

Personnel Placement

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POSITIONS WANTED: 40¢ per word, plus \$4 for use of box number, per insertion. \$10 minimum, per insertion. Prepayment required. This rate is available only to individuals seeking jobs.

DISPLAY (POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKET PLACE, and so forth): \$6.40 per millimeter; \$160 minimum, per insertion (minimum charge covers 25 millimeters on a single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads less than 103 millimeters (4 inches). No cash discount. Prepayment required for all foreign ads. Purchase orders and billing information required for all other advertising.

Send copy for all **Positions Wanted** ads and **Display** ads less than 1/6 page in size (125 millimeters) to:

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

Send copy for **Display** ads 1/6 page and larger to:

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

Blind ad replies should be addressed as follows:

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

POSITIONS WANTED

Aquatic Biologist. Specialties: stream ecology, macroscopic invertebrates, park management. Impact statement experience—parks, water, sewage projects. Seeks position with environmental firm. Box 54, SCIENCE. X

Biochemist. Ph.D. Publications. Experience: TLC, GC, RIA prostaglandins bile acids, preparation of BSA, TME derivatives, metabolism studies in cholesterol bile acids. Chemistry microbiology background. Box 55, SCIENCE. X

Biochemist/Chemist. Ph.D. 1969. Extensive experience in microbial mutagenesis, carcinogen metabolism, HPLC, GC, luminescence, and other chemical and biochemical techniques. Publications, grants. Seeks full-time, part-time, or consulting. Box 56, SCIENCE. X

Biochemist/Systems Analyst. Ph.D. (biochemistry), M.S. (electrical engineering), available for mathematical modeling and analysis of biochemical, physiological, or pharmacological systems. Full-time, part-time, or consulting basis. Will translate data into model, check hypotheses, and suggest experiments. Expertise in mathematics, large scale computation, multivariable optimization, and biochemistry. Has programs. Interdisciplinary publications. References. Box 57, SCIENCE. 2/16, 23; 3/2, 9

Biologist. Ph.D. Varied teaching experience. Trained in marine ecology, environmental problems, human biology. Seeks challenging employment in Seattle-Olympia area. Prefers innovative college setting or conservation work, chance to write and/or develop new educational programs. Box 58, SCIENCE. X

Cellular Immunologist/Cytogeneticist. Ph.D. Broad experience in clinical research, lymphocyte culture, T and B lymphocyte quantitation, cytogenetics. Publications. Desires research or research/teaching position. Box 59, SCIENCE. 2/16, 23

Lawyer/Medical Researcher. Seeks position in environmental or health areas. Interests: genetics, cancer, immunology, and administrative law. Box 45, SCIENCE. X

POSITIONS WANTED

Marine Botanist/Limnologist. M.S. 1976. Energetic, ambitious, experienced in laboratory and field research in a broad range of disciplines, as well as reference bibliography preparation. Desires position in aquatic biology. Résumé and references upon request. Immediate availability. JEC, 1026 Cherokee Avenue, Valdosta, Georgia 31601. X

Plant Ecologist. Ph.D. 1972. Postdoctorate, research, teaching, consulting experience. Publications. Seeks academic or consulting position. Box 60, SCIENCE. X

Virologist/Immunologist. Ph.D. microbiology. Experience in biomedical research, virology, immunology, antiviral vaccines and chemotherapy, tissue culture, and clinical diagnostic tests. Seeks challenging industrial/hospital/government/or research position. Available immediately. Box 61, SCIENCE. X

POSITIONS OPEN

ALGAL ECOLOGIST

Assistant research scientist (non-tenure accruing) to conduct research on the ecology and control of problem algae. Appointment in Department of Botany and Aquatic Weeds Research Center; participation in the department's graduate program. Send curriculum vitae, transcripts, and three letters of recommendation by 28 February to: Jack Ewel, Search Committee Chair, Botany Department, Bartram Hall, University of Florida, Gainesville, Fla. 32611.

ANATOMY

The Department of Anatomy of the University of South Carolina School of Medicine is seeking a qualified anatomist to fill an assistant professor position commencing 1 September 1979. Position will involve teaching microscopic anatomy to medical students. Necessary qualifications include the Ph.D. or M.D. degree, a positive commitment to teaching, knowledge of other anatomical disciplines, involvement in research, and service to the school and university. Submit résumé and letters of recommendation to: Professor Richard J. Weymouth, Chairman, Department of Anatomy, School of Medicine, University of South Carolina, Columbia, S.C. 29208. An Affirmative Action/Equal Opportunity Employer.

ASSISTANT OR ASSOCIATE DEPARTMENT HEAD

Applications are invited for the position of assistant or associate department head, Department of Biological Sciences, Carnegie-Mellon University, a non-tenure track faculty appointment. Responsibilities include day-to-day operation, assisting faculty in development of undergraduate and graduate academic programs, student recruitment. He or she will be encouraged to teach at undergraduate or graduate level in the general area of biological sciences. Candidates must have a Ph.D. in the broad area of biological sciences; experience in college-type administration; ability to deal with faculty, administrators, and students.

The position will be available in spring 1979; deadline for applications is 28 February 1979. Send curriculum vitae and letters of reference to: Lois Kiss, Office of the Dean, Mellon Institute of Science, Carnegie-Mellon University, 5000 Forbes Avenue, Pittsburgh, Pennsylvania 15213.

Carnegie-Mellon University is an Equal Opportunity/Affirmative Action Employer.

RUTGERS UNIVERSITY

Department of Biology with emphasis on neurobiology and behavior has available **THREE ASSISTANT PROFESSORSHIPS:** (i) **Molecular Neurobiologist**, and (ii) **Neural or Behavioral Geneticist**. Responsibilities will include an undergraduate course in molecular biology or general genetics, respectively, and a course in an area of specialization. Establishment of an independent research program is expected. (iii) **Biologist** (research interests consistent with those of department preferred, but not essential). Principal responsibility will be development of an introductory course for students with limited science backgrounds, preparatory to the standard biology curriculum. Although this position requires particular commitment to teaching, development of an active research program is expected. Send curriculum vitae with a cover letter describing your interest to: Search Committee, Department of Biology, Rutgers University, Livingston College, New Brunswick, N.J. 08903. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ANATOMY—ASSISTANT PROFESSOR

UNIVERSITY OF WISCONSIN-MADISON

Position available 1 July 1979 for a person with Ph.D. or M.D. to teach allied health undergraduate courses in anatomy. Evidence of a strong research program and interest in graduate training are required. Research area is open but some preference may be given to cell or developmental biology and muscular or nervous systems. Curriculum vitae and letters of reference must be sent before 5 April 1979 to:

Dr. David D. Slauterback
447 Bardeen Laboratories
Anatomy Department

UNIVERSITY OF WISCONSIN-MADISON

Madison, Wisconsin 53706

An Affirmative Action/Equal Opportunity Employer, M/F

ASSISTANT PROFESSOR OF BIOLOGY. Liberal arts college for women has a tenure-track position available 20 August 1979. This person will teach genetics, a one-semester, cell-oriented introductory biology course for science majors and participate in laboratory instruction in general biology. Establishment of a research program is expected. Ph.D. required. Send curriculum vitae, transcripts, three letters of recommendation, and a statement of teaching and research plans by 9 March 1979 to: Dr. Clarence F. Dineen, Department of Biology, Saint Mary's College, Notre Dame, Ind. 46556. An Equal Opportunity/Affirmative Action Employer.

