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ENERGY

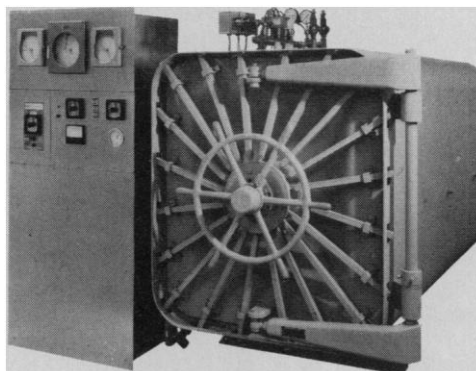
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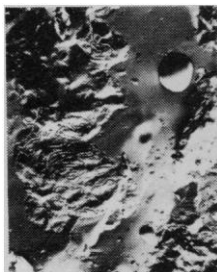
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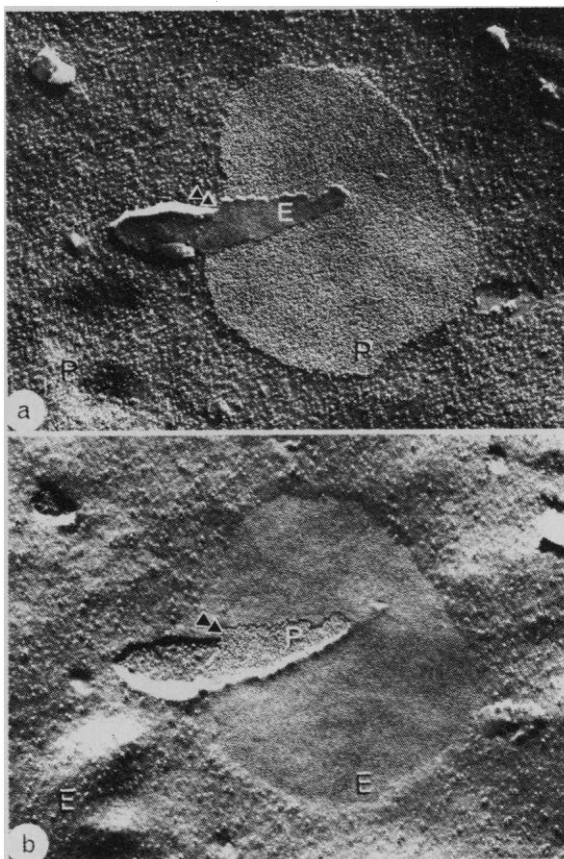
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Fig. a and b are a complementary pair of freeze-
fractured gap junctions of the lateral pancreatic
membrane. Micrographs were mounted so
corresponding areas are in the same position. a:
P-face of the nexus with typical arrangement of
membrane-associated particles. Arrows indicate
where the fracture plane is reversed and reveals
the E-face. b: E-face of nexus with small pits
corresponding to the particles on the P-face of the
nexus. Note the different distribution of particles of the surrounding
membrane areas. x57,000. (Courtesy Dr. Stephan Peter, University
of Heidelberg, Federal Republic of Germany.)



Freeze-Fracture
specimen of
M. Kidney. x3,000.
(Courtesy Dr. T.
Yamamoto, Kobe,
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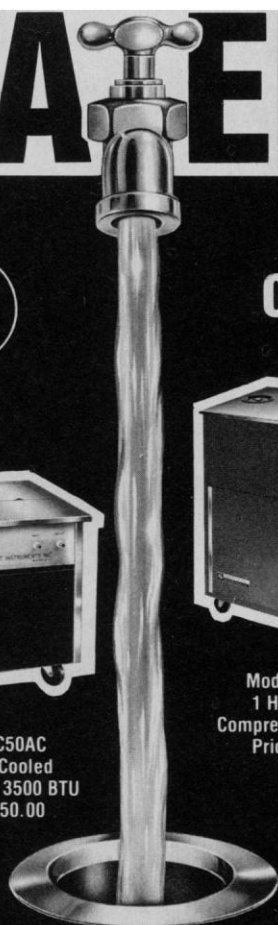
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POSITIONS WANTED

Administrator with master's, in health care setting for 5 years, seeks greater direct program development and service orientations. Experience in large medical school department in Midwest includes: special projects, management, evaluation, budget planning and management, affirmative action, personnel, payroll, purchasing, grants, management and negotiations, travel, S & E, private practice. Box 91, SCIENCE. 3/24; 4/28; 5/26

Anatomist. Four years of teaching comprehensive human gross anatomy at university. Now developing/teaching anatomy course for professional dance secondary students. M.S. physiology. Research: cell culture, SEM, TEM, bone, dissection. Wanted: teaching or teaching/research in human anatomy. Background: embryology, cellular, histology. Location open. Box 92, SCIENCE. X

Biochemical Pharmacotoxicologist, doctorate 1977, **Veterinarian.** Five years of research experience in antibiotics-anaesthesia, circulation research, general and inhalation toxicology, teratology, mycotoxins, spermatology, chromatography, enzymology, electrophoresis, immunoelectrophoresis; publications; 4 years practice. Seeks position in university/industry. Write: Ghosh, Werderstrasse 5, 3000 Hannover 1, West Germany. X

Biochemist, M.S., Ph.D. 1974; experienced in mitochondrial research, enzyme purification; neurochemistry and radiobiology background; publications; seeks research, industrial, hospital, or teaching position. Box 97, SCIENCE. X

Biochemist/Organic Chemist, Ph.D. Skilled in radioimmunoassay, protein separation, cell fractionation, radioisotope labeling, enzymology, organic synthesis, and teaching. Experience in academic, industrial, and hospital research. Presently employed. Interested in supervisory positions. R. J. Dummel, 38 Aquavista Way, San Francisco, Calif. 94131. X

M.D., Ph.D. (Biochemistry) seeks overseas post with drug firm. Interested in searching for, and analyzing extracts of, rare plants for compounds of medical interest. Extensive laboratory experience in steroid field. In good health, willing to go anywhere for extended periods. Box 93, SCIENCE. 3/24, 31

Limnologist: Ph.D. Vienna, Austria. Special interests: fish biology, fish culture. Seeks research or practical work. Box 95, SCIENCE. X

POSITIONS WANTED

Biologist/Plant Physiologist. Ph.D. 1974; 2 years of postdoctoral research. Background: plant physiology, mycology, tissue culture, electron microscopy, polysaccharide analysis, gas chromatography. Seeks research/teaching position. Box 87, SCIENCE. X

B.A. in Biology, 1975. Two years of experience in electron microscopy with knowledge of bacteriology, plant virology, tissue culture. Background in biochemistry, neurophysiology, botany. Seeks research assistant position with university or private research laboratory in New England. Write to: R. Riscoe, 140 Bennett Road, Teaneck, N.J. 17666. X

Biomathematics Ph.D. (1977) with broad mathematics/statistics background and 1½ years of government-contract research and development experience; seeks challenging, rewarding position as mathematical modeler/analyst for biomedical, environmental science, or other applications. Box 80, SCIENCE. X

Entomologist/Ecologist. Ph.D. Seeks challenging research/teaching, university or government position. Over 13 years of teaching experience in zoology, entomology, and environmental health. Eight publications in fruit-insect pest control and water pollution. Administrative and grant writing experience. ARPE pest management, registered sanitarian NE HA, "A" grade licenses in water and waste water treatment. Box 89, SCIENCE. X

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. 3/24, 31; 4/7

Life Sciences—Chemistry. Honors 100 graduate hours 3.6/4.0 M.S., B.S., B.A. Cancer, cell research, all radiological instrumentation. Describe position fully. 1613 74 Street, Kenosha, Wisconsin 53140. X

Peptide Immunochemist: Ph.D. 1971, biochemistry; degree in organic; strong background in solid phase peptide synthesis; experienced in protein isolation, purification, chemical modification and characterization, affinity chromatography, RIA, synthetic peptide antigens to elicit specific antibody, thrombosis, immunochemistry; available immediately; New York City area; salary negotiable. Box 96, SCIENCE. X

Phycologist, M.S. 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. 3/24, 31; 4/7

Science Writer, mainly biomedical. Newspaper, academic experience. M.S. biology. Seeks meaningful role in science communication, education. Box 90, SCIENCE. X

POSITIONS OPEN

AGRICULTURAL SCIENTIST wanted as research associate on an interdisciplinary study of non-chemical-using Midwest farms. Ph.D. in entomology, plant physiology, or soil science preferred; other fields possible. Willingness to work in new areas essential. Salary: \$16,000. One year starting June 1978. Continuation dependent on further funding. Résumé, names of three references, graduate transcripts, and relevant reprints to: William Lockeretz, Center for Biology of Natural Systems, Washington University, St. Louis, Missouri 63130. Equal Opportunity/Affirmative Action Employer.

ASSISTANT DIRECTOR, Ohio Agricultural Research and Development Center, Wooster, Ohio. Opening 1 May 1978. Requirements: Ph.D. degree in a plant science discipline, agricultural engineering, or natural resources with experience in agricultural research, teaching and/or extension activities. Applicant must have demonstrated ability and interest in research administration. Forward nominations or letters of interest with résumé by 3 April to: Dr. Charles Johnston, Ohio Agricultural Research and Development Center, Wooster, Ohio 44691. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ANATOMIST. The Department of Anatomy, University of Louisville Health Sciences Center, invites applications for an appointment as assistant professor or associate professor effective 1 July 1978. Preference will be given to candidates with teaching interests in gross anatomy or oral histology. Research interests are open, but strong indications of promise or achievement, as experience warrants, are desired. Send résumé and personal statement to: Dr. J. B. Longley, Department of Anatomy, University of Louisville Health Sciences Center, Box 35260, Louisville, Kentucky 40232. Candidates who will be at the Vancouver meetings of the American Association of Anatomists, 3 to 6 April, are invited to contact Dr. Longley there. The University of Louisville is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT DEAN FOR RESEARCH. Preference in arts, humanities, or social sciences. Closing date (postmark): 15 April 1978. Direct inquiries/applications to: Dr. William Calhoun, Chairman, Search Committee, 404 Andy Holt Tower, The University of Tennessee, Knoxville, Tennessee 37916. The University of Tennessee is an Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.

UNIVERSITY OF ILLINOIS, CHICAGO

The Department of Biological Sciences invites applications for two assistant professor positions for September 1978. Candidates should have postdoctoral experience and are expected to develop a vigorous research program in (i) **MOLECULAR EVOLUTION** or (ii) **IMMUNOBIOLOGY**. For the molecular evolution position candidates should use molecular techniques such as nucleic acid or protein sequencing or the synthesis and functioning of ancestral molecules in the study of evolutionary problems. Immunobiology candidates should establish a modern immunobiology program that will complement the existing strengths of our multidisciplinary doctoral program. The applicants selected will be expected to participate in undergraduate education in evolution and immunobiology, respectively, and to direct M.S. and Ph.D. candidates. Applications, including curriculum vitae, a statement of research plans, and letters from three references, should be sent to: Dr. S. K. Shapiro, Head, Department of Biological Sciences, University of Illinois, Box 4348, Chicago, Illinois 60680. Closing date: 21 April 1978. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR ANATOMY

Department of Anatomy is seeking applications and recommendations for a tenure-track faculty position to be filled 1 July 1978. Doctoral degree, preferably in anatomy required; postdoctoral research training considered a strong asset. Research experience and commitment in neurosciences preferred. Applicants should provide evidence of teaching experience in neurosciences, human gross anatomy, or microscopic anatomy. Send curriculum vitae and references to: William J. Young, Ph.D., Chairman, Department of Anatomy, University of Vermont, Burlington, Vermont 05401. Telephone: 802-656-2230.

An Affirmative Action Employer

DEPARTMENT OF ANATOMY invites applications for a tenure-track position as **ASSISTANT PROFESSOR** to begin September 1978. The individual must have teaching experience in gross anatomy and strong postdoctoral research experience either in neurobiology or cell biology. Send curriculum vitae, three references, and statement of career goals to: Dr. Ronald G. Clark, Chairman, Department of Anatomy, University of Miami School of Medicine, Miami, Fla. 33152. An Equal Opportunity/Affirmative Action Employer.

