undergraduate participation. The position will exist for 4 years and will be reviewed in the third for extension. Submit résumés and references to: **W. F. Ahrensbrak, Chairman, Geoscience Department, Hobart and William Smith Colleges, Geneva, New York 14456; or see Ahrensbrak at AGU Miami meeting.**

These colleges are an Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOCHEMISTRY

Applications are invited for the above faculty position to begin on or before 1 September 1978. A slight preference will be given to individuals with demonstrable originality and productivity in research in one or more of the following areas: membrane and lipid biochemistry, molecular and cell biology, differentiation, molecular endocrinology, and metabolic control mechanisms. The successful candidate will also be expected to participate in graduate and medical student teaching. Interested applicants should send curriculum vitae, a detailed statement of research interests, and names of three references (before 1 June 1978) to: **Dr. Mariano Tao, Chairman, Search Committee, Department of Biological Chemistry, University of Illinois at the Medical Center, 835 South Wolcott Avenue, Chicago, Ill. 60612. The University of Illinois is an Affirmative Action/Equal Opportunity Employer and encourages applications from members of minority groups and women.**

ASSISTANT PROFESSOR, BIOLOGY. Teach human anatomy and physiology to Allied Health students, plus biostatistics and/or animal behavior to majors. Ph.D. required. Starting salary: \$13,157 to \$18,651; effective 1 September 1978. Forward résumé to: **Chairperson, Biology Department, Kean College of New Jersey, Morris Avenue, Union, N.J. 07083.**

An Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR OF BIOLOGY (visiting for 1978-1979, tenure-teaching appointment possible, 1979-1980). Candidates will be expected to teach at the graduate and undergraduate level in the field of biology with special emphasis in the areas of plant and/or marine ecology and to carry out research programs in one of these areas. A Ph.D. degree is required; postdoctoral experience is advisable. Salary: \$15,000 to \$16,000 depending upon qualifications. Submit curriculum vitae including bibliography, statement of research interests, teaching background, and names of four referees from whom references may be obtained to: **Dr. O. P. Bahl, Chairman, Department of Biological Sciences, State University of New York at Buffalo, 109 Cooke Hall, Buffalo, New York 14260. State University of New York at Buffalo is an Equal Opportunity/Affirmative Action Employer.**

CORNELL UNIVERSITY ASSISTANT PROFESSOR DEPARTMENT OF MICROBIOLOGY

Applicants are invited for the position of assistant professor in the Department of Microbiology, College of Agriculture and Life Sciences. The position is for a microbial cytologist with training in the techniques of electron microscopy. The appointee will be expected to teach courses in general microbiology and to establish an advanced level course in the area of his research specialty. The appointee will also be expected to undertake a vigorous research program and to contribute to advanced undergraduate and graduate training in the Department of Microbiology.

Applicants should possess the Ph.D. in microbiology or a related area, have postdoctoral research experience and have demonstrated research ability. Inquiries are invited from all qualified applicants. *Women and minority candidates are encouraged to apply.*

Curriculum vitae, including the names of at least three persons who can be contacted for letters of reference, should be sent to: **Professor H. W. Seeley, Jr., Search Committee, Department of Microbiology, Stocking Hall, Cornell University, Ithaca, N.Y. 14853 by 1 May 1978. Cornell University is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

THE ECOSYSTEMS CENTER MARINE BIOLOGICAL LABORATORY (MBL) WOODS HOLE, MASSACHUSETTS

An opening is available at the assistant or associate professor level for an **ECOLOGIST** with experience in terrestrial studies and interests in modeling. An applicant should wish to work, in part, jointly with a group of other ecologists of diverse interests. Send a letter, résumé, and names of referees to: **Dr. G. M. Woodwell, Director, The Ecosystems Center, MBL, Woods Hole, Mass. 02543.**

ASSISTANT PROFESSORSHIPS IN PHYSIOLOGY UNIVERSITY OF PENNSYLVANIA

The Department of Physiology is seeking four M.D.'s or Ph.D.'s with experience in specific areas noted. Applicants should have had 3 years of postdoctoral training and teaching experience in physiological-biophysics. (i) **Skeletal and cardiac muscle, mechanics and electromechanical coupling:** candidate with a strong theoretical and mathematical background preferred. (ii) **Muscle biophysics with a demonstrated expertise in electron microscopy:** should have experience combining ultrastructural, biophysical, and physiological approaches in the study of cardiac muscle. (iii) **Rapid exchanges in cells and subcellular particles:** should have a strong background in chemistry, including physical chemistry, and mathematics, including computer programming. (iv) **Biochemical neuroendocrinology:** experience in carbohydrates, metabolism and control. Knowledge of techniques for study of isolated pancreatic islets preferred. Responsibilities include teaching of medical and graduate students. Send curriculum vitae, bibliography, and names of referees to: **Department of Physiology, School of Medicine, University of Pennsylvania, G-4, Philadelphia, Pa. 19104.**

An Equal Opportunity/Affirmative Action Employer

ASSISTANT OR ASSOCIATE PROFESSOR OF PLANT TAXONOMY. The Department of Biological Sciences seeks a Ph.D. or D.Sc. with a strong background in the flora of eastern North America and modern methods of taxonomy as half-time assistant curator of the Herbarium Marie-Victorin and for half-time teaching in plant and general taxonomy in the French language. This position must be filled as soon as possible on and after 1 June 1978. Applicants should send, as soon as possible and by registered mail, curriculum vitae and two letters of recommendation to: **Dr. Raymond McNeil, Director, CREM, Université de Montréal, C.P. 6128, Succ. "A," Montréal, Québec, Canada H3C 3J7.**

ASSOCIATE—CHEMISTRY LABORATORIES (Two Positions)

Applications are invited for two junior positions in the Clinical Chemistry Laboratories at the Hospital of the University of Pennsylvania. Minimum qualifications are Ph.D. degree or M.D., eligible for licensure in Pennsylvania and certification in clinical pathology. Candidates may have expertise in: (i) immunopathology and protein chemistry, or (ii) nuclear medicine, endocrinology, and hormone receptor studies. Interests should encompass a serious research program, service functions, and teaching. Applicant must be willing to interact with hospital clinical services at the patient care and consultative levels. Some administrative experience is desirable. Send curriculum vitae to:

**Dr. Pascal J. Viola
Director, Division of Laboratory Medicine
Department of Pathology
Hospital, University of Pennsylvania
3400 Spruce Street
Philadelphia, Pennsylvania 19104**

Equal Opportunity/Affirmative Action Employer

PATHOLOGY/IMMUNOBIOLOGY (Two Positions)

Applications are invited for two junior faculty positions in the Immunobiology Unit of the Department of Pathology, University of Pennsylvania. Minimum qualifications are M.D. and/or Ph.D. degrees. Preferred candidates will have strong research background and current interest in immunological aspects of membrane biochemistry, molecular immunogenetics, and immunogenetics. Send curriculum vitae to:

**Dr. Arnold J. Rawson
Acting Chairman, Department of Pathology
University of Pennsylvania
School of Medicine/G3
Philadelphia, Pennsylvania 19104**

Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

ASSISTANT PROFESSOR OF ORAL ANATOMY, Ph.D. or Ph.D./D.D.S., beginning 1 September 1978. Participation in anatomy courses for dental students is expected. Research interests of the department center on the functional design of the vertebrate oral apparatus. Applications should be received no later than 1 June. Please provide curriculum vitae, statement of research plans, significant reprints, and arrange to have three letters of reference sent directly to: **Dr. Thomas C. Lakars, Department of Oral Anatomy, College of Dentistry, University of Illinois at the Medical Center, 801 South Paulina, Chicago, Ill. 60680.**

An Affirmative Action/Equal Opportunity Employer

ASSOCIATE PHYSICIST

Conduct research in theoretical nuclear physics with emphasis on intermediate energy topics. Help direct research of graduate students and postdoctoral appointees.

Ph.D. in physics with 2 years of experience at or above the postdoctoral level. Background should include demonstrated achievements in nuclear structure (many-body theory and group theory), nuclear reactions (microscopic theory and intermediate energy applications), and field theory with structure and reaction applications.