Applications are invited for two positions at the level of **ASSISTANT PROFESSOR** in the Department of Industrial Environmental Health Sciences; doctoral degree in industrial hygiene or in a closely related physical or biological science with some industrial hygiene experience is required. The applicant is expected to contribute to existing research programs, develop independent research projects, and participate in the teaching program. It is anticipated that the applicant will contribute to the teaching at night for part-time and continuing education programs.

Interested candidates should send curriculum vitae and description of research and teaching interests to: Yves Alarie, Ph.D., Chairman, Department of Industrial Environmental Health Sciences, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, Pa. 15261. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR, INORGANIC CHEMISTRY

Tenure-track position, starting fall 1979 (pending availability of funds). Must have potential for outstanding research and excellence in teaching. Ph.D. or equivalent required. Send or arrange to have sent detailed résumé, research plans, transcripts, and three letters of recommendation by 28 February 1979 to:

Dr. R. A. Pacer
Chemistry Search and Screen Committee
Indiana University-Purdue University
Fort Wayne, Ind. 46805

Affirmative Action/Equal Opportunity Employer

UNIVERSITY OF SASKATCHEWAN, College of Medicine, Department of Pharmacology. **ASSISTANT PROFESSOR IN PHARMACOLOGY.** University of Saskatchewan. Applicants should possess a Ph.D. in pharmacology or an M.D. plus at least 2 years of postdoctoral research experience, and must have a strong interest in both teaching and research. Inquiries should be directed to: Dr. G. E. Johnson, Professor and Head, Department of Pharmacology, University of Saskatchewan, Saskatoon, Saskatchewan, Canada S7N 0W0.

ASSISTANT PROFESSOR IN PHYSIOLOGY. The Physiology Department of the West Virginia School of Osteopathic Medicine invites applications for the position of assistant professor in physiology, available immediately. Duties include teaching in the areas of genitourinary, gastrointestinal, and mechanical aspects of musculoskeletal physiology, using an organ system approach to the teaching of medicine. Research facilities are available and research is encouraged. Send curriculum vitae and names of three references to: Michael K. Cope, Ph.D., Acting Chairman, Department of Physiology, West Virginia School of Osteopathic Medicine, 400 North Lee Street, Lewisburg, West Virginia 24901. An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR. A full-time, tenure-track position for a qualified physiologist starting 1 September 1979. The successful candidate will be expected to develop a strong research program in his or her specialty, as well as to engage in training of graduate students and participate in teaching affairs of the department. Research interests in cardiovascular, pulmonary, or renal physiology preferred. Ph.D. required, with postdoctoral experience preferred; at the associate professor level, a proven record of research productivity is required. Send curriculum vitae and three letters of reference by 15 April 1979 to: **Theodore M. Hollis, Chairman, Physiology Search Committee, Department of Biology, 208 Mueller Laboratory, Box A, The Pennsylvania State University, University Park, Pa. 16802.**

An Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR AND ASSISTANT RESEARCH MICROBIOLOGIST, Department of Medicine. Applicants must have Ph.D. in microbiology and postdoctoral experience in anaerobic bacteriology and biochemistry. Responsibilities include supervision and teaching. Expertise required in microbial pathogenicity, protein chemistry, tissue culture, immunology, and experimental infection. Submit curriculum vitae, references, and letter describing interests to: **Dr. Sydney M. Finegold, Chief, Infectious Disease Section, VA Wadsworth Medical Center, Los Angeles, Calif. 90073.** *The University of California is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR HUMAN NUTRITION AND FOODS PROGRAM SCHOOL OF HOME ECONOMICS

To teach courses in normal and therapeutic nutrition and participate in curriculum development. Conduct research in human nutrition or foods. Administer dietetics concentration as related to ADA program requirements and student credentials (ADA approved generalist, plan IV). Advise undergraduate and graduate students. Qualifications: Ph.D. in human nutrition or related area. Eligible for ADA membership, RD highly desirable. Demonstrated ability in clinical dietetics, teaching, and/or research. Starting fall semester 1979. Send résumé before 1 April 1979 to: **Search Committee, Human Nutrition and Foods, School of Home Economics, University of Vermont, Burlington, Vermont 05405.**

An Affirmative Action Employer

ASSISTANT PROFESSOR OF BIOCHEMISTRY. Applications are invited for a 12-month, tenure-track position from qualified individuals with a commitment to excellence in teaching and research in the area of **molecular biology.** Responsibilities include participation in the undergraduate and graduate teaching program, as well as the development of a graduate course in molecular biology. The individual is expected to develop a vigorous, independent research program in some area of mammalian molecular biology which would be compatible with a joint appointment in the College of Agriculture and Experiment Station. A Ph.D. in biochemistry with postdoctoral experience is required. Please send résumé, graduate transcripts, summary of research interests, and the names of three references to: **R. P. Wilson, Head, Department of Biochemistry, Drawer BB, Mississippi State University, Mississippi State, Miss. 39762.**

ASSISTANT PROFESSOR THE OHIO STATE UNIVERSITY DEPARTMENT OF ZOOLOGY

The responsibilities of this position include teaching in introductory zoology and an upper division course in bioacoustics. Incumbent will be responsible for collections in the Borror Laboratory of Bioacoustics. A Ph.D. is required with teaching and research experience in the area of bioacoustics. Postdoctoral work is desirable. An active research program and participation in graduate education are expected. This is a 9-month, tenure-track appointment beginning in September 1979.

Send curriculum vitae and three letters of recommendation to: **Professor Tony J. Peterle, Chairperson, Department of Zoology, The Ohio State University, 1735 Neil Avenue, Columbus, Ohio 43210.** Applications must be received by 15 March 1979.

The Ohio State University is an Equal Opportunity/Affirmative Action Employer. All qualified persons, including women, members of minority groups, and the handicapped, are encouraged to apply.

POSITIONS OPEN

ASSISTANT PROFESSOR OF PHYSIOLOGY. The Department of Medical Physiology, College of Medicine, Texas A & M University invites applications from individuals specializing in renal or endocrine control of cardiovascular function and/or body fluids. Candidates should have 1 or 2 years of postdoctoral experience and will be expected to show promise of developing a vigorous research program. The appointee will join a physiology faculty deeply involved in cardiovascular research and will participate in its medical and graduate teaching programs. Send curriculum vitae, a résumé of research interests, and names of three references to: **Dr. Elvin E. Smith, Head, Department of Medical Physiology, College of Medicine-1, Texas A & M University, College Station, Texas 77843.** *Texas A & M University is an Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF ZOOLOGY EASTERN ILLINOIS UNIVERSITY

Terrestrial ecologist with strong biometrics background. Tenure-track; salary commensurate with experience. Ph.D.; some postdoctoral experience desirable but not essential. Research encouraged. Send credentials to: **Director, Division of Life Sciences, Eastern Illinois University, Charleston, Illinois 61920.** Deadline for applying: 15 March 1979.