NEUROBIOLOGIST

DEPARTMENT OF ANATOMY. A faculty position will become available next fiscal year (June to May) at the associate or full professor level. The primary responsibility will be to develop a strong, sophisticated neurobiology program that complements our cell biology research endeavors. While the primary teaching responsibilities relate to the ongoing neuroanatomy curriculum, greater emphasis will be placed on the development of graduate and postdoctoral programs. Send curriculum vitae, three references, and statement of career goals to: Dr. Ronald G. Clark, Chairman, Department of Anatomy, University of Miami School of Medicine, Miami, Fla. 33152. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR. Bioorganic, biochemistry, or organometallic chemistry. The successful candidate will be expected to teach undergraduate organic chemistry with biochemistry or inorganic chemistry, and to initiate a vigorous and innovative research program within the Guelph-Waterloo Centre for Graduate Work in Chemistry. The appointment is for a 2-year definite term. Submit complete curriculum vitae, an outline of research plans, and names of three references to: **D. E. Irish, Chairman, Department of Chemistry, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1.**

ASSISTANT PROFESSOR OF BIOCHEMISTRY. Applications are invited for the position of an assistant professor of biochemistry at the Department of Biological Chemistry, University of California at Los Angeles (UCLA), School of Medicine, in conjunction with the biochemistry section of the Mental Retardation Research Center at UCLA. The successful candidate is expected to participate in the biochemical research program of the MRR Center, devoted largely to the study of inborn errors of metabolism (enzyme deficiency diseases) at the molecular level, for example, elucidation of the nature of genetic mutations leading to catalytically impaired enzymes, or of altered metabolic pathways as a result of enzyme mutations. Experience in enzymology, protein chemistry, intermediary metabolism, amino acid metabolism, and application of GC-mass spectrometry for analysis of complex mixtures will be considered an advantage. A degree of Ph.D. in biochemistry or related subject is essential. Teaching duties will be in the Department of Biological Chemistry for medical and graduate students of biochemistry. The biochemistry section of the MRR Center is led by Dr. George Popják and has fully equipped laboratories. Applications containing curriculum vitae, past research experience, list of publications, future research objectives, and names of three referees should be sent to: **Chairman, Search Committee, Department of Biological Chemistry/MRR Center, UCLA School of Medicine, Center for Health Sciences, Los Angeles, California 90024.** Deadline for applications: 1 April 1978.

UCLA is an Equal Opportunity Employer conforming to Affirmative Action policies.

ASSISTANT PROFESSOR OF IMMUNOLOGY in residence, Section of Hematology, Department of Internal Medicine, University of California, Davis. Requires Ph.D. in immunology and/or microbiology. Individuals with postdoctoral training are preferred. It is necessary for the applicant to have experience and expertise in tissue culture of human cell lines, particularly the culture of human plasma cells, as well as lymphoid lines. Additional experience in cell surface markers, functional assays of lymphocyte, and a background in immunochemistry are required. Experience in animal systems such as canine or feline lymphomas is desired. *An Equal Opportunity/Affirmative Action Employer.* Send bibliography to: **Malcolm R. Mackenzie, M.D., Section of Hematology, 4301 X Street, Sacramento, Calif. 95817.**

Applications are invited for tenure-track position as **ASSISTANT OR ASSOCIATE PROFESSOR OF PLANT PATHOLOGY** beginning 1 July 1978. Experience beyond Ph.D. in quantitative epidemiology and/or ecology and control of soil-borne plant pathogens required. Position will involve teaching and research. Send letter of interest, curriculum vitae, transcripts, and names of three references by 15 May to: **Dr. J. E. Mitchell, Department of Plant Pathology, 1630 Linden Drive, University of Wisconsin-Madison, Madison, Wisc. 53706.**

The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT OR ASSOCIATE RESEARCH ANALYTICAL INORGANIC CHEMIST

Ph.D. in chemistry or physical sciences with experience in the generation and characterization of particulate sulfur oxides with emphasis on metal sulfate aerosols. The level of appointment will be commensurate with qualifications. The individual will be responsible for generation and characterization of aerosols for a large air pollution exposure facility. Will become a member of a large multidisciplinary biomedical team and will have opportunity for development of individual research. Send complete curriculum vitae, including bibliography and names of at least three references, to: **Director, California Primate Research Center, University of California, Davis, California 95616.** The position will remain open until filled but early application is encouraged. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

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
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Four tenure-track, assistant professor positions for Ph.D.'s. **Biologist** with broad background, **fluent in Spanish**, to direct and participate in established audio-tutorial general biology program and develop a computer-assisted evaluation system; **microbiologist** with specialty in microbial ecology; **tropical ecologist** with specialty in systems or population ecology; **plant developmental biologist** with emphasis on organismal approach. Persons hired for last three positions will be expected to conduct research, supervise graduate students, develop graduate courses, and participate in undergraduate teaching; some knowledge of Spanish desirable but not essential. Starting salary: \$15,540. Send curriculum vitae, transcripts of all academic work, and three letters of reference to: **Recruitment Committee, Department of Biology, University of Puerto Rico, Rio Piedras, Puerto Rico 00931**, by 14 April 1978. *The University of Puerto Rico is an Equal Opportunity Employer.*

POSITION AVAILABLE at SHIPPENSBURG STATE COLLEGE Shippensburg, Pennsylvania 17257

BOTANIST. Tenure-track assistant or associate professor appointment (salary range: \$13,400 to \$21,700) available for semester I, 1978-1979. Prefer specialist in one or more of the areas of modern plant anatomy, morphology, and taxonomy. Teaching includes general botany and plant ecology and the specialized areas above. Recent Ph.D. and research interest required. Apply before 7 April 1978 to: **Dr. William E. Peightel, Chairman, Department of Biology, Shippensburg State College, Shippensburg, Pennsylvania 17257.**

CARDIOVASCULAR TRAINING POSITIONS. The Department of Pharmacology at the Medical University of South Carolina offers postdoctoral training opportunities in cardiovascular function, dysfunction and the action of cardiovascular drugs. Ongoing studies, carried out at the chemical, biochemical, biophysical, morphological, physiological, and clinical levels, focus on the role of vasoactive substances (for example, catecholamines, renin, kinins, and prostaglandins) in control of arterial pressure, the molecular and biophysical basis for cardiac and vascular diseases and cardiovascular drug action, metabolism of drugs, action of drug metabolites, and new drug development. Stipends are available and applications from individuals holding the Ph.D. and/or M.D. degree with backgrounds in the physical and/or biomedical sciences should be addressed to: **Postdoctoral Training Committee, Department of Pharmacology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, S.C. 29403.** *Affirmative Action/Equal Opportunity Employer.*

DEPARTMENT OF PHYSIOLOGY AND BIOENGINEERING CHAIRPERSON

The Eastern Virginia Medical Authority is recruiting a chairperson for the Department of Physiology and Bioengineering. The Eastern Virginia Medical School, a regionwide, multi-campus, multi-institutional academic medical and health education program is committed to an interdisciplinary, integrated educational curriculum. Applicants must be interested in integrated undergraduate education, training, and research. Send curriculum vitae and recommendations to: **Dr. Powell Williams, Department of Radiology, 600 Gresham Drive, Norfolk, Virginia 23507**, no later than 15 April 1978. *The Eastern Virginia Medical School is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

BIOLOGY AND SOCIETY

A biologist whose scientific interests are appropriate for appointment in the Division of Biological Sciences in the area of the human implications and social impact of biology. A junior, tenure-track appointment jointly between the Program on Science, Technology, and Society and the Division of Biological Sciences. Candidates will be expected to maintain an active research program and to participate in teaching the biology and society course and in giving or participating in other courses, for example, biomedical and environmental ethics and the candidate's biological specialty. Submit curriculum vitae, statement of research and teaching interests, and names of three references. Send to: **Dr. Stuart M. Brown, Jr., Associate Director, STS Program, 624 Clark Hall, Cornell University, Ithaca, New York 14853**, prior to 1 May 1978.

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**

CHAIRPERSON

Full-time faculty position, to assume leadership of a newly organized Department of Clinical Psychology and establish a research program in neurobiology/neuropsychology and experimental psychopathology. Teaching of students in psychology, psychiatry, undergraduate medicine, and basic science. Candidates must have a Ph.D. in psychology. Postdoctoral training in neurobiology/neuropsychology preferred. Established research record, teaching, clinical, and administrative experience required.

Faculty rank and salary appropriate to credentials. *Affirmative Action/Equal Opportunity Employer.*

Send inquiry and curriculum vitae to:

**Michael Alan Taylor, M.D., Chairman
Search Committee
Department of Psychiatry and Behavioral Sciences
University of Health Sciences/The Chicago
Medical School
Building 50
North Chicago, Illinois 60064**

CHAIRPERSON, DEPARTMENT OF BIOLOGICAL SCIENCES. The Department of Biological Sciences of Texas Tech University invites applications and nominations for the position of chairperson to begin 1 September 1978, or thereafter. We are interested in individuals having experience in teaching and research, and with a demonstrated potential for, or record of, administrative ability. The department has a faculty of 30, approximately 300 undergraduate majors, and 70 M.S. and Ph.D. students. Applicants should send a curriculum vitae and the names of three references to: **Dr. John L. Kice, Biological Sciences Chairperson Search Committee, College of Arts and Sciences, Texas Tech University, Lubbock, Texas 79409.** *An Equal Opportunity/Affirmative Action Employer.*

BIOMEDICAL ENGINEERING CHAIRPERSON. The Biomedical Engineering Program of Carnegie-Mellon University is currently seeking qualified candidates for the position of chairperson of this program. The successful candidate will take charge not only of the existing faculty and staff but also have significant additional funding from the university. Those interested in this position should contact: **Professor E. L. Cussler, Department of Chemical Engineering, Carnegie-Mellon University, Pittsburgh, Pa. 15213.** *Carnegie-Mellon University is an Affirmative Action/Equal Opportunity Employer.*

**THE INTERNATIONAL CENTRE OF
INSECT PHYSIOLOGY AND ECOLOGY
P.O. BOX 30772, NAIROBI, KENYA
VACANCIES**

Applications are invited from suitably qualified candidates for the following positions to be filled early in 1978:

1) PRINCIPAL TECHNICIAN (LABORATORY MANAGEMENT)—REF. TEC/78/2.

QUALIFICATIONS: a good degree in physics or in other related fields, with five or more years of laboratory experience, at least three of them at a senior level in fields related to the ICIPE work, for example, physics, chemistry, microscopy, histology, physiology, insect breeding, and handling scientific photography. Preference will be given to mature candidates with professional technical training or graduates having extensive postgraduate experience in technical work.

RESPONSIBILITIES: the successful candidate will be expected to organize and coordinate the activities of laboratory technicians, to participate in the coordination of training courses on laboratory techniques, in keeping a detailed equipment inventory, looking after all equipment and ensuring that their maintenance is on a proper schedule, to participate in the purchase of laboratory materials, and to undertake other laboratory management duties.

2) ELECTRONIC ENGINEER—REF. TEC/78/3.

QUALIFICATIONS: a very good university degree, or equivalent technical diploma in electronics, with five or more years of experience in a well-established instrument design, development, and construction firm or institution. The successful candidate is expected to be already familiar with the relevant mathematics, analogue techniques, instrumentation electronics, design of integrated circuits and digital techniques and communication.

RESPONSIBILITIES: the successful candidate should be interested in and capable of service and repair of a large variety of sophisticated scientific equipment like electron microscopes, spectrometers (MS/GC, NMR), spectrophotometers, oscilloscopes, and amplifiers. The candidate will also actively participate in instrument design, equipment fabrication, and servicing. He/she will be expected to take part in the setting up of facilities required for this work.

SALARY: will be negotiable and include attractive benefits. Other benefits include moving expenses, housing allowance, group medical insurance scheme, and so forth.

Applications giving detailed information on general education, professional qualifications, experience, marital status, age, present terms of employment (including salary), names and addresses of four referees (including one personal referee), and photostat copies of relevant certificates and diplomas, should be addressed to: **The Administrative Manager, International Centre of Insect Physiology and Ecology, P.O. Box 30772, NAIROBI, KENYA**, to reach him not later than 15 April 1978. Applicants who will not have heard from us by 30 April 1978 should consider themselves as having been unsuccessful.

**THE INTERNATIONAL CENTRE OF
INSECT PHYSIOLOGY AND ECOLOGY
P.O. BOX 30772, NAIROBI, KENYA
VACANCIES**

Applications are invited from suitably qualified candidates for the following positions to be filled early in 1978:

1) RESEARCH SCIENTIST (PLANT HOST/INSECT RELATIONS)—THREE POSTS—REF. SCI/78/1.

QUALIFICATIONS: Ph.D. with five or more years of postdoctoral research experience. High-quality research for Ph.D., and evidence for excellence since doctorate will be critical criterion.

RESPONSIBILITY: the successful candidates will carry out research in planthost/insect relations, in some instances including mass-rearing techniques and screening for resistance. The long-term objective of the research programme is to investigate thoroughly and establish the bases of plant resistance to insect attack. The research effort will specifically cover cereal stem-borers, legume pod-borers, and maize streak virus diseases at least initially.

POSITIONS: three positions are available immediately. Candidates with extensive experience may be offered positions at a senior level.