Interested parties should submit résumé, along with three letters of recommendation, to:

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

Application deadline is 31 May 1978. *The Ames Laboratory is an Equal Opportunity Employer. Applications from minority or female candidates are encouraged.*

BIOCHEMISTRY FACULTY POSITION BIOCHEMISTRY AND BIOPHYSICS SECTION UNIVERSITY OF CONNECTICUT, STORRS

Applications are invited from nationally known scholars for a faculty position at the associate or full professor level. Desired starting date: September 1978. The appointee will be expected to maintain an active research program and should have previous experience teaching biochemistry. Teaching duties will include undergraduate and graduate courses. Send curriculum vitae, including summary of present research interests, copies of representative publications, and names of at least three references to:

**Search Committee, Biochemistry and
Biophysics Section
Biological Sciences Group, Box U-125
University of Connecticut
Storrs, Connecticut 06268**

An Equal Opportunity Employer

Applications are invited for the position of **DIRECTOR OF THE INTERNATIONAL PACIFIC HALIBUT COMMISSION (IPHC)**, a Canadian and United States agency headquartered at the University of Washington, Seattle. Duties will commence on or about 15 August. The future status of the commission and, therefore, the tenure of the directorship is subject to the outcome of current negotiations between Canada and the United States. **Qualifications:** applicants should be graduates of recognized universities and have had training and experience in biological research. Comprehensive understanding of the factors involved in the scientific management of a renewable resource is required. Administrative experience also is required. **Duties:** develop research plans for approval by the commission and direct their execution. Propose annual regulations for the halibut fishery. Be responsible for the publication of scientific reports. Liaise with fishing, processing, and scientific communities and representatives of provincial, state, and federal agencies. Prepare annual budgets for the governments of Canada and the United States. Be responsible for the maintenance of a competent scientific and technical staff and for the general management of the office. **Salary:** depends on the applicant's experience but will be equivalent to United States Civil Service Grade GS-15 or GS-16, which ranges from \$36,171 to \$47,500. Pension, disability, life insurance, and medical plans are provided on a shared cost basis. Applicants should send a résumé, including the names of three professional references, not later than 12 May 1978 and should provide a list of their publications and sample of papers as evidence of their ability to conduct scientific research. Applications should be forwarded to: **Clifford R. Levelton, Chairman, IPHC, Department of Fisheries and the Environment, Ottawa, Ontario, Canada K1A 0H3.**

POSITIONS OPEN

BIOCHEMISTRY POSTDOCTORAL POSITION is available immediately for biophysical studies dealing with either Fe transport and incorporation into porphyrin; H^+ , O_2 , and anion uptake and release by reconstituted and intact erythrocytes or the interaction of heme with artificial phospholipid bilayers. Experience in rapid reaction techniques, membrane studies, heme chemistry, and/or ion transport is highly desirable. Send curriculum vitae and the names of three references to: **Dr. John S. Olson, Department of Biochemistry, Rice University, Houston, Texas 77001.** An Affirmative Action/Equal Opportunity Employer.

BIOCHEMISTRY TECHNOLOGIST AND RESEARCH ASSISTANT at The Center for Blood Research, Boston, Mass., to direct blood research projects; needs college degree in biology or chemistry and minimum of 2 years of training in laboratory research techniques; experience in protein chemistry and expertise in identification, isolation, and extraction of labile proteins from blood serum essential. \$9,000 per year. *Equal Opportunity Employer.* Send résumés to: **Box 116, SCIENCE.**

BIOLOGY FACULTY. Tenure-track position to teach undergraduate and graduate courses in area of immunology or hematology; also undergraduate courses in microbiology and general education. Doctorate or near completion of degree required. Appointment at rank of assistant professor (\$14,256 to \$17,136) depending on qualifications and experience. Contact: **Dr. J. D. Crum, Dean, School of Natural Sciences, California State College, 5500 State College Parkway, San Bernardino, Calif. 92407.** An Equal Opportunity/Affirmative Action Employer.

BIOLOGY FULL-TIME FACULTY POSITION

Available fall 1978. Ph.D. Major duties involve teaching human anatomy/physiology to nonscience majors. Academic rank dependent on experience. Interested persons should respond with a letter of application, a résumé, and three recent letters of recommendation by 25 April to: **Chairman, Biology Department, La Salle College, 20th and Olney Avenues, Philadelphia, Pennsylvania 19141.** An Equal Opportunity/Affirmative Action Employer

BOTANICAL SCIENTISTS AIR POLLUTION RESEARCH AND ENVIRONMENTAL ASSESSMENT

Energy Impact Associates, Inc. (EIA), formerly Westinghouse Environmental Systems Department, has staff positions open at the technologist and scientist level for plant scientists with experience in evaluating air pollution effects on vegetation. Applicants should have a demonstrated competence in chemistry, plant physiology, air monitoring equipment, and experimental design. A basic knowledge of ecology and taxonomy is desirable. Ph.D. is required for senior level position. Position and salary are commensurate with education and experience.

Interested parties should send résumé, transcripts, salary history, references, and an outline of experience and research interests to:

**RICHARD B. PAULIN, MANAGER
Human Resources
P.O. Box 1899
Pittsburgh, Pa. 15230**
An Equal Opportunity Employer

DIRECTOR OF ANIMAL TUMOR RESEARCH FACILITY

The University of Rochester Cancer Center, University of Rochester School of Medicine and Dentistry, is seeking a **DIRECTOR** for its Animal Tumor Research Facility (ATRF), available to start 1 July 1978. The appointment will be at an academic rank commensurate with the applicant's experience and will be a joint appointment in the most appropriate pre-clinical or clinical department of the Medical School. The director is responsible for supervision of the ATRF, which functions as a central service of the center for acquisition, maintenance, and manipulation of experimental animal tumors. Applicants should have qualifications and interests in tumor morphology and are expected to engage in research, preferably directed toward animal tumor systems, and to provide consultation for other Cancer Center investigators using animal tumor systems. Applicants should submit curriculum vitae and three references to: **Dr. Russell Hilf, Chairman, Search Committee, Department of Biochemistry, University of Rochester School of Medicine and Dentistry, 601 Elmwood Avenue, Box 607, Rochester, New York 14642.** An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

Department of Internal Medicine, School of Medical Sciences, University of Nevada, Reno. **Ph.D. BIOCHEMIST.** Academic rank according to qualifications; full-time; primarily university-based with possible Veterans Administration affiliation. **Qualifications:** Ph.D. in biochemistry; 3 years plus of postdoctoral experience; demonstrated ability for independent investigation and ability to obtain grant support; research interest primarily in gene regulation and cyclic nucleotide metabolism. **Responsibilities:** collaborate with other faculty of the Department of Medicine engaged in basic and clinical research; teach a limited number of courses at the graduate and undergraduate levels. **Closing date:** 30 April 1978. **Respond to:** **Paul R. Miller, M.D., School of Medical Sciences, University of Nevada, Reno, Reno, Nevada 89557. Telephone: 702-784-4816.** *Affirmative Action/Equal Opportunity Employer.*

BIOCHEMISTRY FACULTY MEMBER

Texas A & M University College of Medicine has a faculty opening in the Department of Medical Biochemistry which can be filled at the assistant, associate, or full professor level. Candidates should have Ph.D. or M.D. and postdoctoral or faculty research experience. Senior-position candidates should have an ongoing funded research program in a medically relevant area, experience in teaching medical students, and exposure to clinical medicine. Duties will include research, course development, and teaching medical students in a new VA-related College of Medicine. Previous applications remain on file and need not be resubmitted. Send complete curriculum vitae to: **Search Committee, Department of Medical Biochemistry, College of Medicine, Texas A & M University, 110 Herman Heep Building, College Station, Texas 77843.**

*Equal Employment Opportunity
Through Affirmative Action*

DIRECTOR. Biologic Resources Laboratory, University of Illinois at the Medical Center. Veterinary degree, administrative background, and training or experience in laboratory animal care required, as well as evidence of research achievement. The director is responsible for the management and husbandry of large animal center and several satellite facilities containing rodents, dogs, large animals, and over 500 nonhuman primates including several breeding groups. The Biologic Resources Laboratory includes extensive research and clinical laboratories, as well as surgical suites and other ancillary facilities. The directorship provides for an appointment in an appropriate academic department. Collaborative or independent research by the director is encouraged. Submit curriculum vitae plus names of three references by 15 April to: **W. Ann Reynolds, Ph.D., Associate Vice Chancellor for Research, University of Illinois at the Medical Center, P.O. Box 6998, Chicago, Illinois 60680.**

EXPERIMENTAL PLANT ANATOMIST CYTOLOGIST/MORPHOLOGIST

The University of California at Davis invites applications for the position of assistant professor and equivalent rank in the Agricultural Experiment Station beginning 1 January 1979. Rank and salary are to be based on qualifications and experience of the applicant.

Teaching: assume responsibility for a graduate course in fruit morphology; develop a course in morphology and anatomy of woody crop plants; advise graduate student research.

Research: research time is to be split between the Department of Pomology and the Department of Viticulture and Enology. Research is to be focused on those aspects of anatomy/cytology/morphology that have important implications in fruit and nut crops.

Qualifications: Ph.D. required. Experimental plant anatomist/cytologist/morphologist with some background in physiology and biochemistry.

Applications must be received by 31 July 1978. Applicants should send their curriculum vitae, copies of transcripts, and three letters of reference to:

**Dr. Dillon S. Brown
Chairman of the Search Committee
Department of Pomology
University of California
Davis, California 95616**

The University of California is an Affirmative Action/Equal Opportunity Employer and encourages applications from members of minority groups and women.

POSITIONS OPEN

CHAIRPERSON, Biology Department, Simmons College, Boston. Begin summer 1978. Associate professor. Ph.D. Eukaryotic cell biologist to teach cell and developmental biology. Demonstrated administrative skills, teaching excellence, research program involving undergraduate participation, and a strong commitment to undergraduate education are essential. Write promptly for detailed job description and application procedure to: **Dr. Richard Nickerson, Search Committee, Biology Department, Simmons College, 300 The Fenway, Boston, Mass. 02115.** An Affirmative Action/Equal Opportunity Employer.

DEPUTY DIRECTOR COLORADO ENERGY RESEARCH INSTITUTE

The Colorado Energy Research Institute (CERI) provides the executive and legislative branches of Colorado government with data and information on energy-related issues through a research program dealing with both production and consumption.

The deputy director supports the director in managing all of the institute's activities, with emphasis on the contract research and grant programs. Requirements include an advanced degree in a scientific or technical discipline, 5 plus years of appropriate experience, strong communication skills, demonstrated ability and experience in managing interdisciplinary policy research programs, and direct experience in dealing with various stakeholder groups. This is a new position subject to state budgetary approval.