THE NATIONAL CLIMATE PROGRAM OFFICE, established in response to the National Climate Program Act signed by President Carter in September 1978, is seeking an **ASSOCIATE DIRECTOR FOR CLIMATE IMPACT ASSESSMENT.** This is an exciting and challenging opportunity for an individual now associated with a university or state government with background in resource or agricultural economics, economic geography, or some related field. Since climate impact assessment is a new field, the specific discipline in which one is trained is less important than the general relevance of interests and experience. The appointment contemplated is for 2 years under the Intergovernmental Personnel Act which provides for full compensation plus some adjustments; special arrangements or a shorter tenure can be considered. The person sought would have major responsibility for planning national and international programs in impact assessment. This includes research to understand the social, economic, and political implications of variations of climate, and also programs to identify and quantify the effects of climate and climate fluctuations. Those interested should send résumés to: **Dr. Edward S. Epstein, Director, National Climate Program Office, NOAA/DOC, 6010 Executive Boulevard, Rockville, Maryland 20852.** *The Department of Commerce is an Equal Opportunity Employer.*

BIOCHEMISTRY, ASSISTANT or ASSOCIATE PROFESSOR. The Department of Biochemistry, University of Missouri-Columbia, invites applications. Applicants must have the Ph.D. degree or equivalent, and postdoctoral experience is expected. Candidates with promise (assistant) or evidence (associate) of exceptional research abilities are being sought. Curriculum vitae, summary of research plans, and three letters of recommendation should be sent to: **Dr. James L. Gaylor, Department of Biochemistry, 322-A Chemistry Building, University of Missouri-Columbia, Columbia, Mo. 65211.** *The University is an Equal Opportunity/Affirmative Action Employer.*

BIOLOGICAL SCIENTIST

Gillette Research Institute is seeking a biologist, biochemist, or biophysicist to work on a long-range program on the physiology of the hair follicle. A Ph.D. with one or more years of research experience is required. We offer a competitive salary and full company benefits. Send résumé to the attention of: **W. Lincoln,**

**Gillette Research Institute
1413 Research Boulevard
Rockville, Maryland 20850**

An Equal Opportunity Employer

NMR SPECIALIST—The University of Pittsburgh has an immediate opening for an NMR specialist; \$18,000 to \$20,000 per year; Ph.D.-level or equivalent. Responsibilities include maintenance, instruction, and expanding user applications. Excellent research programs, facilities, and support services make this an outstanding opportunity. *Affirmative Action/Equal Opportunity Employer.* Contact: **W. R. Howe, Chemistry Department, University of Pittsburgh, Pittsburgh, Pa. 15260.**

POSITIONS OPEN

ROYAL ALEXANDRA HOSPITAL FOR CHILDREN Camperdown New South Wales, Australia BIOCHEMIST

Applications are invited for the new position of biochemist (principal scientific officer) within the Department of Biochemistry in the Hospital's Institute of Pathology.

The Hospital is a 400-bed paediatric teaching hospital of the University of Sydney and offers a comprehensive range of clinical and laboratory services.

The new appointee will assist the present biochemist (Dr. L. Webster) in the routine work of the department and will have special responsibilities in the development of new tests and techniques in the area of clinical paediatric chemistry. He/she will closely liaise with the hospital's clinical staff and participate in the training programme of clinical and laboratory staff.

Applicants should hold a Ph.D. degree in biochemistry or its equivalent; previous experience in clinical chemistry would be an advantage.

Salary range: A\$21,049 to A\$26,145, per annum.

Further information is available from: **Dr. R. K. Oates, Director of Medical Services.**

Applications including the names of two referees should be addressed to: **J. S. Yu, General Superintendent,** as soon as possible.

BIOLOGICAL CHEMISTRY FACULTY POSITIONS

The Department of Biological Chemistry, University of California, Los Angeles (UCLA) School of Medicine, plans several appointments to its faculty during the next 18 months; one position will be open in summer 1979. While we are particularly interested in highly qualified individuals with research interests in the areas of chemical enzymology, protein chemistry, and genetics or cell biology of eukaryotes, outstanding candidates with other research interests will be seriously considered. A genuine interest and excellence in teaching is also expected. While it is anticipated that appointments will be as assistant professors, appointment could be at a higher level in an exceptional case. Please submit curriculum vitae and names of three referees by 15 April (for the initial position) to: **John G. Pierce, Vice Chairman, Department of Biological Chemistry, UCLA School of Medicine, Center for Health Sciences, Los Angeles, Calif. 90024.** *An Equal Opportunity Employer; applications from minority candidates and women are encouraged.*

UNIVERSITY OF SOUTH CAROLINA

The Department of Biology is seeking applicants for four tenure-track positions at the **Assistant Professor** level for fall 1979: (i) **INVERTEBRATE DEVELOPMENTAL BIOLOGY** (will teach undergraduate invertebrate zoology); (ii) **IMMUNOLOGY**; (iii) **MOLECULAR GENETICS**; and (iv) **SOMATIC CELL GENETICS.** All successful candidates will be expected to initiate and maintain a quality research program and teach at the undergraduate and graduate levels. Please specify on the outside of the envelope the position for which you are applying. Send curriculum vitae, three letters of recommendation, reprints, and statement of future research objectives by 26 March to:

**Larry T. Wimer
Chairman, Biology Department
University of South Carolina
Columbia, S.C. 29208**

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

CLIMATOLOGIST

The Department of Environmental Sciences, University of Virginia, invites applications for a permanent research post in climatology. Ph.D. is required. Salary range \$18,000 to \$28,000, depending on qualifications. Applicants must be well grounded in meteorology and climatology with interest in related environmental sciences. Duties include research on the climate of Virginia and the surrounding mid-Atlantic region, preparation of research publications for general circulation, coordination of Virginia's State Climate Program, and providing information services. Send résumé, reprints, and names of three references to: **B. P. Hayden, Department of Environmental Sciences, University of Virginia, Charlottesville, Virginia 22903.** *The University of Virginia is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

BIOMATHEMATICIAN

The University of Virginia is seeking a biomathematician with a strong background in biology/medicine. The individual selected should possess a Ph.D. in biomathematics or a related area; have at least 1 year of postdoctoral experience; and demonstrate potential for developing an independent research program. Primary responsibilities will include the development of biomathematics curriculum for graduate students in the basic medical sciences and the coordination of the daily activities of a biomathematical core facility of a Diabetes Research and Training Center. The position is available immediately. All interested candidates should send current curriculum vitae, bibliography, statement of interests, and references to:

Dr. Rodney L. Biltonen
Department of Pharmacology
University of Virginia School of Medicine
Charlottesville, Virginia 22908