2) POSTDOCTORAL RESEARCH FELLOW (PLANT HOST/INSECT RELATIONS)—REF. SCI/78/2.

QUALIFICATIONS: African postdoctoral scientists, newly graduated, whose experience is in insect science. High-quality research for Ph.D. and evidence of dedication in scientific work will be a distinct advantage.

RESPONSIBILITY: the successful candidate will carry out research in the field of sweet potato weevil in collaboration with other scientists working on plant host/insect relations and under the guidance of a senior scientist in the programme.

SALARY: emoluments for all the posts will be negotiable and include attractive benefits.

Applications giving detailed information on general education, professional qualifications, experience, marital status, age, present terms of employment (including salary), names and addresses of four referees (including one personal referee), and photostat copies of relevant certificates and diplomas, should be addressed to:

**The Administrative Manager
International Centre of Insect Physiology and Ecology
P.O. Box 30772
NAIROBI, KENYA**

to reach him not later than 15 April 1978. Applicants who will not have heard from us by 30 April 1978 should consider themselves as having been unsuccessful.

**THE INTERNATIONAL CENTRE OF
INSECT PHYSIOLOGY AND ECOLOGY (ICIPE)
P.O. BOX 30772, NAIROBI, KENYA
(REF: SCI/78/3)**

Applications are invited from suitably qualified candidates from Africa for six positions as **GRADUATE RESEARCH SCHOLARS** at the ICIPE, which are all available from July 1978:

1) GRADUATE RESEARCH SCHOLAR IN INSECT ARCHITECTURE
QUALIFICATIONS: an honours degree in architecture and design from a recognizable institution.

RESPONSIBILITIES: investigation of well-defined examples of insect architecture, with a view to understanding the principles on which they are structured and how they function. It is expected that some of the findings may be utilised in research and development for novel human settlement. Emphasis will be placed on termites initially, therefore the trainee will be required to collaborate with researchers in termite behaviour, ecology, natural products, chemistry, and sensory physiology at the ICIPE and the university institutions in engineering and architecture. The work will probably involve the setting and testing of models.

DURATION: initially for 2 years but may be extended, upon satisfactory evaluation of progress of trainee.

2) GRADUATE RESEARCH SCHOLAR IN INSECT TAXONOMY

QUALIFICATIONS: at least an M.Sc. in entomology, zoology, or related fields, but a B.Sc. (upper second class) will be considered.

RESPONSIBILITIES: the project will involve training in paleontology, geology, and principles of taxonomy prior to a detailed study of a large collection of fossil insect material from East African archaeological sites. The project will be mounted by the ICIPE Research Centre in collaboration with the International Louis Leakey Memorial Institute for African Prehistory (TILMIAP), Nairobi, Kenya, on classification and taxonomy of tropical insects with emphasis on higher Diptera and termites.

DURATION: available by July 1978, this position is tenured at the ICIPE for 1 year, but renewable for further periods upon satisfactory evaluation of progress.

3) GRADUATE IN EPIDEMIOLOGY OF LEISHMANIASIS

QUALIFICATIONS: at least an M.Sc. in entomology or zoology.

RESPONSIBILITIES: the project will be concerned with a study of the epidemiology of leishmaniasis and the biology of the vectors involved. It may be prefaced by relevant course on tropical entomology and parasitology; it certainly will include extensive field and laboratory investigations.

DURATION: initially for 2 years but may be extended upon satisfactory evaluation of progress.

4) GRADUATE RESEARCH SCHOLAR IN TERMITE ECOLOGY

QUALIFICATIONS: M.Sc. in entomology, zoology, or soil science or B.Sc. (upper class with a bias towards ecology).

RESPONSIBILITIES: evaluation of the role of termites in the ecosystem as a foraging competitor in pasture land and as a landscaping agent under semiarid savannah conditions; studies may be extended to include the impact of termites on human settlements.

DURATION: initially for 2 years but may be extended, upon satisfactory progress of the scholar.

5) POSTGRADUATE RESEARCH TRAINING IN NATURAL PRODUCTS CHEMISTRY

QUALIFICATIONS: M.Sc. or at least B.Sc. (upper second class) in chemistry (with bias in organic chemistry) or biochemistry.

RESPONSIBILITIES: studies in chemical determination, assay and analysis of compounds responsible for chemical communication in insects (for example, pheromones), developmental hormones, and secondary plant products responsible for deterring insects from feeding in some other way, or associating with crops.

DURATION: initially for 2 years but may be extended, upon satisfactory progress of the scholar.

6) GRADUATE RESEARCH SCHOLAR IN TAXONOMY OF MEDICAL VECTORS

QUALIFICATIONS: at least an M.Sc. in entomology, zoology, or related fields, but a B.Sc. (upper second class) will be considered.

RESPONSIBILITIES: this project involves curating existing collections of medical vectors, expanding the collection, survey, assisting of researchers in identification of vectors they are working on. The scholar will work closely with the Division of Vector Borne Diseases (DVBD)—Kenya Ministry of Health, in taxonomic and mating work on the collections of mosquitoes which are housed there, and also with the Natural Museums of Kenya.

DURATION: initially for 2 years but may be extended, upon evaluation of progress.

BENEFITS: for all positions the benefits include tax-free stipends, housing allowance, group medical insurance scheme, and passages for the appointee and immediate family (if any).

Applications giving detailed information on general education, professional qualifications, experience, marital status, age, present terms of employment (including salary), names and addresses of four referees (including one personal referee), and photostat copies of relevant certificates and diplomas, should be addressed to:

**The Administrative Manager
International Centre of Insect Physiology and Ecology
P.O. Box 30772
NAIROBI, KENYA**

to reach him not later than 15 April 1978. Applicants who will not have heard from us by 30 April 1978 should consider themselves as having been unsuccessful.

CSIRO

POSTDOCTORAL RESEARCH FELLOW DIVISION OF HORTICULTURAL RESEARCH ADELAIDE, SOUTH AUSTRALIA

CSIRO has a broad charter for research into primary and secondary industry areas. The organization has approximately 7000 employees, 2300 of whom are research and professional scientists, located in divisions and sections throughout Australia.

FIELD: CELL BIOLOGY.

GENERAL: the division is concerned with research on a range of perennial horticultural plants (deciduous and evergreen) from both temperate and subtropical regions. Current programs include studies on the genetic improvement of grapevines and fruit trees, of plant viruses and plant parasitic nematodes, and on the harvesting and drying of grapes. Research in plant physiology, biochemistry, and cytology relates to photosynthesis, salinity, plant and fruit development, and plant hormones.

LOCATION: the division has laboratories at Adelaide, South Australia (headquarters), and Merbein, Victoria. The successful appointee will be required to take up duties in Adelaide, South Australia.

DUTIES: to participate in a biochemical program to study the development of leaf cells in higher plants at the cellular and sub-cellular levels.

QUALIFICATIONS: a Ph.D. degree in biochemistry, plant physiology, botany, or biology, or equivalent qualifications. Specialized training in nucleic acid biochemistry would be an advantage.

SALARY: research scientist or senior research scientist: A\$14,506 to A\$21,134 per annum.

TENURE: 2 years, commencing in the first half of 1978.

Applications, giving full personal and professional details, the names of at least two professional referees, and quoting reference number 491/41, should reach:

The Chief
Division of Horticultural Research, CSIRO
G.P.O. Box 350
Adelaide, South Australia 5001

by 24 April 1978.

SUPERVISOR OF TOXICOLOGY INFORMATION DEPARTMENT

The Chemical Hygiene Fellowship of Carnegie-Mellon Institute of Research, a well-established and expanding research facility located 20 miles east of Pittsburgh, PA, concerned with all phases of toxicological testing of chemicals, is developing a toxicology information department. We are seeking a supervisor who will be involved in planning, implementing and administering the future department.

The qualified individual must have an advanced degree in a biological or physical science. In addition, appropriate educational background and two or more years of supervisory experience in information systems involving computer techniques and library administration is required. Some experience in computer programming and knowledge of computer hardware is highly desirable.

Interested individuals should send curriculum vitae to:
Carnegie-Mellon Institute of Research
Box 60, R.D. No. 4
Export, PA 15632
ATTN: Mr. A. R. Ryrholm

A DIVISION OF CARNEGIE-MELLON
UNIVERSITY

AN EQUAL OPPORTUNITY/
AFFIRMATIVE
ACTION EMPLOYER

POSITIONS OPEN

CHAIRPERSON DEPARTMENT OF PHARMACOLOGY

The University of Texas Medical Branch seeks an internationally known scholar as head of the Department of Pharmacology in the Medical School and the Graduate School. The departmental goal is to develop a leadership position in research and teaching. Applicants must have demonstrated excellence in research, a genuine interest in medical and graduate education, in addition to the necessary administrative abilities. The M.D. or Ph.D. or its equivalent is required. Individuals with outstanding records in closely related fields are also encouraged to apply.

Applicants should send curriculum vitae, bibliography, and names and addresses of three references to:

Dr. Samuel Baron, Chairperson
Pharmacology Search Committee
P.O. Box 146, UTMB Station
University of Texas Medical Branch
Galveston, Texas 77550

An Equal Opportunity/Affirmative Action Employer

CLARK UNIVERSITY CHAIRPERSON DEPARTMENT OF BIOLOGY

The Department of Biology at Clark University is seeking a chairperson. The department, with 10 faculty members, 25 graduate students (M.A./Ph.D.), and 225 undergraduate majors, carries out undergraduate and graduate instruction and research. Applications are invited immediately from qualified individuals with distinguished records in teaching and research, and preferably some administrative experience. The chairperson is expected to provide academic leadership for the department and develop new and challenging programs in association with neighboring institutions. Applicants should have professional experience in the general area of physiology; cell physiology and/or neurobiology are preferred specialties.

Send résumé and names of three references to: Dean Leonard Berry, Chairman of Biology Search Committee, Clark University, Worcester, Mass. 01610. The deadline for submitting applications is 15 April 1978.

Clark University is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged.

CHEMISTRY FACULTY POSITION

Visiting assistant professor. Ph.D. with specialty in analytical-inorganic or physical-inorganic. Teach and direct student research in ACS-accredited undergraduate program at small, liberal arts college. One-year position beginning 1 September 1978, with possibility of extension. Send résumé, undergraduate and graduate transcripts, and three letters of recommendation to: Dr. Robert W. Ridgway, Chairman, Department of Chemistry, Rollins College, Winter Park, Florida 32789. The deadline for applicants is 1 April 1978. *An Affirmative Action/Equal Opportunity/Title IX Employer.*

OHIO STATE UNIVERSITY COMPREHENSIVE CANCER CENTER (OSUCCC) DEPUTY DIRECTOR

The OSUCCC is soliciting applications for the faculty position of deputy director. Incumbent directs the clinical activities of the Comprehensive Cancer Center relating to research, treatment, and education.

Individual must be a Board-certified oncologist with established accomplishments in clinical research and sponsored support.

Mail applications by 15 April 1978 to: Executive Secretary, OSUCCC, Suite 357 McCampbell Hall, 1580 Cannon Drive, Columbus, Ohio 43210.

An Equal Opportunity Employer

The Department of Anatomical Sciences has an immediate opening for a **DEVELOPMENTAL NEUROBIOLOGIST** with an active research program in structure/function of mammalian nervous system at the cellular level. Teaching responsibilities include neuroanatomy for medical and dental students and participation in the university-wide graduate neuroscience training program. Excellent research facilities available. Appointment commensurate with qualifications. Reply with curriculum vitae by 15 April 1978 to: Dr. Maynard Dewey, Chairman, Department of Anatomical Sciences, Health Sciences Center, State University of New York at Stony Brook, Stony Brook, New York 11794. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

DIRECTOR OF ANIMAL TUMOR RESEARCH FACILITY (ATRF)

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 towards 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.*

SAN FRANCISCO STATE UNIVERSITY (SFSU) TIBURON CENTER FOR ENVIRONMENTAL STUDIES

Position available for **DIRECTOR**. Ph.D. degree required. Tenure-track position in Geology Department. Involves half-time administrative duties developing center; half-time teaching. Candidates should have demonstrated teaching and research interest in marine geophysics, physical oceanography, or estuarine dynamics. Rank and salary commensurate with qualifications. Submit résumé, names of three references, and brief discussion of professional interests and goals to: Dr. James C. Kelley, Dean, School of Science, San Francisco State University, 1600 Holloway Avenue, San Francisco, Calif. 94132. *SFSU is an Equal Opportunity/Affirmative Action Employer.*

ELECTRON MICROSCOPY—MICROPROBE TECHNICIAN, CORNELL UNIVERSITY

Applications are invited for a technician position in the electron microprobe, electron microscopy facility of the Materials Science Center. Experience with electron optical equipment is essential; some background with computers and automated microprobes is desirable. Responsibilities will include maintenance of and student instruction on a new, fully automated SEM microprobe. The facility serves both the materials and geological communities.