Please reply in confidence with a complete résumé to: **Deputy Director Search Program, Colorado Energy Research Institute, 2221 East Street, Golden, Colo. 80401.**

CERI is an Equal Opportunity Employer.

DIRECTOR, NATIONAL GEODETIC SURVEY

Thorough knowledge of geodesy, geophysics, and surveying. Demonstrated management ability. Ph.D. in geodesy, geophysics, surveying, or related physical sciences. Salary: \$47,500. Subject to U.S. Civil Service Commission approval. Location—Rockville, Maryland. Apply to: **Department of Commerce, National Oceanic and Atmospheric Administration, 6001 Executive Boulevard, Rockville, Maryland 20852, AD415:NYB.** *Equal Opportunity Employer.*

TUSKEGEE INSTITUTE—DIRECTOR, CARVER RESEARCH FOUNDATION (CRF). Position available 1 August 1978. Earned doctoral degree or the highest earned degree attainable in field of training and experience is required. Salary commensurate with education and experience. Applications accepted through 1 June 1978. Send application to: **Dr. Eugene W. Adams, Chairman, Search Committee CRF, Tuskegee Institute, Tuskegee, Ala. 36088.** An Equal Opportunity/Affirmative Action Employer.

RESEARCH AND SPONSORED PROGRAMS DIRECTOR. Will assist in preparation and review of proposals, disseminate information on funding opportunities, and maintain contacts with funding agencies. Director will report to Dean of Graduate School and should possess skills and experience in proposal preparation. Send résumé, final transcript, and letters of recommendation to: **Search Committee, Dean of the Graduate School, University of Arkansas at Little Rock, Little Rock, Arkansas 72204.** An Affirmative Action Employer.

ENVIRONMENTAL HEALTH EPIDEMIOLOGIST

Applications are invited for a full-time assistant professorship in the Department of Preventive Medicine and the Institute for Environmental Studies, University of Wisconsin, Madison. Position available summer 1978. A Ph.D. in epidemiology with emphasis in environmental health is preferred. Salary commensurate with training and experience. Appointee will be expected to establish an independent program of research and be responsible for the fostering of interdisciplinary research programs. Teaching responsibilities include the development of an undergraduate course in environmental health and participation in a graduate program in epidemiology. Send curriculum vitae including the names of three references by 15 April 1978 to: **Dr. Donn D'Alessio, Chairman, Environmental Health Search and Screen Committee, Stovall Building, 465 Henry Mall, Madison, Wisconsin 53706.** The University of Wisconsin is an Equal Opportunity Employer, Titles VIII. Applications from women and minority groups especially welcome.

POSITIONS OPEN

DEAN OF AGRICULTURE. The University of Arizona invites nominations and applications for the position, dean of agriculture. As principal administrative officer of the college, the dean reports to the executive vice president and has responsibilities for resident instruction, the Agricultural Experiment Station (research), and the Cooperative Extension Service. The Schools of Renewable Natural Resources and Home Economics are also administered within the College of Agriculture.

Candidates for the position should have demonstrated administrative skill, be familiar with the organization and management of land grant programs, and show evidence of creative research/scholarship. The candidate would be expected to develop an effective working relationship with faculty, staff, and the people of Arizona.

Salary negotiable and competitive. Applications and/or nominations should be submitted in writing to: **Lee B. Jones, Chairman, Dean's Search Committee, Administration 501, University of Arizona, Tucson, Arizona 85721.** Applications must include a current curriculum vitae and the names and addresses of at least three professional references. Closing date for applications is 1 July 1978. *An Affirmative Action/Equal Opportunity/Title IX/Section 504 Employer.*

SCIENTIFIC DIRECTOR. An internationally known university research center has available the position of scientific director to administer a program concerned with scientific techniques as applied to archeology; principally those developments in physics, electronics, chemistry, remote and near sensing, and geophysical prospecting. This research center recognizes the need to disseminate information to the research archeologists concerning the scientific applications which have been proven in the laboratory and in the field. Qualifications: Ph.D. in physics, 10 to 15 years experience in the field of archeometry with a specialty in thermoluminescence dating (pre-close method), radium-lead disequilibrium, lead isotope ration, provenience studies. Art authenticity experience with museums a plus factor. Administrative and development experience in a similar research setting a must as well as a history of publishing in international journals. Position available 1 July 1978; salary to be determined. Curriculum vitae, plus names and addresses of five references, to be submitted by 1 May 1978 to: **Box 117, SCIENCE.** *Equal Opportunity Employer.*

FACULTY POSITION

Biology—assistant professor, 12-month regular tenure-track position—neurobiology/neurophysiology—fall 1978. University of Missouri-Kansas City. Must possess doctorate and demonstrated research productivity. Will be assigned undergraduate, graduate, and health science teaching responsibilities. Successful candidate will have joint appointment in Medical School with teaching responsibilities. Send complete curriculum vitae and three letters of reference to: **Chairman, Search Committee, Department of Biology, University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, Mo. 64110.** Closing date is 1 June 1978. *An Equal Opportunity Employer.*

FERMENTATION RESEARCH AND DEVELOPMENT

A challenging position in a department which specializes in fermentation research and development to support research on natural products. Position requires a Ph.D. or equivalent experience in fermentation. Experience in solving scale-up problems is very desirable, and preferably, a solid record of accomplishments. A professional environment is offered in staff, equipment, and facilities, including competitive salaries and complete benefit package. Please send résumé in confidence to: **William T. Jackson, Employment Supervisor.**

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POSITIONS OPEN

DIRECTOR

The position of director of the International Laboratory for Research on Animal Diseases (ILRAD) will become vacant in June 1978. The director is the chief officer of the institution and must have experience and background in disease research and in the administration of a research institution. In addition, the director must be able to relate to a variety of staff and direct the research programs of the institution as well as various other functions associated with a research program involving both basic and disease-oriented activities.

ILRAD's mandate is to develop effective control methods for trypanosomiasis and theileriasis, two important animal diseases that constrain livestock production in a number of developing countries. It is one of the International Research Centers supported by the Consultative Group on International Agricultural Research. The staff of ILRAD is recruited internationally and is engaged in multidisciplinary research activities leading to the development of immunologic or related control procedures. The ILRAD headquarters is in Nairobi, Kenya, and is a modern research complex.

Qualified candidates are requested to submit current curriculum vitae as well as a synopsis of their research and administrative experiences. Included should be the names and addresses of three referees who can be contacted in support of their candidacy. This information should be submitted to: **Chairman, ILRAD Search Committee, Rockefeller Foundation, 1133 Avenue of the Americas, New York, N.Y. 10036.** Further information can be obtained from the same address.

FACULTY POSITION IN PHYSICAL OCEANOGRAPHY

The College of Marine Studies, University of Delaware, invites applications for an academic faculty position in physical oceanography at the Marine Studies Complex, Lewes, Del. The position will be available 1 July 1978.

Candidates with academic and research interests in continental margin (shelf and slope) and estuarine circulation dynamics are sought. Preference will be given to a geophysical fluid dynamicist with demonstrated numerical modeling expertise. A pioneering opportunity is available in the setting of a developing academic and research program, and new facilities. Rank and salary will be commensurate with qualifications.

Application deadline is 1 June 1978. Send curriculum vitae, bibliography, list of research and teaching interests, and names of three professional references to: **Dr. Christopher N. K. Mooers, Physical Oceanography Search Committee, College of Marine Studies, Lewes, Del. 19958.**

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

FUNGAL PHYSIOLOGIST/MYCOLOGIST. Assistant professor beginning 1 July 1978. Ph.D. with background in botany, physiology, and biochemistry. Undergraduate/graduate teaching and active research program with marine/aquatic fungi. Submit application with names of three references by 30 April 1978 to: **R. D. Goos, Department of Botany, University of Rhode Island, Kingston, R.I. 02881.** *Affirmative Action/Equal Opportunity Employer.*

HEAD, DEPARTMENT OF ENTOMOLOGY

Available 1 October 1978. Ph.D., entomology or a related discipline. Must possess interest plus experience or in-depth knowledge of resident instruction, extension programs, and research with significant professional and academic experience in entomology, part of which should have been in the Land Grant University System. Will have administrative responsibility for academic affairs, department personnel, financial matters, physical facilities, and other related matters. Will provide leadership and coordination in resident education, extension, research, and departmental relations with the public. Individuals desiring further information contact: **Stanley G. Gesell, Chairman, Search Committee, Department of Entomology, The Pennsylvania State University, 106 Patterson Building, University Park, Pa. 16802.** Applications accepted until 1 June 1978.

Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

ONE-YEAR POSITION IN GENETICS: The Department of Biology at UCLA has one temporary teaching position available beginning September 1978. Applicants must have a Ph.D. degree and the qualifications to teach a large undergraduate upper division course in genetics, a lower division course in genetics for nonscience majors, and to participate in the introductory biology course. Applicants should send curriculum vitae, including names and addresses of three referees to: **Search Committee, Biology Department, University of California, Los Angeles, California 90024,** before 8 May 1978. *An Equal Opportunity/Affirmative Action Employer.*

Possible opening, fall 1978, for faculty member in **GEOLOGY/EARTH SCIENCE.** Candidates must be able to teach a wide range of geoscience material. Expertise in sedimentology-stratigraphy and environmental geology desirable. Evergreen is a 4-year accredited liberal arts college which emphasizes team-taught interdisciplinary studies. No departments. Salary range: \$12,940 to \$16,060. For information contact: **Dr. Willard Humphreys, Academic Dean, L2219, The Evergreen State College, Olympia, Wash. 98505.** Closing date: 30 April. *Equal Opportunity/Affirmative Action Employer.*

HEALTH STUDIES. Applicants sought for junior faculty position with expertise in study of biological and social determinants of disease. Knowledge of disease processes required. Appointee will teach in one or more of the following areas: community health, occupational health, and psychosomatics. Health studies is a multidisciplinary program focusing on health behavior, including identification of behavioral risk factors and their determinants, techniques for modifying these behaviours, and evaluation of health behavior changes. Ph.D. or M.D. required. Salary commensurate with experience. Starting 1 September 1978. Apply to: **Professor N. Ashton, Chairman, Health Studies Group, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1.**

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

The University of Michigan Medical School has a position available for **INSTRUCTOR** in our Department of Surgery. Applicant must be Board-eligible or certified urological surgeon for full-time academic position involving teaching, research, and clinical practice. Level of appointment and salary will be commensurate with applicant's qualifications. Please send résumé to: **Box 112, SCIENCE.** Code 400H0. *A nondiscriminatory, Affirmative Action Employer.*

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

The Department of Surgery has an opening for **INSTRUCTOR/ASSISTANT PROFESSOR** beginning 1 July 1978. Position is for pediatric orthopedic surgeon. At least 1-year fellowship in pediatric orthopedic following approved residency and must show evidence of scholarly endeavor in academic medicine by publication, honors, and demonstrated teaching ability. Title commensurate with experience and qualifications. Please reply to: **Box 114, SCIENCE.** Code 200H0. *A nondiscriminatory, Affirmative Action Employer.*

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

The Department of Surgery has an opening for an **INSTRUCTOR** beginning 1 July 1978. This will be a full-time academic position at Wayne County General Hospital, Eloise, Michigan. Must have completed requirements for certification in orthopedic surgery. Must show evidence of scholarly endeavor in academic medicine by publication, honors, or demonstrated teaching ability. Would also include appointment to academic faculty at University of Michigan. Please reply to **Box 115, SCIENCE.** Code 100H0. *An Affirmative Action, nondiscriminatory Employer.*

LECTURER. A faculty position with emphasis on revision and direction of teaching laboratories in a series of courses in general biology for majors is available. Relevant experience and skills must be demonstrated. Send letter of application, curriculum vitae, and letters from three references to: **Search Committee, Biological Science Program, Michigan State University, East Lansing, Michigan 48823.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

JUNIOR FACULTY POSITION IN ENVIRONMENTAL STUDIES. Metropolitan College, the evening division of Boston University, has an open faculty position in environmental studies, beginning in September 1978. Interested individuals must have strong training in one of the environmental sciences and both teaching and research in the field. Ph.D. required. Rank and salary commensurate with experience. Please send your résumé and credentials, including at least three letters of reference, to: **Dr. John M. Head, Chairman, Faculty Search Committee, Metropolitan College, Boston University, 755 Commonwealth Avenue, Boston, Mass. 02215.** Boston University is an Equal Opportunity/Affirmative Action Employer.

NORTHWESTERN UNIVERSITY LECTURER Cell Biologist/Embryologist

A 1-year position as lecturer in the Department of Biological Sciences is open starting 1 September 1978. The successful candidate is expected to teach four 10-week courses; one in cell biology, one in embryology, and two of mutual interest to the candidate and the department. Candidates should have a Ph.D. in biological science; teaching experience is desirable. Salary will be based on background and experience.

Send curriculum vitae and the names of three referees to: **Chairman, Department of Biological Sciences, Northwestern University, Evanston, Illinois 60201.**

Northwestern University is an Equal Opportunity Employer.

MOLECULAR BIOLOGY MICROBIAL GENETICS

To assist in projects on molecular biology-microbial genetics. Minimum requirement: bachelor's degree with strong background in chemistry, biochemistry, and microbiology or cell biology. At least 2 years of working experience in nucleic acid metabolism desired. Additional experience in microbial genetics, cell biology, organic synthesis, or immunochemistry would be helpful. A professional environment is offered in staff, equipment, and facilities, including competitive salaries and a complete benefit package. Please reply within 2 weeks to: **W. T. Jackson, Employment Supervisor.**

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Oregon Regional Primate Research Center is seeking a scientist with training in **POPULATION GENETICS and STATISTICS**: (i) to develop criteria for breeding nonhuman primates, particularly but not exclusively rhesus monkeys, with the aims of maximizing the heterogeneity of the gene pool in the main colony population and of increasing phenotypic uniformity in selected subpopulations of animals; to set up and supervise a genetic marker laboratory for identifying whatever immunological and biochemical traits are available and appropriate for the above purposes; and to consult with other institutions breeding primates regarding exchange of males and possible frozen sperm and (ii) serve as statistical consultant in experimental design and analysis of data for a scientific staff of approximately 50 investigators. A computer is available at the Oregon Primate Center, and computerized breeding records have been maintained for the last 12 years. Deadline for application is 1 May 1978. Send curriculum vitae and references to: **Dr. W. P. McNulty, Chairman of Search Committee, Oregon Regional Primate Research Center, 505 Northwest 185 Avenue, Beaverton, Oregon 97005.** An Equal Opportunity Employer.

7 APRIL 1978

POSITIONS OPEN

FACULTY POSITION(S): MICROBIOLOGY

Department of Biochemistry, responsible for undergraduate programs in microbiology and biochemistry, anticipates the need for staff capable of teaching in one or more of the following areas: virology, microbial genetics, immunology, and serology. Candidates will be expected to show evidence of an appropriate background in one of these areas and, in addition, will be required to describe a program of research, related or not to essential teaching responsibilities. Letters of inquiry should include curriculum vitae, statements of teaching capacities and research interests, three letters of recommendation, and reprints. **Dr. Jean-Louis Lavoie, Directeur, Département de Biochimie, Faculté des Sciences et de Génie, Université Laval, Québec, Québec, Canada G1K 7P4.** Actual or eventual fluency in French is required of all candidates. Actual salary range for assistant professors: C\$19,000 to C\$31,000.

FACULTY POSITION IN ENVIRONMENTAL HEALTH SCIENCES

The Department of Environmental Health Sciences, School of Public Health and Tropical Medicine, Tulane University, announces a tenure-track position at the assistant/associate professor level beginning fall semester 1978 in environmental health sciences. Responsibilities include teaching graduate courses in occupational health and air pollution and establishing an active research program. The applicant must have an earned doctorate (Ph.D. or Sc.D.) with an emphasis in occupational health/industrial hygiene. Send complete résumé and three letters of reference by 15 May to: **Dr. Thomas G. Akers, Acting Chairman, Department of Environmental Health Sciences, School of Public Health and Tropical Medicine, Tulane University, New Orleans, La. 70112.** Tulane University is an Affirmative Action/Equal Opportunity Employer.

CALIFORNIA ORAL PATHOLOGY

The Department of Oral Medicine and Hospital Dentistry, School of Dentistry, and the Department of Pathology, School of Medicine, University of California at San Francisco (UCSF), are seeking a full-time faculty member at the assistant professor level. The successful applicant will assume responsibilities for teaching in the dental, medical, and dental hygiene curricula, in dental and medical specialty programs, and to graduate students. If qualified, the appointee will have service responsibilities in oral pathology and in pathology. Candidates should have a dental/medical degree or a Ph.D. in pathology. Formal training in pathology and oral pathology and a demonstrated ability to conduct research are required. This position will be available 1 July 1978. Applications must be received by 30 April 1978. *UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.* Send applications or nominations with curriculum vitae to: **John S. Greenspan, B.Sc., B.D.S., Ph.D., M.R.C. Pathology, Department of Oral Medicine and Hospital Dentistry, University of California, San Francisco, Calif. 94143.**

PATHOLOGY RESIDENCY PROGRAM—Position open at the University of Massachusetts Medical School. Applications from women and minority groups are especially encouraged. AMA approval is pending. Write to: **Dr. A. Like, Department of Pathology, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, Massachusetts 01605.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN X-RAY OPTICS

A postdoctoral research associate position is available for a Ph.D. with a background in optics to assist in the theoretical and experimental progress of an ongoing research project in x-ray optics. Some experience in the testing of optical components would be helpful. Salary: \$12,000 per year. Send curriculum vitae and three letters of recommendation to:

**Dr. James F. McGee
Department of Physics
Saint Louis University
221 North Grand Boulevard
St. Louis, Missouri 63103**

Saint Louis University is an Equal Opportunity Employer with an Affirmative Action Plan.

ASSOCIATE DEAN

COLLEGE OF FORESTRY AND NATURAL RESOURCES

COLORADO STATE UNIVERSITY

The College of Forestry and Natural Resources at Colorado State University is the largest college of its kind in the United States. It had an enrollment of 1012 in fall 1977. The college has five departments: Forest and Wood Sciences, Range Science, Earth Resources, Recreation Resources, and Fishery and Wildlife Biology. Bachelor's, master's, and doctoral degrees are offered in all five departments.