Midland Macromolecular Institute (MMI) invites applications for a position at the level of **assistant professor** or **associate professor** depending upon experience and qualifications. Duties will involve research and teaching in **BIOPOLYMERS** (chemistry and/or physics). Required: Ph.D. with interest and experience in NMR, including NMR instrumentation. Applicants should submit curriculum vitae, a list of publications, and names of three references to: **BIO-POLYMERS, Midland Macromolecular Institute, 1910 West St. Andrews Drive, Midland, Michigan 48640** by 1 April 1979. *MMI is an Equal Opportunity Employer.*

BOTANIST with Ph.D. and previous teaching experience required to develop and supervise introductory lecture course for majors and nonmajors. In addition to imaginative and inspirational teaching, candidate will be expected to conduct an active research program. Preferred research specialties are experimental mycology, applied botany, or genetics, but applications will be considered from all fields of botany. Position begins 1 September 1979. Rank and salary are open. Please submit curriculum vitae and four letters of reference by 22 March to: **Leonard Beevers, Department of Botany and Microbiology, 770 South Oval, University of Oklahoma, Norman, Okla. 73019.** *An Equal Opportunity Employer.*

CHAIRPERSON—BIOCHEMISTRY DEPARTMENT. The University of Massachusetts Medical School is seeking an individual who has a proven commitment to excellence in research and has demonstrated expertise in teaching and administration to chair its Department of Biochemistry. The department presently has strength in the areas of cyclic nucleotides, hormonal control of metabolism and nutrition. The appointee will have the opportunity to recruit additional faculty. The successful candidate will be expected to lead a department that is both exceptional in its research and committed to quality teaching of biochemistry to medical and graduate students. Please send curriculum vitae, bibliography, and three references by 15 March 1979 to: **Dr. F. S. Fay, Chairman, Search Committee, Department of Physiology, UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL, 55 Lake Avenue North, Worcester, Mass. 01605.** *Minority and women candidates are encouraged to apply. The University of Massachusetts is an Equal Opportunity/Affirmative Action Employer.*

CHEMICAL TOXICOLOGIST (FOODS). Assistant professor of environmental toxicology and assistant rank in the Agricultural Experiment Station. Eleven-month appointment; 65 percent teaching and 35 percent research. Requirements include Ph.D. in chemistry or biochemistry, working familiarity with food chemistry and instrumental methods of analysis, and publication in areas related to this description. Previous training in toxicology and research experience with toxicants is desirable. Responsibilities include research in the chemical/biochemical aspects of toxicants where the primary concern is in foods, and teaching the equivalent of two courses from existing offerings and a new course on toxicants in foods. Send résumé, transcripts, copies of reprints and thesis abstract, and three letters of recommendation to: **Search Committee, Department of Environmental Toxicology, University of California, Davis, Calif. 95616**, prior to 1 April 1979. Available 1 July 1979. *The University is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.*

16 FEBRUARY 1979

POSITIONS OPEN

CLINICAL BIOCHEMIST

Clinical biochemist to assist in directing research toward development of diagnostic reagent products. Position requires an advanced degree in biochemistry, immunochemistry, or related science with five plus years of experience in clinical development of diagnostic products. Some management experience in directing group R & D efforts preferred. Familiarity with FDA medical device regulations highly desirable. Reply in confidence to:

Leo Bressler

SIGMA CHEMICAL COMPANY

3500 DeKalb St. Louis, Missouri 63118

Telephone: 314-771-5765

An Equal Opportunity Employer, M/F

Department of Dermatology, University of Texas Medical Branch, invites applications for anticipated faculty openings in the following areas:

CLINICAL DERMATOLOGIST—Must be Board-certified or -eligible and have experience in teaching students and housestaff.

RESEARCH SCIENTIST—Must possess Ph.D. or equivalent and research experience in immunobiology, photobiology, or biochemistry.

Faculty rank, tenure, and salary commensurate with experience. Please send curriculum vitae to:

Edgar B. Smith, M.D.
Department of Dermatology
University of Texas Medical Branch
P.O. Box 196
Galveston, Texas 77550

All applications must be received by 1 March 1979. *University of Texas Medical Branch is an Affirmative Action/Title IX Employer.*

CLINICAL PATHOLOGIST to direct Clinical Chemistry Laboratory, Emory University Hospital, and to develop associated teaching and research activities. Requires minimum of 3 years of previous experience in clinical chemistry, demonstrated ability in research, and eligibility for medical licensure in Georgia. Reply to: **Rex B. Conn, M.D., Department of Pathology and Laboratory Medicine, Emory University, Atlanta, Georgia 30322.**

FISHERIES DEAN, University of Washington. Degree programs: B.S.F., B.S. with major in fisheries or food science, M.S., Ph.D. Divisions: Fisheries Research Institute, Institute of Food Sciences and Technology, Laboratory of Radiation Ecology, Washington Cooperative Fishery Research Unit, Aquaculture. Qualifications: advanced professional degree; national prominence in field; demonstrated administrative ability. Salary competitive and negotiable. Submit applications by 1 April 1979, to: **Committee on the Deanship of the College of Fisheries, 316 Administration Building, AH-20, University of Washington, Seattle, Washington 98195.** *An Equal Opportunity/Affirmative Action Employer.*

DEAN AND FACULTY POSITIONS THE AMERICAN UNIVERSITY OF THE CARIBBEAN

School of Medicine, located on the island of Montserrat in the West Indies, has the following administrative and faculty openings:

DEAN OF MEDICAL SCIENCES

Will carry the rank of professor and requires 30 percent teaching and 70 percent administration. M.D. or Ph.D. with teaching or administrative experience required.

DEAN OF CLINICAL STUDIES

Will carry the rank of professor and supervise the clinical studies in the hospitals. M.D. with professional or administrative experience required.

FACULTY OPENINGS

Openings in the areas of neuroanatomy, gross anatomy, physiology, pharmacology, and pathology. Twelve-month contract. M.D. or Ph.D. required.

Please send résumé to:

American University of the Caribbean
Mt. St. Joseph, Ohio 45051

POSITIONS OPEN

CANCER CENTER DIRECTOR FOR PROGRAM DEVELOPMENT

The Northern California Cancer Program (NCCP) is seeking a director for program development with emphasis on the basic sciences. NCCP is a consortium cancer center with programs in clinical research and cancer control. We are looking for a senior individual to develop and direct our multi-institutional, multidisciplinary collaborative research program. Candidates should be an M.D. or Ph.D., must have a strong background in cancer and in basic science, and be capable of providing leadership to the scientific community in the region.

Interested candidates should send curriculum vitae to:

Stephen K. Carter, M.D., Director
Northern California Cancer Program
1801 Page Mill Road, Building B, Suite 200
Palo Alto, California 94304

Applications must be received by 1 March 1979.

The Northern California Cancer Program is an Affirmative Action Employer and welcomes applications from women and members of minority groups.