Correspondence should be addressed to: Professor D. L. Kohlstedt, Department of Materials Science and Engineering, Bard Hall, Cornell University, Ithaca, N.Y. 14853.

ENERGY STUDIES. Faculty position to teach courses in energy technology or energy policy analysis. Ph.D. preferred. Send résumé and three letters of recommendation to: Dr. Alexander Casella, Energy Management and Policy Search Committee, Sangamon State University, Springfield, Illinois 62708. *Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION

Assistant professor, Department of Biochemistry and Pharmacology, Tufts University School of Medicine, Boston, Massachusetts 02111, with postdoctoral experience relevant to mechanisms of enzyme action. Responsibilities include pursuit of fundamental research and participation in the teaching of medical, graduate, and dental students. Contact: Dr. Henry G. Mautner, Chairman. *Tufts University is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION IN BIOCHEMISTRY

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

POSITIONS OPEN

DEAN OF UNDERGRADUATE EDUCATION/ ASSOCIATE VICE PRESIDENT FOR ACADEMIC AFFAIRS STATE UNIVERSITY OF NEW YORK AT BUFFALO (SUNY)

SUNY at Buffalo invites applications for Dean, Division of Undergraduate Education who will also serve as associate vice president for academic affairs. Dean reports to and advises the vice president for academic affairs and leads the Division of Undergraduate Education, which enrolls the university's approximately 13,000 undergraduates. Responsible for developing and implementing the university's undergraduate program, general education programs and courses, advisement policies, and programs for teaching effectiveness. Maintains a wide variety of academic support services.

Applicants should demonstrate scholarly excellence, concern for imaginative teaching and an ability to provide intellectual leadership on a university-wide basis. Dean is expected to qualify for a tenured faculty appointment.

Appointment date: 1 August 1978. Application deadline: 17 April 1978. Send recent curriculum vitae and the names of five referees to: **Dr. Clifton K. Yearley, Chairman, Undergraduate Dean's Search Committee, c/o Shirley A. Crews, Manager of Employment, SUNY at Buffalo Personnel Department, Crofts Building, Amherst, New York 14260**

SUNY at Buffalo is an Equal Opportunity/Affirmative Action Employer.

ENVIRONMENTAL SCIENCE

The College of Staten Island of The City University of New York (CUNY) invites applications for a position as associate professor in the Department of Biological Sciences. We are seeking an ecologist-environmentalist, actively involved in quantitative ecological research. Teaching responsibilities include ecology and biometrics, on the undergraduate level, and courses in the master's level environmental sciences program. Ph.D. and appropriate experience required. Salary range: \$18,430 to \$27,700. Starting date: 1 September 1978. Curriculum vitae to: **Dr. Alfred M. Levine, Chairperson, Search Committee, The College of Staten Island/CUNY, St. George Campus, 130 Stuyvesant Place, Staten Island, N.Y. 10301. Affirmative Action/Equal Opportunity Employer.**

The Department of Psychiatry in collaboration with the Waisman Center on Mental Retardation and Human Development and the Endocrinology-Reproductive Physiology Program (ERPP) at the University of Wisconsin-Madison invites applications for a full-time **FACULTY POSITION**. The person should have, or develop, a research program in the broad area of neuroendocrinology and neurotransmitters with an interest in reproductive endocrinology. Priority will be given to clinically trained psychiatrists with basic science research background in the above areas. Substantial research space, equipment, and participation in the Waisman Center core grant in the ERPP training program of pre- and postdoctorals will be provided. Duties and prerogatives of the position include clinical and research supervision of residents, fellows, and teaching medical and graduate students.

The faculty appointment will be in the Department of Psychiatry at the assistant professor level, but appointment to a higher rank may be considered depending on qualifications and experience.

Correspondence should be addressed to: **Dr. W. T. McKinney, Professor and Chairman, Department of Psychiatry, 427 Lorch Street, Madison, Wisconsin 53706. An Equal Employment Educational Institution/Title IX/Title VI.**

MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) Faculty Position, Department of Nutrition and Food Science and Director of the MIT Clinical Research Center

The Department of Nutrition and Food Science is seeking a qualified individual to fill an available faculty position and also serve as director of the MIT Clinical Research Center (CRC).

The applicant must have an M.D. degree and considerable research experience and reputation in clinical investigation. The person appointed will be expected to participate in the teaching programs in the department and to pursue a vigorous research program. Level of academic appointment will be determined by the qualifications of the appointee.

The department has a large multidisciplinary teaching and research program in all principal areas of nutrition and food science. The CRC is an NIH-supported, 12-bed facility, administered through the department.

Curriculum vitae, together with representative publications and the names of five referees, should be submitted as soon as possible to: **Dr. V. R. Young, Chairman, Search Committee, Room 56-331, Massachusetts Institute of Technology, Cambridge, Mass. 02139.**

MIT is an Equal Opportunity Employer. Representatives of minority groups are urged to apply.

POSITIONS OPEN

TWO FACULTY POSITIONS. Assistant professor, tenure-track beginning fall 1978. **VERTEBRATE ZOOLOGIST.** Ph.D. required with postdoctoral experience preferred. Primary teaching responsibility in anatomy and physiology, and teaching capabilities in histology. Development of an active research program in area of expertise and direction of graduate student research. **BACTERIAL PHYSIOLOGIST.** Ph.D. required with postdoctoral experience preferred. Responsibilities include teaching courses in bacterial physiology and introductory microbiology, development of an active research program, and direction of graduate student research. Send curriculum vitae, statement of research interests, reprints, and three letters of reference by 15 April 1978 to: **Dr. Carl Dee Brown, Chairman, Department of Biology, Memphis State University, Memphis, Tenn. 38152. An Equal Opportunity University.**

UNIVERSITY OF PETROLEUM AND MINERALS DHAHRAN, SAUDI ARABIA

The Department of Physics will have faculty positions open from September 1978. Physicists with Ph.D. degrees interested in teaching and developing laboratories for M.Sc. Program in Physics are sought.

Facilities available are IBM 370/158, PDP 11's, Mossbauer spectrometer, neutron generator, nitrogen and helium liquefiers, x-ray spectrometer, GCA/McPherson ESCA-36, Varian FC 12E UHV chamber with lead, augers, and photoemission capabilities, Varian 3117 sputtering equipment, and SPEX Industries laser raman spectrometer.

Rank and salary open. Attractive allowances. Candidates please send complete résumé to the following address:

**Dean of Faculty and Personnel Affairs
University of Petroleum and Minerals
P.O. Box 144
Dhahran
Saudi Arabia**

FOOD AND NUTRITION SPECIALIST

**Cooperative Extension Service
Lincoln University of Missouri
Jefferson City, Missouri**

Major responsibilities: provide leadership for extension involvement in the EATING SLIM Program, provide nutrition consultation to area extension specialists, prepare, review, and select nutrition information materials, represent food and nutrition area at professional and other meetings, attend professional improvement programs, serve on extension and university committees, and attend extension faculty meetings and monthly home economics category meetings.

Qualifications: graduate degree in foods and nutrition, preferably community nutrition or public health nutrition, ability to work independently, ability to work well with people at all socioeconomic levels, and willingness to travel throughout the state.

Salary: commensurate with qualifications and experience.

Benefits: Civil Service retirement, group life and health insurance, annual leave, sick leave.

Closing: 31 March 1978, or until position is filled.

Contact: Edward D. Taylor, Acting Assistant to the Dean, 900 Moreau Drive, Jefferson City, Missouri 65101.

An Equal Opportunity Institution

AQUATIC BIOLOGIST

A position is available for an Aquatic Biologist to assist in developing and conducting programs related to power generating plants in the State of Michigan. Applicants must have at least MS in aquatic biology and advanced training in ichthyoplankton, fisheries assessment, and aquatic ecology. Preference will be given to applicants with biostatistical experience and those who demonstrated good writing ability.

Salary will be commensurate with experience and training. Curriculum vitae and graduate and undergraduate transcripts should be addressed to:



**Professional Employment-AB
CONSUMERS
POWER COMPANY
1945 W. Parnall Road
Jackson, Michigan 49201**

An Equal Employment Opportunity Employer M/F

SYMPOSIUM ANNOUNCEMENT AND CALL FOR PAPERS

Society for Neuroscience Eighth Annual Meeting—Satellite Symposium—Pittsburgh, PA, October 30-31, November 1, 1978.

Vestibular Function and Morphology. A Symposium co-sponsored by NASA and the University of Pittsburgh.

Chairman: Professor Otto Lowenstein (England)

Invited Speakers:

Morphology—Professor Hans Engstrom (Sweden)
Dr. Richard Gacek (USA)

Physiology:

Receptors & Afferents—
Professor Otto Lowenstein (England)
Dr. Ake Flock (Sweden)
Dr. Jay Goldberg (USA)
Dr. Manning Correia (USA)

Nuclei & Efferents—

Dr. Jay Goldberg (USA)
Dr. Wolfgang Precht (Germany)

Visual Vestibular

Interaction—
Dr. Laurence Young (USA)
Dr. David Robinson (USA)

A call is issued for free communications (15 and 30 minutes) on the above indicated, or closely related, subjects. Abstracts of a maximum of 200 words will be required by July 1.

Communications, requests and correspondence may be sent to:

**Dr. Torquato Gualtierotti
University of Pittsburgh
Vestibular Research Laboratory
207 Hill Building
3434 Fifth Avenue
Pittsburgh, PA 15260**

POSITIONS OPEN

DEPARTMENT OF RADIOLOGICAL SCIENCES UNIVERSITY OF CALIFORNIA, IRVINE

The Department of Radiological Sciences at the University of California, Irvine, invites applications for a full-time position in **GASTROINTESTINAL RADIOLOGY** at assistant professor level. Applicants should be Board-certified radiologists with special training in G.I. radiology. Preference will be given to candidates with training in radiological research. In addition to the clinical service the successful applicant will be responsible for the academic aspects of G.I. radiology and will be expected to develop a strong research program and to take a vigorous part in resident training. The successful candidate will be based at the VA Hospital, Long Beach (chief of radiology, Dr. Henry Pribram) and will be appointed to the faculty of the University of California, College of Medicine, Irvine. *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.F.R.
Professor and Chairman
Department of Radiological Sciences
University of California, Irvine
College of Medicine
Irvine, California 92717

Closing date: 15 April 1978.

DEPARTMENT OF RADIOLOGICAL SCIENCES UNIVERSITY OF CALIFORNIA, IRVINE

The Department of Radiological Sciences at the University of California, Irvine, invites applications for a full-time position in **URORADIOLOGY** at assistant or associate professor level. Applicant should be Board-certified in diagnostic radiology with special training in uroradiology, preferably at a university medical school; applicant must have experience in interventional uroradiology, interest in the problems of spinal cord injury patients, and be prepared to develop a research program in uroradiology. The post will include responsibility for the clinical operation of the Uroradiological Division and teaching at undergraduate and resident levels. The successful candidate will be based at the VA Hospital, Long Beach (chief of radiology, Dr. Henry Pribram) and will be appointed to the faculty of the University of California, College of Medicine, Irvine. The residency program in radiological sciences is completely integrated between the University of California, Irvine Medical Center, the VA Hospital, Long Beach, and Memorial Hospital, Long Beach. *Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.* Applications, which must include a short biography and copies of any publications, should be sent to:

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

Closing date: 15 April 1978.

Mississippi State University has need for **HEAD** of new Department of Biological Sciences, a result of merger of Departments of Botany, Microbiology, and Zoology, effective 1 July 1978, 12-month basis. Applicants must have Ph.D. in one of areas indicated and a record of scholarly activity. Administrative experience would be helpful. Department will have approximately 20 full-time faculty and is empowered to grant the Ph.D.

Candidates should write: **Dean L. C. Behr, College of Arts and Sciences, Drawer AS, Mississippi State, Miss. 39762**, including curriculum vitae. Arrange to have four professional references write. *Mississippi State University is an Equal Opportunity/Affirmative Action Employer.*

MICROBIOLOGISTS

Mississippi State University has two openings for assistant or associate professors in microbiology. One position requires teaching capabilities in pathogenic microbiology, virology, and microbial genetics. The other position requires teaching capabilities in areas of applied and environmental microbiology. A strong interest in research and graduate student direction required. Rank and salary commensurate with qualifications. Send résumé and the names of three references to: **Dr. Lewis R. Brown, P.O. Drawer MB, Mississippi State, Miss. 39762.** *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

IMMUNOCHEMIST/RADIOBIOLOGIST

Applications are invited for two permanent faculty positions at the assistant professor level to begin September 1978. The successful applicants will be expected to develop strong research and teaching programs within a well-rounded Biology Department. Some participation in the general teaching programs of the department is expected.