The position of associate dean is that of a "full deputy" to the dean. The associate dean speaks with full authority for the dean in the dean's absence and on other occasions as required. The dean and associate dean work as a team, with specific assignments developed to meet personal interests and abilities and the needs of special circumstances. In this regard, the associate dean will deal with matters pertaining to all major program areas of the college including research, extension, and instruction.

Applicants must qualify for a regular academic appointment in one of the college departments and must have attained a doctoral degree in one of the several major areas of emphasis of the college. Competence in both teaching and research at the university or equivalent level should be demonstrated. Academic administrative experience as a department head or comparable position is highly desirable. Three letters of recommendation are required.

The position is available as of 1 July 1978. Nominations and applications will be accepted until 1 June 1978. Mail communications to: **Dr. Stephen Paranka, Search for Associate Dean of Forestry, College of Business, Colorado State University, Fort Collins, Colo. 80523.**

Colorado State University is an Equal Opportunity Employer and complies with Title IX requirements. Complaints should be filed with the Office of Equal Opportunity, Student Services Building.

NATURAL PRODUCTS DETERMINATION

Merck, Sharp & Dohme Research Laboratories, Rahway, New Jersey, offer a position in the structure determination group of the Department of Biophysics for a Ph.D. chemist who is interested in starting an industrial research career with the analysis of novel natural products (largely from fermentation sources). A strong background in organic chemistry and instrumental analysis is essential. Applicants with 1 or 2 years of postdoctoral experience are preferred. A good publication record is required. Merck, Sharp & Dohme Research Laboratories offers an active, interdisciplinary research environment which emphasizes personal initiative and independent work. Publishing is strongly encouraged. A professional environment is offered in staff, equipment, and facilities, including competitive salaries and complete benefit package. Please send résumé in confidence to: **William T. Jackson, Employment Supervisor.**

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POSITIONS OPEN

PHYSIOLOGIST

The Basic Science Department desires a Ph.D. in physiology with a strong general background to assume the major responsibility for course development and teaching of the chemistry-basic physiology sequence for new students. Candidates should have research interests in some aspect of mammalian physiology. Send résumé and references to: **Dr. Grace E. Jacobs, Basic Science Search Committee, Northwestern College of Chiropractic, 1834 South Mississippi River Boulevard, St. Paul, Minn. 55116.**

POSTDOCTORAL APPOINTMENT

For research on hormone control of enzyme and membrane biosynthesis in developing intestine. Good training in cell biology and/or biochemistry essential. \$10,500 to \$13,500. Available now or summer 1978. Send curriculum vitae and names of references to: **Dr. Florence Moog, Department of Biology, Washington University, St. Louis, Mo. 63130. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION. Chemical and biological studies on bile pigment and heme metabolism. Suitable for recent Ph.D. in chemistry with a desire for biologically oriented experience. Only applicants prepared to attend for interview at their own expense need apply. Send curriculum vitae to: **A. F. McDonagh, 1120 HSW, University of California, San Francisco, Calif. 94143. The University of California is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION in electron microscopy, for continuing development of freezing fixation systems for transmission and scanning techniques, with emphasis on understanding and controlling radiation, heat transfer, and phase transformation effects. Experience in materials or polymer science, metallurgy, or biophysics essential. Initial appointment for 1 year with possibility of renewal. Deadline for receipt of applications: 3 May 1978. Please send curriculum vitae and names of three references to: **Doctors H. T. Davis and L. E. Scriven, Department of Chemical Engineering and Materials Science, 421 Washington Avenue, University of Minnesota, Minneapolis, Minn. 55455. An Equal Opportunity Educator and Employer.**

A **POSTDOCTORAL POSITION** is available to study mechanisms of action of peptides employing predominantly electrophysiological techniques in mammalian spinal pain pathways. Send curriculum vitae and three references by 1 May 1978 to: **M. Randic, Department of Veterinary Anatomy, Pharmacology and Physiology, Iowa State University of Science and Technology, Ames, Iowa 50011. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION in vision biochemistry available 1 June 1978, for approximately a 2-year period. Research to be conducted on the role of visible light in photoreceptor cell development and retinal membrane integrity. Experience with lipid/protein techniques useful. Salary: \$10,000. Send curriculum vitae and names of three references to: **D. T. Organisciak, Department of Biochemistry, Wright State University, School of Medicine, Dayton, Ohio 45435.**

POSTDOCTORAL POSITION. Geophysical fluid dynamicist to collaborate on thermal and mechanical modeling of terrestrial planetary interiors. Knowledge of numerical, finite-difference, and finite-element computational methods and basic interests in thermal convection are desirable. Send curriculum vitae and names of three references to:

**Dr. Gerald Schubert
Department of Earth and Space Sciences
University of California
Los Angeles, California 90024**

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

POSTDOCTORAL POSITION available for fall 1978 for electrophysiologist to join a laboratory concerned with membrane mechanisms of anesthetics, hydrostatic pressure, and inert gas narcosis. Persons experienced with intracellular recording techniques for neuroblastoma tissue cultures are especially encouraged to apply although other preparations will be considered. For further information contact: **Dr. James Parmentier, F. G. Hall Hypo-Hyperbaric Facility, Department of Anesthesiology, Box 3870, Duke University Medical Center, Durham, North Carolina 27710. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION, MARINE SCIENCES. Available immediately. To study impact of proposed tidal power developments on marine benthic ecosystems in the Bay of Fundy. Field work in Nova Scotia. Possible 2-year appointment. Résumés to: **Dr. Michael J. Risk, Department of Geology, McMaster University, Hamilton, Ontario, Canada L8S 4M1.**

POSTDOCTORAL POSITION IN BIOCHEMISTRY available immediately for recent Ph.D. Areas of research include function of mitochondrial membranes, energy transduction, and mitochondrial biogenesis in mammalian cells. Send résumé and names of references to: **Dr. Thomas M. Devlin, Department of Biological Chemistry, Hahnemann Medical College, Philadelphia, Pa. 19102. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS IN LIPIDS BIOCHEMISTRY

Research on the regulatory mechanisms of lipoprotein lipase activity and lipoprotein structure and degradation. Molecular, cell culture, and immunological approaches are employed. Applicants should have training in biochemistry and cell biology.

Send résumé and names of three references to: **André Bensadoun, Division of Biological Sciences and Division of Nutritional Sciences, Savage Hall, Cornell University, Ithaca, N.Y. 14853.**

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS available May 1978 for 3 years. One for DNase/polymerase purification from human leukemic cells and the other for antibody purification/immunofluorescence. \$11,000 to 14,000 per year. Contact:

**Dr. Srivastava
Roswell Park Memorial Institute
666 Elm Street
Buffalo, N.Y. 14263**

POSTDOCTORAL POSITION IN VIROLOGY. Available 1 September 1978 for recent Ph.D. to study mechanisms of assembly of enveloped viruses. Prefer some experience with animal viruses and/or membrane research. Must be U.S. citizen or permanent resident. Send curriculum vitae and names of two references to: **Dr. S. E. Taube, L-2034 Microbiology, University of Connecticut Health Center, Farmington, Conn. 06032.**

An Equal Opportunity Employer

POSTDOCTORAL RESEARCH ASSOCIATE

Three positions are currently available on a program project grant dedicated to cell membrane ion transport:

- 1) **ELECTRON MICROSCOPY**
- 2) **CELLULAR ELECTROPHYSIOLOGY**
- 3) **RADIOISOTOPIC FLUX/TRANSPORT**

Send curriculum vitae to:

**Dr. M. Lieberman
Department of Physiology
Duke University Medical Center
Box 3709
Durham, North Carolina 27710**

An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL RESEARCH POSITION. Two-year appointment available immediately for recent Ph.D. trained in membrane and protein bioanalytical chemistry to participate in studies to relate transport interactions between heavy metal and other metals/nutrients to specific membrane proteins in intestinal and renal microvillar membrane vesicles. Send curriculum vitae and references to:

**J. W. Brown
Personnel Officer
Comparative Animal Research Laboratory
1299 Bethel Valley Road
Oak Ridge, Tenn. 37830**

An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION

Available for M.D. or Ph.D. investigating peptide hormone action at cellular level in normal and pathological states. Strong interest and/or background in biochemistry, transport processes, and/or intermediary metabolism is desirable. Send curriculum vitae and references to: **Dr. Dean Lockwood, Department of Medicine, University of Rochester School of Medicine, Rochester, New York 14642.**

POSITIONS OPEN

NEURORADIOLOGIST. Director of neuroradiology in the Department of Radiology at the Massachusetts General Hospital, Boston. Clinical competence and academic achievements essential. Cooperation with neurology and neurosurgery in patient care, teaching, and research expected. Reply to: **Juan M. Taveras, M.D., Radiologist-in-Chief, Massachusetts General Hospital, Boston, Mass. 02114. Equal Opportunity Employer.**

UNIVERSITY OF CALIFORNIA, IRVINE CALIFORNIA COLLEGE OF MEDICINE DEPARTMENT OF RADIOLOGICAL SCIENCES

Applicants are invited for a position at the assistant level in the **DIVISION OF NEURORADIOLOGY** (Chief of Service, Dr. Stephen Fierstien) in the Department of Radiological Sciences, University of California, Irvine, College of Medicine.