DIRECTOR—GERIATRIC RESEARCH, EDUCATIONAL AND CLINICAL CENTER. The Veterans Administration Outpatient Clinic, Boston, is seeking a director for the outpatient component of the Boston OPC/Bedford VAMC, Geriatric Research, Educational and Clinical Center (GRECC). Candidates must have an advanced degree, M.D. preferred, and academic credentials sufficient to support an appointment as an associate or full professor. They should also have experience and interest in gerontological research, education, and/or health care management. The position requires that the candidate develop, implement, and manage integrated ambulatory, clinical care demonstration programs. He/she will be expected to develop and interrelate ongoing educational, research, and clinical gerontology programs. The position offers an appointment in the VA Outpatient Clinic (GRECC), and an appointment with one of four affiliated medical or dental institutions. Base salary: \$40,000 to \$47,500 per annum (full-time) depending on qualifications. Part-time appointment (minimum 5/8 salary prorated). Interested parties should submit their curriculum vitae to: **Jeremiah E. Silbert, M.D. (151A), VA Outpatient Clinic, 17 Court Street, Boston, Mass. 02108.**

EXPERIMENTAL PATHOLOGIST—Tenure-track position. Responsibilities include establishment of a research program in the candidate's area of expertise, participation in graduate program of experimental pathology, and teaching in undergraduate medical school curriculum. M.D. degree with training and experience in academic pathology and a record of research excellence as demonstrated by publications and grant support required. Applicants whose research interests are in membrane biology, connective tissue biochemistry, or immunobiology may be given special consideration. Direct inquiries (including current curriculum vitae, three references, and a letter describing research interests) to: **Chairman, Department of Pathology and Laboratory Medicine, Emory University, Atlanta, Georgia 30322.** *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

NATIONAL SCIENCE FOUNDATION DIVISION OF ATMOSPHERIC SCIENCES DIVISION DIRECTOR

The National Science Foundation is seeking qualified applicants for the position of director, Division of Atmospheric Sciences. The position is excepted from the competitive civil service and is equivalent to the GS-16/17 grade level (\$44,756 to \$59,421 per annum; limited by statute to \$47,500). This position may be filled on a permanent or rotational basis. Applicants should have a Ph.D. in one of the atmospheric sciences or equivalent experience. Applicants should be recognized authorities in the atmospheric sciences and have demonstrated national and international leadership in their field of expertise. It is expected that this position will be included in the Senior Executive Service of the federal government, which is to be established on 13 July 1979. There may therefore be additional qualification requirements established which are not known at this time. All qualified individuals will be considered, including those interested in a leave of absence from their current scientific or science management responsibilities. Applicants should submit their Personal Qualifications Statement, SF-171, and a current curriculum vitae to: **Division of Personnel and Management, Section B, Room 212, 1800 G Street, NW, Washington, D.C. 20550** by closing date of 1 April 1979. For further information, telephone **E. Paul Broglio at 202-632-4107**. *The National Science Foundation is an Equal Opportunity Employer.*

ECOLOGIST—UCLA

Applications are invited for appointment in the Division of Environmental Biology of the Laboratory of Nuclear Medicine and Radiation Biology as **assistant research ecologist**, with joint appointment as assistant professor (tenure-track) in the Department of Biology. We seek applicants having specializations in arthropod ecology or environmental physiology, in quantitative ecology with skills in modeling and field testing of ecological processes, or in vertebrate population and production ecology. Interest in applied aspects of ecology in desert ecosystems is desired. Applicants should provide evidence demonstrating excellence in research and teaching. Send curriculum vitae, statement of teaching and research interests, and names and addresses of three references before 15 March 1979 to: **Ecology Search Committee, Laboratory of Nuclear Medicine and Radiation Biology, University of California, 900 Veteran Avenue, Los Angeles, California 90024**. *An Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS

Full-time faculty positions are available in the Department of Obstetrics and Gynecology for basic scientists with a research interest in reproductive biology and an expertise in biochemistry. A doctorate is required. Academic rank and salary are dependent on qualifications. If interested, please send curriculum vitae and bibliography to:

William N. Spellacy, M.D.
Professor and Head
Department of Obstetrics and Gynecology
Abraham Lincoln School of Medicine
University of Illinois Medical Center
840 South Wood Street
Chicago, Illinois 60612

Affirmative Action/Equal Opportunity Employer

GENETICIST. Assistant professor position available for a sabbatical leave replacement (1979-1980 academic year). Ph.D. required. Teaching responsibilities include a course in genetics and participation in introductory biology courses. Research facilities excellent. Applicants should send curriculum vitae, graduate and undergraduate transcripts, and names of three references to: **Dr. David B. King, Chairman, Department of Biology, Franklin and Marshall College, Lancaster Pa. 17604**.

IMMUNOLOGIST, VIROLOGIST

Two positions are available immediately at the assistant professor level for a cellular immunologist and a virologist to work in the Bovine Leukemia Research Unit. Applicants should have a Ph.D. or D.V.M. degree with postgraduate training in the appropriate discipline. Qualified applicants should send a résumé, copies of representative publications, and the names of three people who may be contacted for references to: **Dr. Jorge F. Ferrer, Chief, Section of Viral Oncology, University of Pennsylvania School of Veterinary Medicine, New Bolton Center, R.D. 1, Kennett Square, Pa. 19348**.

POSITIONS OPEN

FACULTY POSITION— BIOMEDICAL MASS SPECTROMETRY

Assistant professorship to be filled by 1 July 1979. The primary qualification is the potential and desire to develop a strong research program in drug metabolism, toxicology, or related area. The successful applicant will be expected to participate in the teaching of analytical methods courses at both the graduate and undergraduate level. Candidates should provide curriculum vitae, three letters of recommendation, and a summary of research interests by 1 March 1979 to: **Dr. S. R. Byrn, Department of Medicinal Chemistry and Pharmacognosy, Purdue University, West Lafayette, Ind. 47907**. *Purdue University is an Equal Opportunity/Affirmative Action Employer.*

UNIVERSITY OF WISCONSIN-MADISON CENTER FOR HEALTH SCIENCES DEPARTMENT OF PHYSIOLOGY

A **FACULTY POSITION** at the assistant professor level is currently available. Applications are invited from persons with postdoctoral experience and a demonstrated interest in endocrinology or neuroendocrinology. Participation is expected in the teaching programs of the department which includes courses in organ systems and cell physiology to undergraduate, graduate, and medical students. Interested candidates should submit curriculum vitae, complete bibliography, and have letters of reference from three individuals sent to: **Dr. Richard C. Wolf, Department of Physiology, University of Wisconsin-Madison, 470 North Charter Street, Madison, Wisconsin 53706**. To receive full consideration applications should be received by 15 March 1979. *The University is an Equal Opportunity/Affirmative Action Employer; women and minorities are encouraged to apply.*

FACULTY POSITION AT THE UNIVERSITY OF CALIFORNIA, DAVIS. Assistant professor, associate professor, or professor (20 percent teaching, 80 percent research). Position available 1 July 1979 for teaching and research in cryoscience and cryotechnology, emphasizing investigation of the fundamental scientific principles of the frozen state and application of such principles to improving frozen food quality. Requirements include a Ph.D. degree pertinent to food science (biophysics, biochemistry, botany, chemistry, engineering, food science, physics, or a related field) and an interest in food science. Send curriculum vitae, transcripts of undergraduate and graduate work, and publications to: **Professor R. L. Merson, Chairman, Search Committee, Department of Food Science and Technology, University of California, Davis, Calif. 95616**. At least four persons should be requested to send letters of recommendation. Applications should be received by 15 April 1979. *The University of California is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.*

SUMMER FACULTY POSITIONS:

PHYCOLOGIST: with field experience in the Gulf of Maine to teach 5-week marine algae course, 26 June to 28 July 1979. Demonstrated experience with estuarine and marine benthic fungi and algae required.