IMMUNOCHEMIST: the successful applicant will be expected to cooperate in teaching undergraduate and graduate immunology courses. Opportunities for research collaboration are available in immunobiology, virology, developmental biology, microbiology, zoology, and plant physiology and genetics. Please address correspondence to: **Dr. Roger A. McNabb.**

RADIOBIOLOGIST: the duties will include instruction in the undergraduate Health Physics Program and development of a vigorous research program in the area of interest. Applicants should have a strong background in radiation biology, radiation protection, monitoring, and the use of radiotracers in biological research. The research interests of applicants need not be in the area of radiation biology, but may be in any basic biological discipline. Correspondence should be addressed to: **Dr. Ernest R. Stout.**

Interested persons should send a current curriculum vitae, an outline of research and teaching interests, pertinent reprints and names of three references to one of the above named individuals: **Department of Biology, Virginia Polytechnic Institute and State University, Blacksburg, Va. 24061.** Deadline for receipt of applications is 7 April 1978.

An Affirmative Action/Equal Opportunity Employer

IMMUNOLOGIST OR VIROLOGIST. Available summer 1978. Requirements: Ph.D. in animal virology or immunology and a demonstrated ability to conduct a high quality research program. Preference will be given to candidates with postdoctoral experience. Duties include shared participation in instruction of medical microbiology to medical students, instruction of graduate students, and conduct of independent research. Appointment will be at assistant or associate professor level to a state-funded tenure-track position. Salary will be commensurate with experience. Send curriculum vitae and names of three references to: **Dr. Thomas R. Kozel, Chairman, Department of Microbiology, University of Nevada, Reno, Nevada 89557.** Application deadline is 15 April 1978 or whenever a suitable candidate is found. *The University of Nevada, Reno, is an Equal Opportunity Employer and does not discriminate on the basis of sex, race, color, religion, handicaps, or national origin in the educational programs or activities it operates.*

INSTRUCTOR OR ASSISTANT PROFESSOR. M.D. degree. Board-eligibility in pathology required. General pathology with specialty in neuropathology and ophthalmic pathology. Prior to 1 April 1978 send curriculum vitae and three letters of reference to:

J. W. Grisham, M.D.
Chairman, Department of Pathology
University of North Carolina, 228-H
Chapel Hill, N.C. 27514

JUNIOR FACULTY POSITION

The Department of Electrical Engineering and Computer Science may be in a position to appoint one or more new faculty at the assistant professor level, effective 1 September 1978. We are interested in superior candidates who have recently completed their doctorate or who expect to complete it this year. All areas of specialization within the department's programs in electrical engineering and computer science will be considered. These areas include: systems and control; computer science and artificial intelligence; electronics and digital systems; energy conversion devices and systems; electromagnetics and dynamics; electronic materials and devices; communication and probabilistic systems; bioelectrical engineering. Duties of a faculty member include graduate and undergraduate teaching, research, and thesis supervision. Candidates should supply a résumé, a description of their professional interests, and the names and addresses of three or more references. Applications should be sent to: **Professor F. C. Hennie, Room 38-435, Massachusetts Institute of Technology (MIT), Cambridge, Massachusetts 02139.** *MIT is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

THE UNIVERSITY OF DELAWARE. Three non-tenure-track **LECTURER POSITIONS** for the 1978-1979 academic year with teaching responsibilities in **general chemistry**. Ph.D. in chemistry required; background in analytical or physical chemistry preferred. Curriculum vitae and three teaching recommendations to: **Dr. Henry N. Blount** (analytical applicants) or **Dr. Robert H. Wood** (physical applicants). **Department of Chemistry, University of Delaware, Newark, Del. 19711**, by 31 March 1978. *The University of Delaware is an Equal Opportunity/Affirmative Action Employer.*

SYDNEY UNIVERSITY—AUSTRALIA LECTURESHIP IN GEOGRAPHY

Applications are called for a specialist in coastal zone resources and management. Appointee will be a member of the Coastal Studies Unit, which is incorporated with the university's interdepartmental Marine Science Centre. The applicant will be required to organize undergraduate and postgraduate teaching and research, and to interact with other programmes of the unit which involve coastal morphodynamics, sedimentary environments, and coastal evolution. He/she must have had training and experience in both physical and human aspects of coastal zone geography or geology. Preference may be given to applicants with research experience of the Australian coast, although applications from outside Australia will be welcome. A Ph.D. or the equivalent in postgraduate experience is required.

Apply by 31 March 1978, or as soon as possible thereafter, to: **Registrar, University of Sydney, Sydney, New South Wales, 2006, Australia.**

MEDICAL ENTOMOLOGIST, Ph.D., assistant professor. To begin 1 July 1978. Principal investigator for pesticide programs. **Preventive Medicine, Department of Family Practice, Medical University of South Carolina, Charleston, South Carolina 29403.** Send résumé to: **Dr. S. H. Sandifer, Head, Preventive Medicine Division.** *An Equal Opportunity/Affirmative Action Employer.*

DUKE UNIVERSITY

Natural Resource Management and Policy—Applications are invited for two assistant professorships (research) in natural resource management and natural resource policy. Applicants should have the doctorate, or an advanced degree in management science, with training and/or experience in one of the two areas. Positions emphasize the development of new research programs. Initial appointment will be for 3 years. Available 1 September 1978.

Applicants should submit a curriculum vitae, transcripts, and names of at least three references to: **Dr. Benjamin A. Jayne, School of Forestry and Environmental Studies, Duke University, Durham, N.C. 27706.**

Duke University is an Equal Opportunity/Affirmative Action Employer.

NEUROBIOLOGIST. The Department of Neurology is seeking a basic researcher at the assistant professor level in the field of neurotransmitter physiology and pharmacology involving brainstem or basal ganglia. Experience with CNS iontophoresis and neuro-anatomical techniques is desirable. Interested persons should submit curriculum vitae, bibliography, names of several references, and a brief sketch of future research plans to: **Dr. Stanley Fahn, Department of Neurology, Columbia University College of Physicians and Surgeons, New York, N.Y. 10032.** *An Equal Opportunity/Affirmative Action Employer.*

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

NEUROCHEMIST, PSYCHOPHARMACOLOGIST or **NEUROPHARMACOLOGIST** to participate in teaching and research in an interdisciplinary program in neural and behavioral biology with appointment in the Department of Physiology and Biophysics or in the Department of Psychology, University of Illinois at Urbana-Champaign. Salary and rank open. Neurochemical or neuropharmacological area of research open. Postdoctoral experience and publications essential. Tenure-track appointment available fall 1978. Applications will be considered as they are received. To ensure full consideration, applications should be received by 15 April 1978. Send curriculum vitae and three letters of recommendation to: **Dr. V. D. Ramirez, Department of Physiology and Biophysics, 524 Burrill Hall, University of Illinois, Urbana, Illinois 61801, telephone: 217-333-1293.** *The University of Illinois at Urbana-Champaign is an Affirmative Action/Equal Opportunity Employer.*

KINGDOM OF SAUDI ARABIA UNIVERSITY OF RIYADH FACULTY OF SCIENCE

The Faculty of Science, University of Riyadh, Saudi Arabia, invites applications for the following teaching positions for the academic year 1398/1399 H, 1978/1979:

MATHEMATICS: real analysis, functional analysis, homological algebra, category theory, differential equations, algebraic and differential topology, ring theory, probability theory, operation research, and mathematical statistics.

PHYSICS: astrophysics, quantum statistical mechanics, low-temperature physics, atomic and molecular spectroscopy, nuclear-spectroscopy, magnetic resonance, and solid state physics (theoretical).

GEOLOGY: hydrogeology.

ZOOLOGY: embryology, physiology and comparative anatomy (of vertebrates), and ornithology.

BOTANY: cytology, genetics and molecular biology, and microbiology.

Qualifications: Ph.D. plus 5 years of experience in teaching and research. A working knowledge of the Arabic language would be useful but is not essential.

Résumés and copies of qualifications and references should be sent as soon as possible to:

The Dean, Faculty of Science
University of Riyadh
P.O. Box 2454
Riyadh
SAUDI ARABIA

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We're clearing our shelves. Entire stock of 1969-1975 AAAS annual meeting session audiotapes is now available at reduced prices.

This is a collection of 149 titles—tapes of selected symposia in the following fields: biological sciences; chemistry; earth sciences; engineering; information and communication; mathematics and logic; medical sciences; physical sciences; and social and behavioral sciences (anthropology, ecology, economics, education, psychology, sociology).

Each session now costs only \$12 if recorded on cassettes or \$6 for each session on open-reel tapes. We don't have enough space to list every title, but you can find titles and descriptions in the 1976 AAAS audiotapes brochure.

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Washington, D.C. 20005

CSIRO

RESEARCH SCIENTIST (THREE POSITIONS) DIVISION OF FISHERIES AND OCEANOGRAPHY SYDNEY, NEW SOUTH WALES (TWO POSITIONS) PERTH, WESTERN AUSTRALIA (ONE POSITION)

CSIRO has a broad charter for research into primary and secondary industry areas. The organization has approximately 7000 employees, 2300 of whom are research and professional scientists, located in divisions and sections throughout Australia.

FIELDS: 1) PHYSICAL OCEANOGRAPHY (TWO POSITIONS) 2) BIOLOGICAL OCEANOGRAPHY

GENERAL: the division is Australia's principal marine research institution with about 60 scientists investigating the physical, chemical, and biological features including fisheries of the oceans around Australia. Headquarters of the division are at Cronulla, Sydney, with regional laboratories in Perth, Brisbane, and a field laboratory in Karumba. On-line access to a Cyber 76 computer is available. Two well-equipped medium-sized chartered vessels are available for oceanographical research and there are several smaller CSIRO vessels. (Generous removal and resettlement costs including rental assistance for a reasonable period will be paid).

1) PHYSICAL OCEANOGRAPHY (SYDNEY)—REFERENCE NUMBER 320/593

The division's main interests in physical oceanography are in meso-scale ocean circulation, numerical modelling (on scales up to ocean basin dimensions), and dynamics of water movements over continental shelves. A main project for the next few years will be a continuation of studies of the East Australian Current, particularly the dynamics of eddies. This work is expected to develop into an interdisciplinary study, involving chemists and biologists.

Preference will be given to applicants who are interested in the above field, but, for the more senior position, applicants who express an interest in starting a different line of research will be considered.

DUTIES:

POSITION: SENIOR RESEARCH SCIENTIST/PRINCIPAL RESEARCH SCIENTIST:

To initiate and carry out research in physical oceanography in any of the fields outlined above. Applicants for this position should have at least 7 years of post-Ph.D. experience in their particular field.

POSITION: RESEARCH SCIENTIST/SENIOR RESEARCH SCIENTIST:

As for position above, but with less emphasis on previous experience. The appointee to this position will initially be a member of a team working on dynamics of eddies.

QUALIFICATIONS: a Ph.D. degree or equivalent qualifications in physics or mathematics, with emphasis on geophysical fluid dynamics.

Field experience on research vessels would be an advantage.

Applications from postgraduate students who expect to complete their Ph.D. soon will be considered for position of research scientist/senior research scientist.

SALARY: dependent upon experience within the ranges:

Research scientist: A\$14,506 to A\$17,811 per annum,
Senior research scientist: A\$18,444 to A\$21,134 per annum, and
Principal research scientist: A\$21,933 to A\$24,896 per annum.

TENURE: an indefinite or fixed term (up to 5 years) appointment may be offered. Further information may be obtained by contacting: B. V. Hamon, telephone (Sydney): 523.6222.

2) BIOLOGICAL OCEANOGRAPHY (PERTH)—REFERENCE NUMBER 320/594.

The appointee will be located at Perth where the division has just built a new laboratory which is comprehensively equipped. Aquarium facilities are available.

DUTIES: the appointee will be an experienced biologist capable of taking part in a range of research activities. Initially however, the appointee will be required to plan and organize a comprehensive study of the ecology of the coastal reef systems off Southwest Australia. It is expected that this study will be interdisciplinary with physicists, chemists, and biologists including specialist crustacean biologists participating.

QUALIFICATIONS: for this senior appointment, a person of outstanding research experience and ability, and with experience in leading a research group, is required. Minimum qualifications are a Ph.D. or equivalent in a relevant field of biological research, together with considerable postdoctoral experience.

Prospective applicants should contact: D. J. Rochford, Chief of the Division, telephone (Sydney): 523.6222, if further details are required.

SALARY: dependent upon experience within the ranges:

Principal research scientist: A\$21,933 to A\$24,896 per annum, or
Senior principal research scientist: A\$26,245 to A\$28,846 per annum.

TENURE: indefinite with superannuation.