Applicants should be Board-certified (or equivalent) radiologists with at least a 1-year fellowship in neuroradiology, including computed tomography and complex tomography of the temporal bone. In addition to clinical responsibilities the successful candidate will be expected to take part in medical student and resident teaching and to develop a research program or take part in ongoing protocols within the department. A large volume of interesting case material is available and the Division of Neuroradiology is presently being completely reequipped with prototype imaging equipment. *Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.* Applications, including a biography and copies of any publications, should be sent to:

**Eric N. C. Milne, M.B., Ch.B., F.R.C.R.
Professor and Chairman
Department of Radiological Sciences
University of California, Irvine
College of Medicine
Irvine, California 92717**

Closing date: 15 May 1978.

POSTGRADUATE RESEARCH DEPARTMENT OF BIOLOGY PRINCETON UNIVERSITY

NIH postdoctoral training position for recent Ph.D.'s in the areas of biochemical and genetic aspects of cell differentiation (Doctors T. Cline, E. Cox, A. Newton, and P. Schedl), cell biology and development (Doctors J. Bonner, E. Cohen, M. Steinberg, and G. Witman), and behavioral and population genetics (Doctors J. Endler, J. Gould, R. May, and W. Quinn) are available beginning summer 1978. Applications should include curriculum vitae and summary of research interest. Closing date: 8 May 1978. Inquiries or applications should be sent to: **Dr. E. C. Cox, Chairman, Department of Biology, Princeton University, Princeton, N.J. 08540. Princeton University is an Equal Opportunity/Affirmative Action Employer.**

Washington State University (WSU), Department of Computer Science, vacancy—**FULL PROFESSOR** applications invited. Send to: **Chairman, Search Committee, Department of Computer Science, Washington State University, Pullman, Wash. 99164. WSU is an Equal Opportunity/Affirmative Action Employer.**

QUANTITATIVE FISHERIES BIOLOGIST

Ecosystems Department, Battelle Pacific Northwest Laboratories, invites applications from Ph.D. or equivalent scientists, for the position of research scientist. Applicants should possess a strong background in fisheries biology (both laboratory and field applications), population dynamics, and biostatistics and be interested in applying them towards improving methods of predicting environmental impacts. A broad background and interest in developing impact evaluation techniques and criteria is desired. Knowledge of fisheries management models and techniques, familiarity with time series analyses, and applicability of species diversity indices will be looked on favorably. Interested candidates should send curriculum vitae, including list of publications, experience, and names of references to: **E. P. Galbraith, Manager-Employment, Pacific Northwest Laboratory Division of Battelle Memorial Institute, P.O. Box 999, Richland, Washington 99352. An Equal Opportunity Employer.**

POSITIONS OPEN

RANGE ECOLOGIST, assistant professor, Department of Agronomy and Range Science, University of California, Davis, Ph.D. with training in range science or ecology with emphasis on range vegetation. Duties include undergraduate and graduate teaching and research on range ecology and productivity of range and wildlands. Detailed position announcement available. *The University of California is an Affirmative Action/Equal Opportunity Employer and encourages applications from members of minority groups and women.* Submit curriculum vitae, transcripts, list of publications and reprints, and request three letters of reference be sent to: **W. A. Williams, Department of Agronomy and Range Science, University of California, Davis, Calif. 95616; telephone 916-752-2474.** Applications may not be considered if received after 15 May 1978.

RESEARCH ASSOCIATE, Department of Neurology, Stanford University School of Medicine. Position available 1 June 1978. Individual should have training in cellular neurophysiology and be interested in working in area of cortical physiology and epilepsy. Experience with intracellular and in vitro techniques desirable. Those interested should send curriculum vitae to:

David A. Prince, M.D.
Professor and Chairman
Department of Neurology
Stanford University Medical Center
Stanford, California 94305

An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE

Responsible for peptide synthesis under a 5-year research contract. At least 5 years of experience required in the field of solid and liquid phase peptide synthesis and familiarity with brain peptide chemistry and biology. Salary according to qualifications. Send curriculum vitae and three letters of recommendation to: **Michel Carbonneau, Molecular and Endocrinology Laboratory, Centre Hospitalier de L'Université Laval, 2705 Boulevard Laurier, Ste-Foy, Québec, Canada G1V 4G2.**

Available immediately: **RESEARCH ASSOCIATE** in hematology-biochemistry laboratory. Write to:

Adel A. Yunis, M.D.
Department of Medicine
University of Miami School of Medicine
P.O. Box 520875
Miami, Fla. 33152

An Equal Opportunity Employer

RESEARCH INSTRUCTOR

Department of Pathology, University of Alabama in Birmingham. Position is nontenure-track. Applicant should be self-supporting (have own research funds and provide own salary), and will be expected to participate in federally sponsored (NASA) contract research. The research will be in two areas: study of the interaction of lipid vesicles with mammalian cells in culture and applications of electrophoretic separation techniques to model whole-cell systems, that is, murine lymphocytic leukemia and thymoma cells in suspension culture. Ph.D. in cellular physiology or related discipline with postdoctoral experience is required. Applicant should have experience in the following techniques: thin section and freeze-fracture electron microscopy; cell culture techniques; induction of mitotic synchrony and cell cycle analysis; iodination of plasma membrane proteins and SDS-polyacrylamide gel electrophoresis; and complement-mediated cytotoxicity assays.

Send applications to: **Dr. Jere P. Segrest, Department of Pathology, University of Alabama in Birmingham, Birmingham, Alabama 35294.** Deadline for applications: 30 April 1978. *An Affirmative Action/Equal Opportunity Employer.*

RESEARCH INSTRUCTOR (HALF-TIME)

Salary is dependent upon grant support. Half-time salary is \$9000 per year. Duties are entirely related to cell separation experiments. Candidates must have previous experience in the separation of cells by centrifugation in continuous gradients and must have either a Ph.D. or an M.D.

Write: **Thomas G. Pretlow, II, M.D., Department of Pathology, University of Alabama in Birmingham, Birmingham, Alabama 35294.** Deadline for applications: 30 April 1978. *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

UNIVERSITY OF NORTH CAROLINA DIVISION OF MEDICAL GENETICS RESEARCH ASSOCIATE

Candidate should have graduate training in epidemiology or human genetics for position involving data analysis and research design for studies of genetic predisposition to cancer and other common diseases. Send curriculum vitae and names of three references to: **Dr. Michael Swift, Biological Sciences Research Center, 220 H, University of North Carolina, Chapel Hill, N.C. 27514.** *Affirmative Action/Equal Opportunity Employer.*

RESEARCH EPIDEMIOLOGIST. Ph.D., strong on data analysis with knowledge of biostatistics. Full-time research appointment in epidemiology, natural history of epilepsy, and related neurological deficits. Appointment at assistant or associate level. To participate as a member of a large team already engaged in research at the University of Minnesota and the Mayo Clinic. Contact: **Robert J. Gummit, M.D., Program Director, University of Minnesota Comprehensive Epilepsy Program, 2829 University Avenue, SE, Minneapolis, Minnesota 55414; telephone: 612-376-5031.** *The University of Minnesota is an Equal Opportunity Educator and Employer.*

The University of North Carolina in Chapel Hill has a **RESEARCH POSITION** at the assistant professor level in the Department of Surgery with a possible joint appointment in the appropriate basic medical science department. Applicants should have either M.D. or Ph.D. and must have 2 to 3 years of postdoctoral basic research experience. Training in immunology and infection (viral and bacterial) essential. Research experience in collagen chemistry, especially in cross-links, is important, with experience in maintaining laboratory animals and dissection preferred. Teaching experience in health-related sciences is desirable. *The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae to: **Colin G. Thomas, Jr., M.D., Professor and Chairman, Department of Surgery, University of North Carolina, 136 Clinical Sciences Building 229-H, Chapel Hill, North Carolina 27514.**

TEMPORARY POSITION IN BIOCHEMISTRY

The University of California at Santa Cruz invites applications for faculty appointment in the Board of Studies in Chemistry for the academic year 1978-1979. The successful candidate will be asked to teach biochemistry, including intermediary metabolism and enzymes, at the undergraduate level, as well as a graduate course in protein chemistry. The level of appointment is that of a lecturer with a 9-month salary of approximately \$14,500. Candidates with a Ph.D. should submit résumé and three letters of recommendation to: **Professor Claude F. Bernasconi, Chairperson, Board of Studies in Chemistry, University of California, Santa Cruz, Calif. 95064.** Deadline: 12 May 1978.