ICHTHYOLOGIST: with teaching experience at a marine field station and record of research on scumbroid or gadoid systematics and/or morphology to teach 5-week graduate-level ichthyology course, 30 July to 1 September 1979. Please send curriculum vitae to:

Dr. N. W. Riser
Marine Science Institute
Northeastern University
East Point, Nahant, Mass. 01908

FACULTY POSITIONS IN CELLULAR IMMUNOLOGY TULANE MEDICAL SCHOOL

Applications are invited for consideration in regard to two openings in the Department of Microbiology and Immunology for immunologists at the assistant/associate professor and instructor level. Preference will be given to individuals with training and interest in cellular immunology, particularly T-cell functions and regulation. Interest and ability to teach medical and graduate students is essential, as is a desire for career development in a university/medical school setting. Applicants should submit their curriculum vitae and names of three references to: **A. Arthur Gottlieb, M.D., Professor and Chairman, Department of Microbiology and Immunology, Tulane Medical School, 1430 Tulane Avenue, New Orleans, Louisiana 70112**. *Tulane is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITION

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

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

FACULTY POSITION. The Department of Geology of the University of South Carolina has requested a tenure-track position at the assistant professor level beginning 1979-1980 academic year. Preferred fields are: solid-earth geophysics, carbonate petrology, or regional geology. Duties will include teaching at the undergraduate and graduate level and developing a strong research program in one of the above areas. Ph.D. required. Applications, including three letters of reference, should be sent to: **Dr. L. R. Gardner, Chairman, Faculty Search Committee, Department of Geology, University of South Carolina, Columbia, South Carolina 29208**. *The University of South Carolina is an Affirmative Action/Equal Opportunity Employer.*

HEAD, DEPARTMENT OF ENTOMOLOGY (Reannouncement)

Virginia Polytechnic Institute and State University invites applications and nominations for the position of head of the Department of Entomology. We are seeking a highly qualified entomologist with a strong commitment to the land-grant missions of teaching, research, and extension. Application deadline: 1 March or until position is filled. *Equal Opportunity/Affirmative Action Employer.* Send applications and nominations, including curriculum vitae and three references, to:

Dr. E. N. Boyd, Associate Dean
College of Agriculture and Life Sciences
Virginia Polytechnic Institute and State University
Blacksburg, Va. 24061

HYDROGRAPHER

The University of Delaware is seeking a professional hydrographer. This person will have a principal role in procurement, development, and testing of a new oceanographic CTD system which will include shipboard digital data storage and computer processing. After system development the hydrographer will be responsible for its use in data collection at sea about 50 days per year and for data processing, sensor calibration, and routine system maintenance ashore. The position requires an M.S. in physical or chemical oceanography or equivalent. Shipboard experience with CTD systems, expert knowledge of computer processing, and basic knowledge of digital electronics and computer interfacing are desired. Salary commensurate with experience and ability.

Send résumé to: **Wadsworth Owen, University of Delaware, College of Marine Studies, P.O. Box 286, Lewes, Del. 19958**.

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

MICROBIOLOGY FACULTY POSITIONS available in molecular genetics and immunology at assistant or associate professor level. Doctoral degree and postdoctoral experience required. Starting date: 1 July 1979 or soon thereafter. Send curriculum vitae and references to: **Search Committee, Department of Microbiology, College of Medicine, University of Arizona, Tucson, Ariz. 85724**. *An Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.*

UNIVERSITY OF TORONTO PHYSIOLOGY/BIOCHEMISTRY

Applications are invited for two research appointments in the general area of gastrointestinal physiology, anaerobiosis, and carbohydrate/protein intermediary metabolism.

- 1) **Professional Associate.** Appropriate doctorate and postdoctoral experience required. Initial appointment up to 5 years, renewable. Salary scale, floor: \$16,000.
- 2) **Postdoctoral Fellow.** Two-year appointment. Initial salary in range: \$11,000 to \$12,000.

Applications and the names of two referees to:

Professor D. F. Metrick, Chairman
Department of Zoology
University of Toronto,
Toronto, Canada M5S 1A1

POSITIONS OPEN

INSECT SYSTEMATIST CORNELL UNIVERSITY

Applications invited for tenure-track position with responsibility for teaching and research; teaching (50 percent) includes teaching at introductory and advanced level in coordinated effort with faculty colleagues; research (40 percent) on systematics of a major arthropod order; extension (10 percent) involves chiefly the identification of specimens in individual's area of specialization. Prefer to fill at assistant professor level; others considered. Send curriculum vitae and names of five references to: **Professor E. H. Smith, Department of Entomology, Cornell University, Ithaca, N.Y. 14853.** Deadline for receipt of applications is 15 June 1979. *Cornell University is an Equal Opportunity/Affirmative Action Employer.*

The Psychology Department at the University of California, Riverside (UCR), has **TWO LECTURER POSITIONS** open for 1979-1980 academic year. One is an **experimental psychologist** with a broad general range of interests (including any combination of perceptual development, comparative psychology, introductory statistics, or research methodology). The other is in **physiological psychology** (skills in either comparative or experimental psychology desirable).

Continuation beyond 1 year is a possibility although lecturer appointments at UCR are made on a year-to-year basis and are currently limited to a 3-year maximum.

UCR is an Equal Opportunity/Affirmative Action Employer. Minority and female candidates are encouraged to apply.

All candidates should send curriculum vitae and the names and addresses of three persons from whom we may request letters of recommendation to:

Dr. Paul Wilson
Chair, Search Committee
Department of Psychology
University of California
Riverside, Calif. 92521

MICROBIOLOGY

**University of Toronto, Scarborough College,
Division of Life Sciences**

Applications are invited for an assistant professorship in the tenure-stream. The applicant should have a Ph.D. and postdoctoral research experience in microbiology. No preference exists for any particular research specialty within the field. Demonstrated ability to teach effectively across the subject area would be an important asset. Principal duties would be undergraduate teaching, participation in graduate instruction, and the development of an active research programme. The current salary floor is \$16,500. The appointment is open from 1 July 1979 and the applicant must be available to commence duties not later than 4 September 1979. Curriculum vitae and the names of three referees should be sent to: **Dr. G. R. Williams, Chairman, Division of Life Sciences, Scarborough College, University of Toronto, West Hill, Ontario, Canada M1C 1A4.**

MICROBIOLOGIST, CELL BIOLOGIST, or IMMUNOLOGIST. Applications are invited for a professorial position at the assistant professor level with salary negotiable. Available 1 September 1979 or at a more convenient later date. Applicants must have a strong commitment to research as exemplified by significant publications and postdoctoral training. The successful candidate will be expected to show competence in teaching general microbiology and/or advanced courses in the genetics or physiology of prokaryotes. Please state specific areas of projected research. Send curriculum vitae and four letters of recommendation to:

Daniel R. Tershak, Acting Head
Department of Microbiology and Cell Biology
The Pennsylvania State University
S101 Frear Building
University Park, Pa. 16802

Closing date for applications is 30 June 1979.