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

The Chief
Division of Fisheries and Oceanography
CSIRO
P.O. Box 21
CRONULLA, NEW SOUTH WALES 2230
AUSTRALIA

by 24 April 1978.

POSITIONS OPEN

NEUROPHARMACOLOGIST

Applications are invited from qualified individuals for a position in the Department of Pharmacology, University of Iowa. Appointment will be at the assistant professor level. The appointee must be committed to excellence in teaching and research and will participate in the department's professional and graduate student teaching activities as well as establish an independent research program of high quality. The applicant must have one or more years of postdoctoral training; preference will be given to applicants with research experience in the general area of neurochemistry/neurotransmitters (for example, peptides as neurotransmitters, immunocytochemistry, receptor isolation/identification, and so forth). Interested applicants should send their curriculum vitae and the names of three references to: **Dr. J. P. Long, Chairman, Department of Pharmacology, University of Iowa, Iowa City, Iowa 52242.** The University of Iowa is an Equal Opportunity/Affirmative Action Employer.

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.

PHARMACOLOGY—The Department of Pharmacology at New York University Medical School has several openings at the assistant professor level for molecular and cell biologists interested in aspects of ligand receptor interactions and their consequences. A major emphasis in neurobiology is planned, but outstanding applicants from other areas are welcome. Send curriculum vitae and three letters of recommendation to: **Dr. Michael Shelanski, Department of Pharmacology, NEW YORK UNIVERSITY MEDICAL SCHOOL, 550 First Avenue, New York, N.Y. 10016.** An Equal Opportunity/Affirmative Action Employer, M/F.

PHYSICAL OCEANOGRAPHER

The University of Washington is seeking a physical oceanographer to fill a joint position with the Applied Physics Laboratory and the Department of Oceanography. The candidate must have a Ph.D. degree and have a demonstrated capability in developing oceanographic instrumentation, operating the instrumentation at sea, and analyzing the data to improve the understanding of internal waves and meso-scale eddies. The candidate will be expected to develop sponsored research programs and to work in conjunction with several related programs in the university. The candidate will be considered for a position on the research faculty of the Department of Oceanography that can involve teaching and supervision of graduate students. Applicants should send complete résumé and four letters of reference to: **Applied Physics Laboratory, 1013 Northeast 40 Street, Seattle, Washington 98105, Attention: Dr. Terry Ewart.**

The University of Washington is an Equal Opportunity/Affirmative Action Employer and will welcome applications from members of minority groups and women.

PLANT PATHOLOGIST. Full-time research on diseases (primarily fungal and bacterial) of tree fruits, especially pears, at Oregon State University's Mid-Columbia Experiment Station at Hood River, Oregon. Available 1 July 1978. Qualifications include: Ph.D. degree in plant pathology; training and research experience in diseases of tree fruits preferred; capability to direct an independent research program and to work closely with other researchers and industry representatives in the region on problems of mutual interest. Preference is for a person who has completed the Ph.D. degree within the past 5 years. Appointment to be at the assistant professor level.

Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973. Send complete application, including curriculum vitae, list of publications, reprints, transcripts, and three letters of recommendation to: **Dr. Thomas C. Moore, Chairman, Department of Botany and Plant Pathology, Oregon State University, Corvallis, Ore. 97331.** Application deadline is 1 May 1978.

POSITIONS OPEN

PHYSIOLOGICAL AND/OR SENSORY PSYCHOLOGY. Applicants with research interests in the biological determinants of behavior are sought for a tenure-track position at the level of assistant professor in the Department of Psychology. Selection of a candidate will be based primarily on the strength of research and teaching credentials rather than on specific fields of expertise. However, some special consideration will be given to candidates with broad biobehavioral training and with postdoctoral experience either in brain development in relation to behavior or in sensory physiology. Duties include undergraduate and graduate teaching, and the development of a strong research program. Applicants should send full curriculum vitae, a detailed statement of interests and qualifications (including reprints, if available), and four letters of recommendation to: **Biopsychology Search Committee, Department of Psychology, Mezes Hall, University of Texas, Austin, Texas 78712.** An Equal Opportunity/Affirmative Action Employer.

PHYSIOLOGY: ASSISTANT PROFESSOR, Ph.D., cardiac electrophysiologist with experience in whole animal, microelectrode, and voltage clamp techniques. Experience in perinatal electrophysiology essential. Apply:

**Dr. Samuel Kaplan
Department of Cardiology
Children's Hospital Medical Center
Eland and Bethesda Avenues
Cincinnati, Ohio 45229**

POPULATION BIOLOGIST

Instructor or assistant professor, tenure-track; Ph.D. required; expertise in computer programming preferred; and experience in helping minority students. Responsibilities include teaching general biology and invertebrate zoology, advising undergraduate and graduate students, and assisting in the graduate program. Send by 7 April 1978: curriculum vitae, names and addresses of three referees, transcripts, and a statement of professional goals to: **Dr. James C. Hull, Chairperson, Population Biologist Selection Committee, Department of Biological Sciences, Towson State University, Towson, Maryland 21204.** An Equal Opportunity/Affirmative Action Employer.

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 possibly 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.

POSTDOCTORAL ASSOCIATE VESTIBULAR NEUROPHYSIOLOGY

Research on peripheral and central dynamics of neural responses employing PDP-11 controlled rotational systems. Strong engineering or physiological systems background desirable. Send curriculum vitae and names of three references to: **Dr. Dennis P. O'Leary, Department of Otolaryngology, Eye and Ear Hospital, University of Pittsburgh, 230 Lothrop Street, Pittsburgh, Pennsylvania 15213.**

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITIONS in cell biology/biochemistry available. (i) Project with Dr. Gary Goldstein involves brain capillary function in vitro. (ii) Project with Dr. Ivan Diamond involves receptor regulation in the nervous system and tissue culture. Send curriculum vitae and names of three references to:

**Department of Neurology, M-794
University of California
San Francisco, California 94143**

POSITIONS OPEN

POSTDOCTORAL POSITION—MUSCLE PHYSIOLOGY. Available immediately for a person with a doctoral degree interested in studying the mechanical properties of the isolated single cardiac muscle cell. Background in muscle physiology, biophysics, or bioengineering desirable. Send curriculum vitae, including names of three references, to: **Dr. Merrill Tarr, Department of Physiology, University of Kansas Medical Center, Kansas City, Kansas 66103.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available beginning 1 October 1978 to study role of cell surface glycoproteins in myogenesis and nerve-muscle interaction. Experience in membrane biochemistry and tissue culture required. Send applications to: **Dr. B. W. Festoff, Neurobiology Research Lab, VA Hospital, 4801 Linwood Boulevard, Kansas City, Mo. 64128.** VA Hospital and University of Kansas Medical Center are Affirmative Action/Equal Opportunity Employers.

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 NEUROPHARMACOLOGY to study synaptic mechanisms and neurotransmitters associated with major afferent and efferent pathways of primate extrapyramidal motor system. Background in microelectrode recording and microiontophoretic techniques desirable. Stipend: \$12,100. Send résumé and names of two referees to: **Dr. R. D. Huffman, Department of Pharmacology, University of Texas Medical School, 7703 Floyd Curl Drive, San Antonio, Texas 78284.** Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Position is available as early as 1 April 1978 for recent graduate with interests in lysosomal enzymes and membrane receptors. Send résumé, grade transcript, and three letters of reference to:

**Dr. Arnold Kaplan
Department of Microbiology
St. Louis University School of Medicine
St. Louis, Missouri 63104**

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITIONS IN MOLECULAR GENETICS. Two positions are immediately available for work on the following topics: (i) in vitro synthesis of membrane protein from *Pseudomonas* plasmid DNA, and (ii) structure and function of DNA insertion elements. Fellowship support can be available for as long as 3 years. If interested, please contact: **Dr. James A. Shapiro, Department of Microbiology, University of Chicago, Chicago, Ill. 60637.** From the time of its original charter, the principle of the University of Chicago has been to appoint scholars without regard to race, color, religion, sex, or national origin.

POSTDOCTORAL POSITION AVAILABLE

Required: a postdoctoral fellow to do research on electrophysiological analyses and mathematical modelling of ion permeation in epithelia.

The candidate must have superior qualifications in two separate areas: (i) **applied mathematical theory**, including a particular extensive experience of: ordinary and partial differential equations; computing, and theoretical analyses of ion permeation mechanisms, and (ii) **experimental electrophysiology**, including in particular extensive laboratory experience with: studying ion permeation mechanisms in muscle or nerve by techniques involving simultaneous use of several intracellular microelectrodes; measuring current-voltage relations; analyzing ion selectivity; and studying time-dependent conductances.

Interested applicants please send your letter of application and curriculum vitae to:

**Professor Jared M. Diamond
Department of Physiology
University of California
School of Medicine
Los Angeles, Calif. 90024**

Affirmative Action/Equal Opportunity Employer. Minority and women candidates are encouraged to apply.

ANNOUNCEMENT
The 37th Annual Symposium
of the Society for Developmental Biology
at the University of Wisconsin
June 14-16, 1978

The 37th Annual Symposium of the Society of Developmental Biology will be held at the University of Wisconsin from June 14-16, 1978 and is entitled "Determinants of Spatial Organization."

This Symposium will cover aspects of the localization of developmental information such as: maternal effect mutants of development, cytoplasmic localization in early development, pattern formation in developing systems, polarity and the role of the cell membrane in cell recognition and differentiation.

The tentative list of speakers will include: N. VERDONK and M. R. DOHMEN, Zoology Laboratory, Rijksuniversitat Utrecht; GARY FREEMAN, Department of Zoology, University of Texas; RICHARD WHITTAKER, the Wistar Institute, Philadelphia, Pa.; RALPH QUATRANO, Department of Botany and Plant Pathology, Oregon State University, Corvallis, Oregon; KLAUS KALTHOFF, University of Freiburg; TONY MAHOWALD, Indiana University, Bloomington, Indiana; A. JANICE BROTHERS, University of California, Berkeley, California; DAVID HIRSCH, University of Colorado, Department of Molecular, Cellular and Developmental Biology, Boulder, Colorado; CHRISTINE NUSSLEIN-VOLHARD, University of Freiburg, Institute of Biology, Freiburg; PETER LAWRENCE, MRC Laboratory, Cambridge, England; PETER BRYANT, University of California, Irvine, California; RICHARD CAMPBELL, University of California, Irvine, California; JOSEPH FRANKEL, University of Iowa, Iowa City, Iowa; and C. PETER WOLK, Michigan State University, East Lansing, Michigan.

Further information and application forms may be obtained by writing to the Business Office of the Society for Developmental Biology at the following address: Claudia Foret, Business Manager, Society for Developmental Biology, Inc., P.O. Box 43, Eliot, Maine 03903.

Research in Therapeutic Applications of Immunology

The Pharmaceuticals Division of ICI is currently reorganising its research programme in applied immunological research. We wish to recruit a scientist with significant experience in immunology to join the present multi-disciplinary immunology group. It is anticipated that this post would be attractive to an immunologist whose research ideas require the support of chemistry, biochemistry and virology. The successful applicant, male or female, will be expected to assume a major innovative role in the discovery of therapeutic agents acting by modification of the immune system. Whilst the research programme will be directed towards a specific target the immunology group carries additional responsibility for advice and training in relation to several other research programmes.

Our modern research laboratories are situated in pleasant surroundings but within easy reach of main road and rail routes. Conditions of service, salary and assistance given to married staff in moving house are designed to attract and retain staff of high calibre.

Could you please write, giving details of qualifications and experience to:
 Mr. M.F. Losse
 Personnel Officer
 ICI Pharmaceuticals Division
 Mereside, Alderley Park
 Nr. Macclesfield, Cheshire, England.



The Diagnostics Division of Abbott Laboratories is seeking several Biochemical Scientists to participate in one of the fastest growing and most dynamic divisions of our health care firm.

Candidates having the following qualifications are invited to apply:

Biochemist / Immunologist

A PhD in Immunology, Biochemistry or a related science coupled with at least 2-5 years experience in a research/development laboratory that involved enzymology, serology, endocrinology, virology, protein chemistry, radioactivity or infectious disease work will be required. Candidates should also have a background in purification of antigens and antibodies plus a working knowledge of diagnostic test systems, sophisticated lab equipment and instruments. Demonstrated ability to direct broad based projects with significant autonomy is preferred.

Manager / Diagnostics Research & Development

We seek an individual with a PhD in Biochemistry, Immunology or a related science coupled with at least 2-5 years managerial experience in a research/development laboratory. Preferred candidate should have experience with in vitro diagnostic products and be strongly motivated toward a career in technical management. A demonstrated record of leadership, technical and organizational skills will be required.