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

SUPERVISORY PHYSICAL SCIENTIST (oceanography/meteorology). The National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce, announces one vacancy in the competitive service in the NOAA Data Buoy Office, Bay St. Louis, Mississippi. Entrance level salary: \$36,171 (GS-15). Vacancy closes 17 April 1978. Incumbent will serve as Chief, Systems Evaluation Division responsible for planning, initiating, and supervising applied research and development efforts dealing with atmospheric and oceanographic data observed at sea, and is required to have an in-depth understanding of oceanographic and atmospheric variables. Incumbent serves as NDBO representative during "at-sea" operations as required. **Qualifications:** bachelor's degree in physical science, physics, engineering, or mathematics that included 24 semester hours in physical science or closely related engineering science, and 3 years of experience in oceanography and/or meteorology directly related to the above duties. At least 1 year of experience must have been at a level of difficulty comparable to that of the next lower grade in federal service. (Graduate education in oceanography and/or meteorology may be substituted for some of the experience.) Application should be made on Standard Form 171 and submitted to: **NOAA Personnel Division, AD411, 6001 Executive Boulevard, Rockville, Md. 20852, Attention: Beverly Stevens.** Telephone: 301-443-8373. *The Department of Commerce is an Equal Opportunity Employer.*

RESEARCH SOURCES SOUGHT

EXPERIMENTALLY CHARACTERIZE MACROSCOPIC MAMMAL RESPONSE TO EXPLOSIVE VAPORS—Firms are sought whose facilities and personnel include appropriate apparatus, established experience and knowledge to determine quantitatively, using both electrophysiological and behavioral methods, the mammalian odor detection thresholds for vapors of ethylene glycol dinitrate (EGDN), nitroglycerine (NG), dinitrotoluene (DNT), ammonium nitrate (NH₄NO₃), and other compounds. Behavioral experiments using operant conditioning techniques will evaluate effects of masking odors on detection threshold for each specified vapor. Available apparatus should include electrophysiological equipment for recording gross potential changes from the olfactory bulb, an odor generator and on-line gas analyzer capable of generating, positively verifying and quantifying concentrations of highly polar molecules at the parts per billion level (volume to volume) and a test chamber. The test chamber must provide a stable environment for injection and exhaust of gases and be equipped with devices to detect stimulus attending and stimulus report behavior. The training and care of subjects must conform to guidelines promulgated by the Animal Care Committee of the American Psychological Association.

Responses to this synopsis should include: documentation of specific expertise in electrophysiological and animal behavior and clear documentation of available equipment. Biographical information and publications of senior investigators only are required. Generalized brochures are deemed inappropriate. The results of evaluation of information submitted will be used as a basis of source lists for future procurements. Only those firms demonstrating clear expertise in the above areas will be included in the list. Firms having capabilities in the field are invited to submit complete information. This is not a Request for Proposal. Complete information should be submitted to: **The Aerospace Corporation, Suite 4000, 955 L'Enfant Plaza, SW, Washington, D.C. 20024, Attention: Subcontracts Administration.**

SENIOR EVOLUTIONARY ECOLOGIST

To collaborate on programs dealing with functional analysis of interactions among plants and animals
(Position Available Immediately)

Requirements: the candidate must be nationally recognized in studies of interactions among plants and animals in natural and managed ecosystems. The individual will be a member of the Department of Botany and Plant Pathology and will be expected to devote one-half of his/her research time in collaborative work with program managers in the Natural Resource Ecology Laboratory to plan and develop research.

We seek a person who has developed recognized concepts in evolutionary ecology, especially as they relate to plant-animal interactions. The applicant must have competence in natural products chemistry, plant and animal systematics, and behavior and physiological mechanisms involved in effects of plant secondary compounds in animal systems.

Ability to work with and advise graduate and postdoctoral students is essential. The individual will be required to fund one-half of his/her time during the academic year and will be expected to fund two summer months research activities.

The individual will be expected to teach one-half time during the academic year. He/she will develop a graduate level course in his/her area of expertise and participate in other ongoing instructional programs in the department.

Faculty rank and salary negotiable.

Colorado State University is an Equal Opportunity/Title IX Employer; Equal Opportunity Office: 314 Student Services Building.

Closing date for receipt of completed applications: 28 April 1978, or until a suitable applicant is found.

Candidates should submit curriculum vitae, transcripts, and have three letters of reference sent to:

Dr. Gary A. McIntyre, Chairman
Department of Botany and Plant Pathology
Colorado State University
Fort Collins, Colorado 80523
Telephone: 303-491-6525

POSITIONS OPEN

Applications from Ph.D.'s are invited for **TEACHING POSITIONS** in the following courses:

Gross Anatomy	Neuroanatomy
General Biological Chemistry	Histology
Biomedical Statistics	Nutrition in Medical Practice
Medical Writing Techniques	Pharmacology
Genetics	Haematological Studies
Embryology	Microbiology
Physiology	Pathology
Epidemiology	Immunology
	Parasitology

The University is located in the West Indies. Please send curriculum vitae to:

St. George's University
c/o Foreign Medical School Service Corp.
One East Main Street
Bay Shore, New York 11706

VETERINARY MEDICAL OFFICER (EPIDEMIOLOGIST)

SALARY: \$21,883 to \$33,825

The Food Safety and Quality Service of the U.S. Department of Agriculture (USDA) is seeking a veterinary medical officer (epidemiologist) to perform veterinary epidemiological investigations, and control activities which require a specialized knowledge of substances capable of causing food-borne disease in man that may have their origin in plants, molds, fungi, bacteria, virus, protozoans, and other microorganisms, and of food additives that may have toxic effect on man. Incumbent will be required to perform emergency unscheduled travel and attend professional meetings.

Qualifications: candidates will have a D.V.M. (additional postgraduate education in epidemiology, public health, or related sciences preferred) and a minimum of 3 years of professional experience. *USDA is an Equal Opportunity Employer.* Submit an SF-171, Personal Qualifications Statement by 30 April 1978 to: **A. Christine Robinson, USDA, FSQS Personnel Division, A3, WSP, Room 3438-S, 14th Street and Independence Avenue, SW, Washington, D.C. 20250; telephone: 202-447-6617.**

Prior to completion of SF-171, applicants should request from Mrs. Robinson a copy of the selective criteria which will be used to evaluate the applicants' experience, training, and education in relation to this position.

VISUAL PSYCHOPHYSICS

Eye Research Institute of Retina Foundation is continuing its search for a permanent staff member in visual psychophysics. Individual laboratory and office space of 325 square feet plus shared facilities in electronics, machine shop, and computer support. Opportunities for collaborative work with other department staff and access to patients with visual disorders. Prefer interests in spatial and chromatic interactions with physiological orientation. Send résumé with references to: **Director, Department of Retina Research, Eye Research Institute of Retina Foundation, 20 Staniford Street, Boston, Mass. 02114.**

SYMPOSIUM

SECOND ANNUAL FUELS FROM BIOMASS SYMPOSIUM

PRELIMINARY ANNOUNCEMENT

Rensselaer Polytechnic Institute
Troy, New York
20 to 22 June 1978

Research reports by DOE contractors.

Open to public on a limited registration basis.

For more information contact:

Dr. William W. Shuster
Chemistry & Environmental Engineering Department
Rensselaer Polytechnic Institute
Troy, New York 12181

CONFERENCE

INTERNATIONAL CONFERENCE ON CELL AND MOLECULAR BIOLOGY IN SPACE

10 to 12 May 1978

This conference, sponsored by the National Aeronautics and Space Administration (NASA) and The University of Toledo, will serve as the initial focus for planning individual and cooperative research efforts in cell and molecular biology which utilize the facilities available during orbital flight of Spacelab and the Space Shuttle. The latter is scheduled for approximately 500 flight missions of up to 60 days duration during the next decade. Topics to be discussed at the conference include: gravity sensing and other sensory phenomena, effects on cells of radiation available in space, cellular and intracellular communication in zero gravity, and subcellular studies. Further information may be obtained from the conference chairman: **Dr. B. Diehn, Department of Chemistry, The University of Toledo, Toledo, Ohio 43606.**

COURSES

College of Marine Studies, University of Delaware will present a Two-Session Summer Course Program (19 June to 22 July and 25 July to 26 August) and a Special Short Course Series, each 2 weeks long, beginning 5 June, ending 25 August, at its Field Station, Lewes, Delaware. **First Session:** Marine Biology; Refresher in Applied Mathematics; Internship in Marine Chemistry; Methods in Chemical Oceanography; Recent Sedimentary Environments. **Second Session:** Internship in Marine Chemistry; Oceanographic Practicum; Introduction to Fluid Mechanics; Ecology of Benthic Micrometazoans. **Short Courses:** Attached Algae; Foraminifera; Aquatic Oligochaeta; Marine Environment Education; Bryozoa; Decapod Crustacea; Coastal Botany. Applications and additional information available from: **Dorothy Woods, College of Marine Studies, University of Delaware, Newark, Delaware 19711. Telephone: 302-738-2842.**

TRAINING PROGRAM

GRADUATE STUDIES IN PHYSIOLOGY

Applications are being accepted for the Ph.D. program beginning in summer or fall 1978. Areas of emphasis in the department are cardiovascular, endocrine, respiratory, and neurophysiology. Prerequisites include an undergraduate degree with an average grade of B or above and a combined GRE score of 1100 plus. Fellowships or assistantships are available for all accepted into the program. More detailed information and applications can be obtained by writing:

Paula Gazaway, Coordinator
Department of Physiology
Texas Tech University School of Medicine
P.O. Box 4569
Lubbock, Texas 79409

FELLOWSHIPS

NEUROSCIENCE POSTDOCTORAL FELLOWSHIP available in June or September for physiological psychologist or neuropsychopharmacologist interested in analyzing the neural substrates of intracerebral, drug self-injection in rats. Write, including curriculum vitae, to:

Professor Bartley G. Hoebel
Department of Psychology
Princeton University
Princeton, N.J. 08540

POSTDOCTORAL FELLOWSHIPS (NIH traineeships) available in the following fields starting summer 1978: (i) **Mosquito cytogenetics**—chromosomal rearrangements, banding techniques, and cytogenetics of interspecific hybridization; (ii) **Computers in parasitology and vector biology**—areas actively under study include: automated data accumulation; information retrieval; multivariate analysis; computer-keys; and (iii) **In vitro cultivation of nematodes** emphasizing filarial development. Knowledge of nutrition, axenic procedures, and mosquito physiology desirable. Send credentials and letters of reference to: **Dr. Paul P. Weinstein, Department of Biology, University of Notre Dame, Notre Dame, Ind. 46556. An Affirmative Action/Equal Opportunity Employer.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP. Position available 1 July 1978 in the laboratories of Dr. B. Furie for study of the biochemistry of the vitamin K-dependent blood coagulation proteins using physical, immunochemical, and biochemical techniques. Salary based on NIH stipends. Applicants with recent Ph.D. or M.D. should have experience in peptide chemistry, protein chemistry, enzymology, or physical biochemistry. Send curriculum vitae and three references to: **Linda C. Smith, Tufts New England Medical Center, Tufts University School of Medicine, 171 Harrison Avenue, Boston, Mass. 02111. An Equal Opportunity Employer, M/F.**

HARVARD SCHOOL OF PUBLIC HEALTH POSTDOCTORAL FELLOWSHIPS



The School's Interdisciplinary Programs in Health program (IPH) invites applications from promising graduates of advanced degree programs in the natural or social sciences interested in turning to research and training in health-related problems. Initially, IPH will focus on broadly defined, interdisciplinary environmental health problems; particularly chemicals in the environment, their detection, measurement, risk assessment, and so forth; also policy considerations such as regulation and its possible economic or sociological impact, and so forth.