The Pennsylvania State University is an Equal Opportunity/Affirmative Action Employer.

PLANT TISSUE CULTURE

Postdoctoral position available immediately to join group investigating tissue culture propagation of conifers through callus cultures, protoplasts. Background in tissue culture or general physiology. Salary competitive. Send curriculum vitae and three letters of recommendation to: **Dr. R. L. Mott, Department of Botany, North Carolina State University, Raleigh, N.C. 27650.**

North Carolina State University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

PATHOLOGIST. Applications invited for full-time chief, Laboratory Service, Veterans Administration Medical Center, Long Beach, California, with appropriate academic appointment in Department of Pathology, College of Medicine, University of California, Irvine. Board-certification in anatomical and clinical pathology, and demonstrated skill in administration and leadership required. Must have outstanding academic qualifications and proven research ability. *Equal Opportunity Employer—women and minorities encouraged to apply.* Interested candidates send curriculum vitae and three letters of reference to: **G. S. Ascher, M.D., Veterans Administration Medical Center (113), 5901 East 7 Street, Long Beach, Calif. 90822.**

PHARMACOLOGISTS

The Squibb Institute for Medical Research currently has several challenging career opportunities for professionals to conduct basic research in conjunction with other cardiovascular scientists involved in new drug development. To meet our needs, we are seeking individuals with the following:

- Ph.D. degree in pharmacology plus 2 to 5 years of postdoctoral experience in model and drug development for use in angina pectoris/myocardial ischemia. Technical assistance will be available in modern, well-equipped laboratory.
- Ph.D. degree in renal physiology or pharmacology; some experience in this area preferred. Technical assistance will be available in modern, well-equipped laboratory.
- B.S./M.S. degree in biology with 2 to 3 years of experience in pulmonary pharmacology to include surgical techniques on large and small animal models.

Located on a campus-like setting in Princeton, New Jersey; salary will be commensurate with experience and we offer a liberal benefits package. Please send curriculum vitae, in strict confidence, to:

E. R. Squibb & Sons, Inc.
Recruitment and Selection Manager
Department MA
P.O. Box 4000
Princeton, New Jersey 08540

An Equal Opportunity Employer, M/F/H

PHYSIOLOGIST. Associate professor in biology, Ph.D. or equivalent required. Nine-month, tenure-track position. Candidates must have broad training in medical physiology, will teach medical physiology and undergraduate and graduate biology courses. Candidate will have a joint appointment in the School of Medicine. Successful candidate must be experienced teacher and researcher. Position available fall 1979. Send curriculum vitae and three letters of reference by 15 April 1979, to: **Physiology Screening Committee, Biology Department, University of Missouri, 5100 Rockhill Road, Kansas City, Missouri 64110.** *The University is an Equal Opportunity Employer.*

PHYSIOLOGIST/BIOCHEMIST. Comparative physiologist/biochemist with organismic orientation to teach physiology and establish vigorous research program effective August 1979. Assistant/associate tenure-leading level; salary negotiable. Submit by 1 March: (i) curriculum vitae, including list of courses taken, and detailed research proposals; (ii) summary of teaching, including evidence of teaching expertise in physiology; and (iii) at least three recommendation letters, to: **Dr. R. L. Pardy, Search Committee, School of Life Sciences, The University of Nebraska, Lincoln, Nebraska 68588.** *Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.*

TWO POSITIONS. Ph.D. or M.S. with experience in atmospheric chemistry or nuclear chemistry for collection and analysis of atmospheric particulate samples from smelters, coal-fired plants, and remote areas including Antarctica and Hawaii. Send résumé and two reference letters to: **W. H. Zoller, Department of Chemistry, University of Maryland, College Park, Md. 20742.** *The University of Maryland is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOW or ESTABLISHED INVESTIGATOR wanted. This program involves the structure and function of the lung in health and disease. Candidate must have experience in cell and organ culture. Send curriculum vitae to: **Yutaka Kikawa, M.D., Professor and Chairman, Department of Pathology, New York Medical College, Basic Science Building, Valhalla, N.Y. 10595.**

POSITIONS OPEN

PHYSIOLOGY POSITION

**Department of Physiology and Biophysics
Colorado State University (CSU)
Fort Collins, Colorado 80523**

FACULTY POSITION IN PHYSIOLOGY. The Department of Physiology and Biophysics in the College of Veterinary Medicine and Biomedical Sciences at Colorado State University, is seeking applicants with a strong interest and background in the area of cardiovascular and/or respiratory adaptations to hyperbaria or hypobaria. A large modern hyper-hypobaric facility currently exists with ongoing research in this area. Responsibilities may also include instruction of undergraduate, graduate, and veterinary medical students. Applicant should hold a Ph.D., M.D., or D.V.M. degree. Salary and rank negotiable. Letter of application and curriculum vitae must be received by 15 April 1979. Address to: **Dr. C. W. Miller, Chairman, Search Committee, Department of Physiology and Biophysics, Colorado State University, Fort Collins, Colo. 80523.** *CSU is an Equal Opportunity/Title IX Employer. Equal Opportunity Office: 314 Student Services Building.*

PHYSIOLOGIST-PHARMACOLOGIST

The Dow Corning Corporation has an immediate opening for a creative physiologist-pharmacologist in our Medical Research Laboratory. Responsibilities include basic and developmental research related to medical devices and laboratory supervision. Candidates should have a Ph.D. or equivalent in physiology or pharmacology with a working knowledge of hematology and histology. Candidate will be located at corporate facilities in Midland, Michigan. Dow Corning is a rapidly growing, Fortune 500 corporation with an excellent salary and benefits program, advancement opportunities, and global operations. *Dow Corning is an Equal Opportunity Employer.* Send résumés to:

**Physiologist-Pharmacologist Placement
Professional Personnel
Dow Corning Corporation
2200 West Salzburg Road—Box 1767
Midland, Michigan 48640**

NATIONAL SYNCHROTRON LIGHT SOURCE

The Chemistry Department of Brookhaven National Laboratory seeks a Ph.D. scientist for work at the National Synchrotron Light Source now under construction. This facility, with its two electron storage rings as dedicated generators of photons for research and development purposes, will produce x-rays in late 1981. The individual now sought would participate in the development and installation of beam line equipment for x-ray crystallography and would engage in experimental research in structural chemistry.