Biochemists / Diagnostic Applications

A PhD or equivalent in a biochemical science with at least 2 years of industrial experience which includes practical knowledge of immunological assay systems, GMP and general industrial development/manufacturing requirements will be required. The individuals we seek will be responsible for providing technical support to production of current products and the introduction of new products. Demonstrated ability to interact with both R&D and Operations functions is preferred. Previous clinical laboratory or project management experience and good communications skills are desired.

We will look for a strong track record of accomplishment in the above areas as indicated by publications, patents, and independent research experience. The persons we seek will be highly motivated, capable of independent work, and will possess the ability to manage complete projects.

If qualified and interested in an advancement oriented career, send a resume with salary history, in complete confidence, to:

Maria Marciano
Corporate Placement

 **ABBOTT**
NORTH CHICAGO, ILL. 60064

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POSITIONS OPEN

UNIVERSITY OF LEICESTER ENGLAND

CHAIR OF APPLIED PHYSIOLOGY

Applications are invited for a chair of applied physiology within the Department of Physiology, tenable from 1 October 1978, or as soon as possible thereafter. The prime responsibility of the post will be the teaching of medical students, and previous experience is essential. There are excellent facilities for research. A medical qualification is desirable but not obligatory. A professor with clinical interests may be appointed as honorary consultant in the National Health Service (NHS), with clinical responsibility.

Further particulars may be obtained from: **the Registrar, The University, Leicester LE1 7RH, England**, to whom applications should be sent by 7 April 1978, quoting reference SCAP.

FACULTY POSITIONS for basic scientists with several years of postdoctoral experience and a desire to teach in a systems-oriented medical school will be available in August at the New England College of Osteopathic Medicine (NECOM). Send curriculum vitae but no letters of recommendations to: **Dr. Gene Yonuschot, NECTOM, 605 Pool Road, Biddeford, Maine 04005**. An Affirmative Action/Equal Opportunity Employer.

MICROBIOLOGY/IMMUNOLOGY

New and expanding Department of Microbiology with emphasis on molecular aspects of microbial pathogenesis and immunology seeks candidates for faculty appointment (assistant, associate, or full professor) in **IMMUNOLOGY** or in medically related microbial **ECOLOGICAL/ELECTRON MICROSCOPY**. Responsibilities include teaching in medical and graduate courses and development of independent research programs. Starting date negotiable between 1 July 1978 and 1 October 1978. Level of appointment and salary commensurate with experience. Ph.D. or equivalent professional degree plus 2 years of postdoctoral research experience required. Submit curriculum vitae, three letters of recommendation, and major publications before 1 May 1978 to: **Dr. Randall K. Holmes, Chairman, Department of Microbiology, Uniformed Services University of the Health Sciences, c/o Personnel Office, 4301 Jones Bridge Road, Bethesda, Maryland 20014**. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to carry out experiments in conjunction with the present experimental nuclear group at the BEVALAC and LAMPF and to participate in the installation and use of the TRISTAN on-line isotope separator at the High Flux Beam Reactor at Brookhaven National Laboratory. Position will require frequent travel between Ames and other national laboratories. Will consider Ph.D. in physics or nuclear chemistry. Desire experience in experimental nuclear physics, with emphasis in nuclear spectroscopy. *The Ames Laboratory is an Affirmative Action Employer and encourages women and minorities to apply.*

All applicants should send résumés and transcripts to: **Ames Laboratory, Personnel Office, 127 Spedding Hall, Iowa State University, Ames, Iowa 50011**. Application deadline is 1 May 1978.

POSTDOCTORAL POSITION in the biochemistry of inflammation to study the roles of superoxide and related free radicals in various models of disease states and in leukocyte metabolism. Salary: \$11,000 to \$13,000. Send curriculum vitae and two letters of reference to: **Dr. Joe M. McCord, Department of Biochemistry, College of Medicine, University of South Alabama, Mobile, Alabama 36688**. An Equal Opportunity Employer.

SOCIOMEDICAL SCIENTIST

Position available for associate professor with joint appointment in Department of Psychiatry and School of Public Health, at Columbia University. Applicant must have a Ph.D. in sociology with extensive experience in medical sociology. A strong research background in adolescent development is essential as is expertise in drug and alcohol use, and experience in conducting longitudinal survey research. Must have established record in raising funds to support own research program. Send résumé to: **Dr. Edward J. Sachar, Chairman, Department of Psychiatry, 722 West 168 Street, New York, New York 10032**. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

The Department of Biochemistry, Rice University, announces the availability of a **POSTDOCTORAL POSITION** beginning 1 July 1978. Applicants should have experience in microbiological procedures, the purification of soluble and membrane bound proteins, anaerobic purification techniques, and standard enzymological skills. Send curriculum vitae and the names of three references (by 15 May 1978) to: **Dr. Graham Palmer, Department of Biochemistry, Rice University, Houston, Texas 77001**. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study metabolic regulation and enzyme turnover in cultured human cells. Experience in protein isolation techniques desirable.

Salary to \$11,000. Send résumé plus names of references to:

**Dr. Ifeanyi Arinze
Department of Biochemistry
Meharry Medical College
Nashville, Tennessee 37208**

POSTDOCTORAL POSITION available immediately for physiological psychologist/physiologist/behaviorist interested in slow wave and unit recording and drug effects in freely moving animals. Send curriculum vitae and references to:

**Dr. C. H. Vanderwolf
Department of Psychology
University of Western Ontario
London, Ontario, Canada N6A 5C2**

POSTDOCTORAL POSITION available for research in studies of autonomic nervous system development and pathophysiology. Background in anatomy, biochemistry, or pharmacology acceptable. Applicant should send curriculum vitae including research interests, publications, and references to: **Eugene M. Johnson, Ph.D., Department of Pharmacology, Washington University Medical School, 660 South Euclid Avenue, St. Louis, Missouri 63110**.

RESEARCH ASSOCIATE. Person with biochemical background (M.S./Ph.D.) wanted for Department of Physiology and Biophysics. Please send curriculum vitae and references to:

**T. C. Welbourne
Personnel Department
LSU Medical Center
P.O. Box 33932
Shreveport, La. 71130
An Equal Opportunity Employer**

TWO TEMPORARY POSITIONS, September 1978. (i) **CELL PHYSIOLOGIST**. Two-year appointment. To teach biochemistry-cell physiology, genetics, and microbiology. (ii) **ANATOMIST AND PHYSIOLOGIST**. One-year appointment. To teach comparative anatomy, general physiology, and help with beginning biology. Salary and rank negotiable. Send curriculum vitae and supportive information to: **Dr. Harold Momberg, Biology Department, Central Methodist College, Fayette, Missouri 65248**. Deadline: 25 April 1978.

STREAM ECOLOGIST, Ph.D. or equivalent in experience, to develop laboratory streams to study pollutant effects on northwestern aquatic species. Detailed for up to 2 years through Intergovernmental Personnel Act only. Must presently be employed by state or local government or educational institution to qualify. Open immediately. Send curriculum vitae to: **Dr. Ronald Garton, Western Fish Toxicology Station, U.S. Environmental Protection Agency, 1350 Southeast Goodnight Avenue, Corvallis, Ore. 97330**, or telephone: 503-757-4735 for further information.

VETERINARY PATHOLOGISTS for teaching, research, and diagnostic pathology in a progressive interdisciplinary department; opportunities for advancement and tenure after appropriate service; two positions. Rank: assistant or associate professor. Salary: competitive and dependent on qualifications. Requirements: D.V.M., Ph.D., with ACVP certification or intention. Teaching experience and research accomplishment helpful. Contact: **Robert B. Wilson, Chairman, Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, Wash. 99164**. This University is an Equal Opportunity/Affirmative Action Employer. In order to assist our efforts to meet Affirmative Action goals, minority, women, or handicapped candidates are encouraged to identify themselves as such in their applications.

POSITIONS OPEN

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

The Department of Psychiatry at the University of Michigan has an opening for a Board-certified **PSYCHIATRIST**, assigned to the Adult Outpatient Program. Applicants must have documented evidence of psychotherapeutic supervisory and general teaching skills, as well as research capabilities. Level of academic appointment open, to be based on qualifications. Please reply to **Box 85, SCIENCE**. Code 1900BO. A nondiscriminatory, Affirmative Action Employer.

VIROLOGIST. Ph.D. Postdoctoral training preferred. Assistant professor of microbiology. Position available September 1978. Responsibilities include undergraduate courses in medical virology (spring quarter) and medical bacteriology (winter quarter) and starting an independent research program in viral-animal host relationships or some aspect of molecular virology. Supervision of graduate (M.S. and Ph.D.) research projects is also expected. Opportunity exists to develop a graduate course in area of interest and to teach in the WAMI Medical Program. Academic year appointment. Salary negotiable. By 1 June send curriculum vitae and three letters of reference to: **Virology Search Committee, Department of Microbiology, Montana State University, Bozeman, Montana 59717**. An Equal Opportunity/Affirmative Action Employer.

VIROLOGIST—MOLECULAR BIOLOGIST. To do research on interferon synthesis. Initial appointment will be at associate research scientist level in the Department of Microbiology. Some experience in interferon work helpful, but not required. Applicants with some postdoctoral experience preferred, but recent Ph.D.'s may be considered. Send résumés to: **M. Kerans, Personnel Department, NEW YORK UNIVERSITY MEDICAL CENTER, 568 First Avenue, N.Y., N.Y. 10016**. An Equal Opportunity/Affirmative Action Employer, M/F.

VISITING LECTURERS Department of Biology

The University of Virginia has openings for one-semester or two-semester lectureships beginning 1 September 1978. Areas of primary interest are evolution, sociobiology, comparative physiology, entomology, mammalogy, and ichthyology, but other areas will be considered. Upper division undergraduate courses plus selected topics courses at undergraduate-graduate level are required. Salary levels are negotiable. Applicants should send no later than 14 April curriculum vitae with references and outlines of proposed lecture and selected topics courses to: **Lecturer Search Chairman, Department of Biology, Gilmer Hall, University of Virginia, Charlottesville, Virginia 22901**. An Affirmative Action/Equal Opportunity Employer.

WATER QUALITY PROFESSOR

The Department of Environmental Sciences at Wilkes College has an opening in the environmental quality analysis area starting September 1978. The major responsibility is teaching and managing an undergraduate water quality laboratory. This is a full-time position at the assistant professor level. Ph.D. desirable. A broad physical and natural science background is desirable. Direct résumé and names of three references to: **Dr. Bruce Berryman, Chairman, Department of Environmental Sciences, Wilkes College, Wilkes-Barre, Pa. 18703**. An Equal Opportunity/Affirmative Action Employer.

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**

UNIVERSITY OF CALIFORNIA

DIRECTOR OF THE SYSTEMWIDE INSTITUTE OF GEOPHYSICS AND PLANETARY PHYSICS IGPP)

The University of California invites applications from qualified individuals for the position of Director of the Systemwide Institute of Geophysics and Planetary Physics (IGPP). At the present time, branches of IGPP exist at three University of California campuses; Los Angeles, San Diego, and Riverside. Each branch is headed by an Associate Director of IGPP who reports to the chancellor of the respective campus. The Director of Systemwide IGPP (1) facilitates and stimulates research in geophysics and planetary physics in the University of California system; (2) provides coordination among the IGPP branches when the interests of the total University are involved; (3) takes a leading interest in relations between state government and geophysical and planetary science research and its applications at the University.

The successful candidate must qualify for a tenured faculty position in a relevant field at a campus of the University of California. The Director's time will be divided between the Institute and regular faculty duties. The successful candidate must have a wide reputation as a scientist, a record of service to the national and international geophysical community, and experience in management of scientific research.

CLOSING DATE: May 1, 1978

SENT RESUME TO: Edna Coleman, Employment Representative, 734—IGPP University Hall, University of California, Berkeley, California 94720.

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AQUATIC ECOLOGIST

We are a major Pacific Northwest utility agency with work in progress on five nuclear power plants. We are seeking an experienced senior aquatic ecologist, or fisheries biologist, to fill a permanent position on our professional staff.

Responsibilities will include: development of monitoring programs to collect baseline data and evaluate impact of generating project construction and operation; evaluation of technical information relating to ecosystem impact; develop schedules and budgets relating to aquatic monitoring programs, and consultant performance thereon.

The successful candidate will possess an advanced degree in aquatic ecology or fisheries biology, plus at least three years of field experience with freshwater life stages of Pacific Northwest anadromous fish, as well as other fresh-water fish and biota. Demonstrated ability to manage aquatic monitoring programs and administer consultant contracts will be a plus! This position requires an understanding of impact analysis and reporting associated with electric generating facilities.

We are headquartered in an inland Pacific Northwest community of approximately 100,000. Comprehensive fringe benefit package includes relocation assistance.