For 1978 academic year, up to eight postdoctoral fellows will be appointed for terms of 1 or 2 years, possibly renewable for a third year. Stipends will be \$15,000 the first year.

Expression of interest is particularly invited from qualified women and minority candidates.

For brochure, write to:

Professor Donald F. Hornig
Director, IPH
Harvard School of Public Health
665 Huntington Avenue
Boston, Massachusetts 02115

ASSISTANTSHIPS

GRADUATE RESEARCH ASSISTANTSHIP IN PHYSICS

A research assistantship is available for a well-qualified student seeking an M.S. or Ph.D. degree in physics. A student with a strong background in optics is desired. The candidate would be associated with an ongoing research project in x-ray optics. An extensive knowledge of x-rays however is not a requirement. Send résumé and names of two references to:

Dr. James F. McGee
Department of Physics
Saint Louis University
221 North Grand Boulevard
St. Louis, Missouri 63103

Saint Louis University is an Equal Opportunity Employer with an Affirmative Action Plan.

PREDOCTORAL STIPENDS BIOLOGY DEPARTMENT TUFTS UNIVERSITY

Teaching assistants and research fellowships are available for students to pursue the Ph.D. degree. Our program is a small and individualized one, with research opportunities available in the areas of cell and molecular biology, genetics, physiology, behavior, and population biology. For a descriptive brochure and an application form contact: **Ross S. Feldberg, Biology Department, Tufts University, Medford, Mass. 02155.**

MARKET PLACE

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Marion, Indiana

Telephone: 317-668-8988

RESEARCH POSITIONS Environment and Policy Institute

The East-West Center, a national educational institution founded by the U.S. Congress in 1960 to promote better relations and understanding among nations through cooperative programs of study, research, and training, is seeking applications and nominations for academic staff in the Environment and Policy Institute. Positions are full-time and permanent (subject to successful probationary period). All center programs are multinational and multidisciplinary. Academic staff, visiting scholars, professionals, and graduate degree students form teams which work on problems with significant mutual consequences for the United States and nations of Asia and the Pacific. In its multinational staff, the center seeks excellence in team research, commitment to the development of educational products and practical applications of such research, and ability to work cooperatively with those from other cultures and disciplines.

Candidates must have a Ph.D. or its academic equivalent in a scientific or professional discipline relevant to the program and evidence of ability and accomplishment in three primary areas: (i) discovery of knowledge about environmental problems and policies, especially at the international level, as evidenced by published and unpublished research; (ii) development of applications of this knowledge (for example, curricula, educational materials, physical models or prototype equipment design, and policy aids); and (iii) cooperative (team, preferably multinational) design and implementation of related research, education, and training projects and activities. Cover letter must provide examples of achievements demonstrating ability in each of these three areas. Preference given to applicants with research, teaching, or analysis experience on environmental issues in Asia or the Pacific. Working proficiency in the English language required. Experience in environmental assessment processes desirable. Positions are open in the following areas:

- Ecological sciences and resource management, particularly in tropical, marine, and forest systems.
- Economics, particularly in resource management, development planning, and international trade and investment.
- Social sciences and law, particularly in application of social and technical analyses in decision processes.

Applications for positions in areas other than those stated above cannot be accepted. Salary commensurate with qualifications. Salary range: \$18,258 to \$33,825 plus current cost-of-living allowance of 17.5 percent (subject to change) for those eligible. Cover letter and complete curriculum vitae with names and addresses of three professional references must be postmarked no later than 1 June 1978. Starting date flexible in last half of 1978. Send to: **Personnel Division, Department 19, East-West Center, 1777 East-West Road, Honolulu, Hawaii 96848.**

An Equal Opportunity Employer, M/F

FACULTY POSITIONS

**College of Medicine, King Faisal University
Dammam, Saudi Arabia**

Applications are invited from qualified men and women in:

Biology	Biochemistry
Chemistry	Hematology
Physics	Biostatistics
Anatomy	Microbiology
Human Physiology	Parasitology
Pathology	Pharmacology
Epidemiology	General Surgery
Community Medicine	Internal Medicine

Doctorate or equivalent degree required. Language of instruction is English. Positions available starting September 1978; interviews scheduled with the dean in the United States and Great Britain early in 1978.

Salary ranges (monthly salary in Saudi riyals or approximate annual equivalent in U.S. dollars)—professor: SR6,000 to 6,600 or \$20,300 to \$22,300; associate professor: SR4,800 to 5,800 or \$16,300 to \$19,600; and assistant professor: SR3,600 to 4,600 or \$12,200 to \$15,600.

(M.D. degree commands a higher salary, up to 50 percent if a clinical as well as academic appointment is held.)

Free furnished accommodations. Airfare to and from Saudi Arabia once a year plus a 45- to 60-day holiday. No Saudi income tax.

Send complete curriculum vitae plus addresses and telephone numbers of three references to:

Mohammed T. Altorki, M.D., MRCP
Dean of the Medical Faculty
King Faisal University
c/o Saudi Arabian Educational Mission
2223 West Loop South, Suite 400
Houston, Texas 77027

Mohammed T. Altorki, M.D., MRCP
Dean of the Medical Faculty
King Faisal University
P.O. Box 9
Isleworth, Middlesex TW7 4LZ
England

Specify dates of teaching appointments and availability.

RESEARCH BIOLOGIST

Searle Laboratories, the Chicago area pharmaceutical division of G.D. Searle & Co., has an immediate opening in the Department of Biological Research for a Research Biologist in Reproductive Endocrinology.

The primary duty involves professional level research in ovarian physiology with particular emphasis on steroidogenesis and ovarian receptors.

Candidates must have an M.S. in Physiology/Biochemistry with a strong background and training in Endocrinology. Ability to work with experimental animals and proficiency in biochemical and surgical techniques are essential.

We are offering an excellent salary and benefit package, as well as the opportunity for personal growth and professional satisfaction. Your resume and salary history should be submitted to:

A. Abelman, Ph.D.

SEARLE

Searle Laboratories
P.O. Box 5110 Chicago, IL 60680

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A Practice, Not Just a Policy*

ASSISTANT PROFESSOR CANADA

Applications are invited for positions at the rank of Assistant Professor to work with algae or fungi. Candidates will be expected to contribute to teaching in introductory biology in addition to teaching algology or mycology. Candidates will also be expected to pursue research in an area such as photosynthesis, development or ecology using algal systems or in an area such as plant pathology, mycology, development or ecology. Postdoctoral experience would be an advantage. The salary will be not less than \$17,000 per annum, subject to the availability of funds. Please submit a curriculum vitae and the names of three referees to:



The Chairman
Department of Plant
Sciences
The University of
Western Ontario
London, Ontario
N6A 5B7

Physicians (Multiple Openings)—The Food and Drug Administration/Bureau of Drugs (an Equal Opportunity Employer) has career Civil Service openings for physicians. (Positions are also available in the Commissioned Corps of the U.S. Public Health Service). Physicians evaluate the results of clinical testing of new drugs (New Drug Applications) and the potential effects on humans of proposed new drugs (Claimed Exemptions for Investigational New Drugs INDs). Physicians are also needed for the bio-research monitoring program to evaluate controversial clinical data and adherence to good laboratory practices, medical ethics, etc. Anticipated vacancies available in multiple specialties (anesthesiology, cardiology, gastroenterology, internal medicine, neurology, OB-GYN, psychiatry and surgery, etc.).

Duties of the positions require judgement, effective writing and speaking and ability to organize work to meet deadlines. Grades are GS-14 and GS-15 (salary ranging from \$37,925 to \$47,500 per year, depending upon medical experience and qualifications). Comprehensive fringe benefits provided. Candidates need at least board eligibility in their medical specialty and must be: a graduate with a degree of Doctor of Medicine from a U.S. or Canadian medical school approved by the Council on Medical Education and Hospitals of the American Medical Association. Doctors of Osteopathy or graduates of foreign medical schools may also be eligible. Full details may be requested.

Send Resume or Curriculum Vitae to:

Food and Drug Administration
Division of Personnel Management
(Room 4B-42)
Attention: George Calvert
5600 Fishers Lane
Rockville, Maryland 20857

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