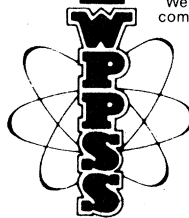
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A PhD in pharmacology, pharmacy, biomedical sciences, plus a definite interest in scientific literature and effective written communication skills will be necessary. Post doctoral, bench experience, or reading knowledge of foreign languages is a definite plus.

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Enviro Control, Inc., under a Prime Contract from the National Cancer Institute (NO1-CP-55666) for the Smoking and Health Program (SHP) wishes to identify current prospective studies and health service programs in the United States with the capability to survey their subjects annually on details of smoking and sequelae. This is to be a supplement to ongoing activities rather than the development of a new study population.

The capability of either an addition or an expansion of a tobacco-use history questionnaire which will allow a stratification of subjects into several classes of tobacco smoke exposure is desired. This will permit the surveillance of the health effects of changes in the toxic yields of cigarettes and other tobacco products in the different exposure groups. Surveillance will be accomplished by documenting specific morbidity and total and specific mortality in the stratified groups. A yearly reassessment of the stratification, by reexamination of the respondents' smoking patterns, will be required.

Organizations meeting these requirements are invited to submit a capabilities statement by 10 April 1978 outlining the purpose of their study or services being provided, the characteristics of their subject population, a list of tobacco-related questions, if any, that are being asked of their subjects, and the final year of support for their current study or services, as applicable. Please reference SHP-77-132B.

This is not a request for proposals. Responses should not include fiscal information. A request for proposal will be sent to those organizations considered capable of satisfying SHP objectives, based on the capabilities statements received. It is contemplated that the SHP will support a supplement to the ongoing study or services that will be required to obtain and process the additional detailed questions of smoking. Depending on the availability of funds, multiple awards may be made. The RFP ECI-SHP-77-132 will be available on or about 24 April 1978, and the closing date for receipt of proposals will be on or about 8 June 1978. RFP's will be available from Enviro Control, Inc., at the address below.

You are invited to submit three copies of your capabilities statement by 10 April 1978 to: **Enviro Control, Inc., One Central Plaza, 11300 Rockville Pike, Rockville, Md. 20852, Attention: Subcontract Administration Department.**

This request does not commit the government or Enviro Control, Inc., to pay any costs associated with the above submittal.

Requests for information concerning this study should be made directly to: **George A. Hall, Subcontract Administrator, at 301-468-2500.** Collect calls will not be accepted.

SYMPOSIUM

PROPAGATION OF HIGHER PLANTS THROUGH TISSUE CULTURE: A BRIDGE BETWEEN RESEARCH AND APPLICATION

A symposium on practical and theoretical aspects of plant propagation through tissue culture will be held at the University of Tennessee, Knoxville, from 16 to 19 April 1978. Topics include trees, vegetables and fruits, ornamentals, disease free plants, morphogenesis, genetic variation, cryobiology, and juvenility. For further information, write: **Symposium, Department of Botany, University of Tennessee, Knoxville, Tenn. 37916. Telephone: 615-974-2256.**

GRADUATE STUDY

GRADUATE STUDY

Graduate programs leading to a Ph.D., M.S., or M.S. Dentistry degree are offered by the Department of Oral Biology, University of Washington, School of Dentistry. Support is available for research training in the biochemistry, cell biology, pharmacology, physiology, and/or pathology of salivary secretion for applicants with M.D., D.D.S., D.V.M., or equivalent degrees. Stipends: \$10,000 to \$14,000.

For details write to: **Dr. Patricia J. Keller, Department of Oral Biology, University of Washington, School of Dentistry, Seattle, Wash. 98195.**

GRADUATE AND POSTDOCTORAL STUDY IN ENVIRONMENTAL HEALTH SCIENCES NEW YORK UNIVERSITY INSTITUTE OF ENVIRONMENTAL MEDICINE

Traineeships, fellowships, and part-time research assistantships are available in general areas of environmental toxicology, environmental hygiene, and environmental radiation with special traineeships in environmental oncology, inhalation toxicology, and lung defense mechanisms. Contact: **Dr. Bernard Altshuler, New York University Institute of Environmental Medicine, 550 First Avenue, New York, New York 10016.**

TRAINEESHIPS

POSTDOCTORAL TRAINEESHIPS IN BEHAVIORAL BIOLOGY are now available at the **UNIVERSITY OF CHICAGO, a fair Employment/Equal Opportunity Employer.** Write to:

**Professor Stuart Altmann
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for further information.

USPHS POSTDOCTORAL TRAINEESHIP available in neuroanatomy. Applicants with some training in electron microscopy preferred. Successful candidate will study brain development within a multidisciplinary group which seeks to understand mental retardation and related areas of human development. **University of California, Los Angeles (UCLA) is an Equal Opportunity Employer.** Write to:

**The Director
UCLA Mental Retardation Research Center
760 Westwood Plaza
Los Angeles, California 90024**

POSTDOCTORAL TRAINEESHIP in auditory pharmacology: biochemistry research areas; transmitter identification and mechanisms in auditory periphery; mechanism of chemical ototoxicity courses available in neuropharmacology, neurophysiology, auditory physiology, and biochemistry.

Trainees supported by NIH postdoctoral training grant at standard stipend levels. Research activities at Tulane University, Department of Pharmacology in cooperation with Louisiana State University, Department of Otorhinolaryngology, Kresge Hearing Research Laboratory of the South. Send curriculum vitae and letters of reference to:

**Dr. Paul S. Guth
Department of Pharmacology
Tulane University School of Medicine
1430 Tulane Avenue
New Orleans, La. 70112**

FELLOWSHIPS

FELLOWSHIP

Openings for biochemists, neurologists, neuropathologists, and pharmacologists in NIH-sponsored multidisciplinary postdoctoral training program in **Biochemical Neuropathology**. Trainees will participate in graduate courses and seminars and will pursue individual research projects in one of the following areas: brain tumor metabolism, biochemistry of spinal cord injury, disorders of lipid metabolism and experimental demyelinating conditions, peripheral nerve disorders, muscle histochemistry, and experimental neurology of the nervous system. Send inquiries to: **Dr. J. Norman Allen, Division of Neurology, Ohio State University, 466 West 10 Avenue, Columbus, Ohio 43210.**

POSTDOCTORAL FELLOWSHIP IN IMMUNOLOGY for Ph.D. or M.D., 1977 or 1978 graduate. Research on lymphocyte activation, macrophage function. Effective April or September 1978 for 1 or 2 years. Contact:

**Julius Gordon
Department of Surgery
McGill University
Donner Building, 740 McGregor
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Applications are invited from Board-certified or Board-eligible physician anesthetists for 2- to 3-year research fellowships in the laboratories of Harvard University, Massachusetts Institute of Technology, or Massachusetts General Hospital. Two appointments will be made annually under USPHS National Research Service Award for advanced training in the Departments of Physiology, Biochemistry, Pharmacology, and Biostatistics. Interested persons should send current curriculum vitae to: **Dr. Richard J. Kitz, Department of Anesthesia, Massachusetts General Hospital, Boston, Mass. 02114.**

POSTDOCTORAL FELLOWSHIP for 2 to 3 years, July 1978. Recent Ph.D. Background in cellular immunology preferred. Training in biochemistry and somatic cell genetics desirable. To work on melanoma cell culture system involving reversible changes in tumorigenicity, immunogenicity, melanin and virus production, plasminogen activator, and LETS protein when grown with 5-bromodeoxyuridine. Send curriculum vitae, research interests, and names of three references to: **Dr. Selma Silagi, Cell Genetics Laboratory, Cornell University Medical College, S500D, New York, N.Y. 10021. Equal Opportunity/Affirmative Action Employer.**

ANDREW W. MELLON TEACHING FELLOWSHIPS

Applications are requested for two 1-year teaching fellowships at Clark University. The fellowships will be awarded in the fields of social environmental impact assessment and population ecology (with emphasis on computer techniques). The fellow will be expected to give one specially designed course, hold one seminar each semester, and link with appropriate research groups at Clark. In exceptional cases the post may be renewed for 1 year only. Send responses as soon as possible to: **Frank W. Puffer, Dean of Academic Affairs, Clark University, Worcester, Mass. 01610. Clark is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.**

FELLOWSHIPS

WHITEHEAD FELLOWSHIP IN OPHTHALMIC RESEARCH

The Amor B. and Loddie L. Whitehead estate has recently endowed a permanent fellowship for research in vision and ophthalmology at the University of Texas Health Science Center at San Antonio. Candidates with interests in various areas will be considered. Specific areas under investigation by the faculty are: (i) binocular vision and stereopsis as related to strabismus and amblyopia; (ii) evaluation of visual function in particular eye diseases; (iii) external eye diseases and the cornea; and (iv) neuro-ophthalmology and ocular motility.

To apply send curriculum vitae, names of four references, and current area of research interest to:

**Samuel C. Rawlings, Ph.D.
Division of Ophthalmology
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**Health Science Center at San Antonio
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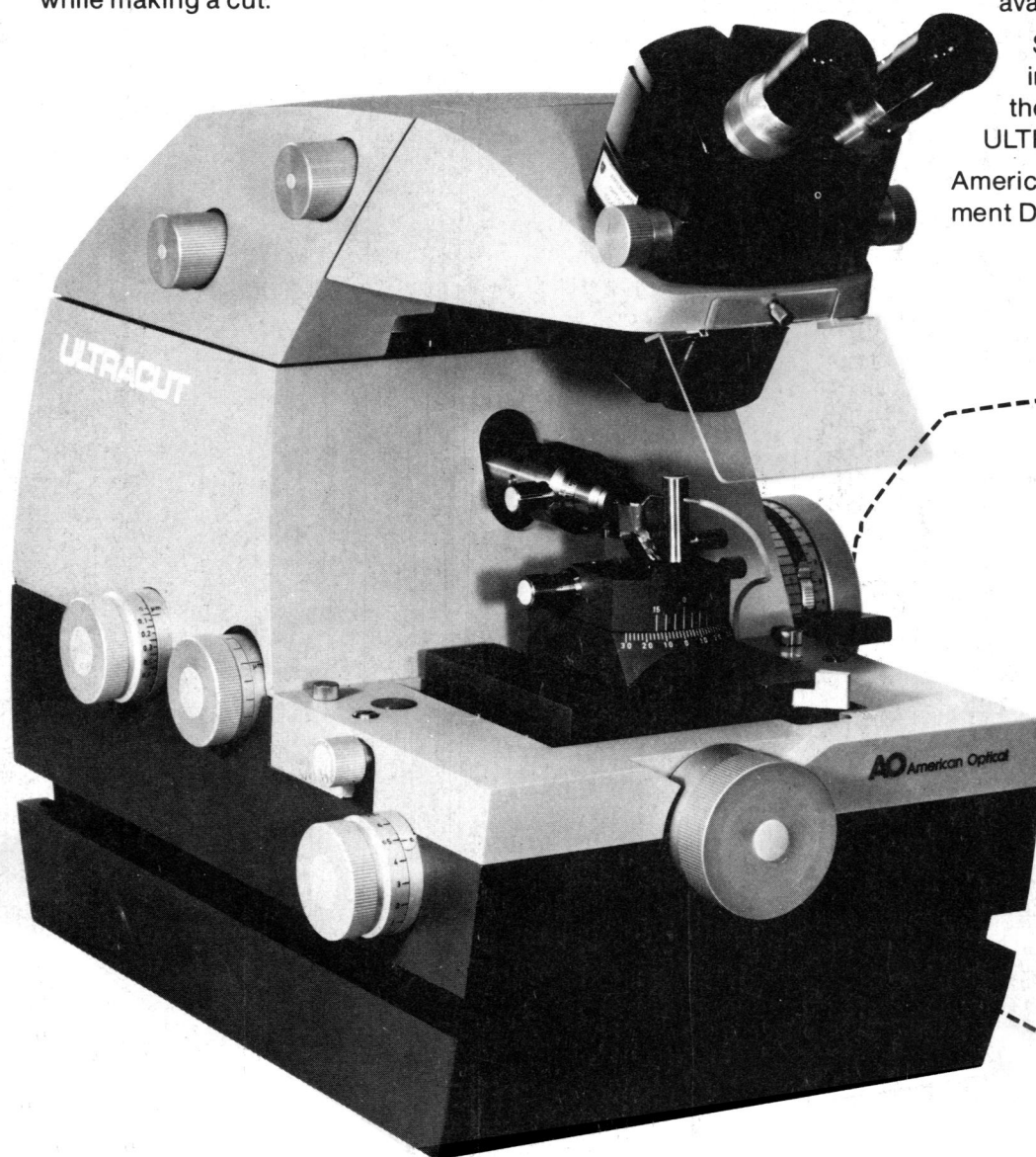
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