Applicants should have experience in chemical crystallography and have demonstrated ability in the development of instrumentation. Interested persons should contact:

Dr. Thomas F. Koetzle
Chemistry Department

BROOKHAVEN NATIONAL LABORATORY

*Associated Universities, Inc.
Upton, L.I., New York 11973
An Equal Opportunity Employer, M/F*

POSITIONS OPEN

PLANT ECOLOGIST

Assistant professor; associate professor level possible for exceptional candidate. Salary: \$12,835 to \$20,000. To teach undergraduate and graduate level courses and develop active research program involving graduate students. Ph.D. required; postdoctoral experience desirable. Send résumé with statement of professional goals and three letters of reference by 20 March 1979 to: **Dr. R. D. Goos, Chairman, Department of Botany, UNIVERSITY OF RHODE ISLAND Kingston, Rhode Island 02881** An Affirmative Action/Equal Opportunity Employer

POPULATION BIOLOGIST—STONY BROOK

A 1-year appointment is available in the Ecology and Evolution Department of The State University of New York (SUNY) at Stony Brook. Teaching duties will include lecturing in the area of population biology—elementary genetics to introductory biology students. The opportunity exists for the candidate to teach in her/his own area of specialization at the graduate level. We prefer the candidate's specialty to be population genetics but other areas of population biology will be considered. Applicants are requested to submit curriculum vitae and three letters of recommendation to: **Dr. J. S. Levinton, Search Committee, Ecology and Evolution Department, SUNY at Stony Brook, Long Island, N.Y. 11794.** Equal Opportunity/Affirmative Action Employer.

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

The Department of Anatomy at the School of Medicine, University of California, Los Angeles, invites applications from qualified candidates for appointments as **POSTDOCTORAL FELLOWS** in the following areas: cell biology, neuroanatomy, neurophysiology, and neuroendocrinology. Support for these positions may be obtained by the candidate with the help of a faculty member by applying to government or private sources or by applying to faculty member(s) for positions on their research grants. Inquiries may be made to: **Dr. A. M. Adinolfi, Vice Chairman for Graduate and Postdoctoral Programs, Department of Anatomy, University of California School of Medicine, Los Angeles, California 90024.** The University of California is an Equal Opportunity Employer.

A position for a **POSTDOCTORAL INVESTIGATOR** is available 1 April 1979 at the Woods Hole Oceanographic Institution to do research in the dynamics of eddies as part of the POLYMODE program. The POLYMODE field experiment is nearly completed, and the position principally involves analysis of measurements from current meters, floats, and CTD stations. The successful applicant must have a Ph.D. in physical oceanography or related field, and some experience in analysis of field measurements for comparison with models. This will be a 1-year appointment. Send résumé and three letters of reference before 15 March 1979 to: **Personnel Manager, WOODS HOLE OCEANOGRAPHIC INSTITUTION, Woods Hole, Mass. 02543.** An Equal Opportunity Employer, M/F/H.

POSTDOCTORAL POSITION for studies of biochemical pharmacology of nucleotide analogs in human bone marrow cells. Experience in growth of hematopoietic progenitor cells in vitro and/or nucleotide biochemistry desirable. Minimum stipend: \$12,000. Send curriculum vitae and names of three references to: **Dr. W. K. Plunkett, Department of Developmental Therapeutics, University of Texas System Cancer Center, M. D. Anderson Hospital and Tumor Institute, Houston, Texas 77030.** An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOW

Available for M.D. familiar with techniques of tissue culture, karyological analysis, chromosome biology, somatic cell genetics, hybridization techniques, protein chemistry, with strong interest in cancer research. Applicant should intend to develop his/her own ongoing research projects. Salary range: \$11,000 to \$13,000. Submit replies to: **Box 52, SCIENCE.**

POSTDOCTORAL FELLOW

Position available for research on globin gene and nucleic acid sequencing techniques. Project will involve recombinant DNA technology. Send curriculum vitae, bibliography, summary of past research experience, and names of references to: **Dr. Gary Paddock, Department of Basic and Clinical Immunology and Microbiology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, South Carolina 29403.** An Equal Opportunity Employer.

POSTDOCTORAL POSITIONS. The Department of Microbiology has a 5-year training grant and research grants to support postdoctoral positions in research in: herpesvirus proteins and mechanisms of immunity, mechanisms of immunity to togaviruses, coronavirus structure and replication, peptide transport, plasmid function in pseudomonas, and other research areas in collaboration with units in the Knoxville-Oak Ridge area. For further details contact: **Dr. Arthur Brown, Department of Microbiology, University of Tennessee, Knoxville, Tenn. 37916.**

POSTDOCTORAL POSITIONS COLLEGE OF MEDICINE UNIVERSITY OF IOWA

Please contact the following departments for postdoctoral positions at: **The University of Iowa, Iowa City, Iowa 52242.**

- 1) **Anatomy, Dr. Terence H. Williams, Basic Sciences Building—Research in neurobiology, endocrinology, cell biology and in cardiovascular, reproductive, and other biological systems.**
- 2) **Biochemistry, Dr. Edward Heath, Basic Sciences Building.**
- 3) **Internal Medicine, University of Iowa Hospitals and Clinics, Francois M. Abboud, M.D., professor and head, or Darris Goerdt, administrator, telephone 319-356-2850.**
- 4) **Microbiology, Dr. I. P. Crawford, professor and head, Basic Sciences Building.**
- 5) **Pharmacology, Dr. J. P. Long, Basic Sciences Building—Major divisions of pharmacology and toxicology, both biochemical and physiological.**
- 6) **Physiology and Biophysics, Dr. Robert E. Fellows, professor and head, Basic Sciences Building—Interest in research.**
- 7) **Psychiatry, Dr. R. R. Crowe, Psychiatric Hospital—Psychiatric genetics.**
- 8) **Radiation Research Laboratory, Dr. J. W. Osborne, 14 Medical Laboratories—In vivo and in vitro studies of the biological effects of radiation; cyclic nucleotides, superoxide dismutase, and cancer; and kinetics of cell proliferation.**

Positions require a Ph.D., M.D., or equivalent. Write to attention of the specific department in which there is interest.

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

POSTDOCTORAL POSITIONS in a combined membrane group of the Departments of Biophysical Sciences and Medicine, State University of New York (SUNY) at Buffalo. Basic and applied NIH sponsored projects on structure-function relationships and drug and hormone-receptor interaction of the erythrocyte and adipocyte membranes. Experience and interest in membrane biochemistry desirable. Salary: \$11,000 to \$14,000. Send curriculum vitae to: **Dr. C. Y. Jung or Dr. F. A. Green, SUNY at Buffalo, 3495 Bailey Avenue, Buffalo, N.Y. 14215.**

POSTDOCTORAL POSITION available immediately for research on membrane phenomena associated with mediator release in allergy. Applicants should have a background in immunochemistry or biochemistry. Send curriculum vitae and three letters of recommendation to: **Dr. A. Froese, Department of Immunology, University of Manitoba, 730 William Avenue, Winnipeg, Manitoba, Canada R3E 0W3.**

POSITIONS OPEN

POSTDOCTORAL POSITION for a Ph.D. in pharmacology or a related discipline to study the involvement of central nervous system membrane lipids and membrane calcium transport in tolerance and/or physical dependence to barbiturates and alcohol. Position (for up to 3 years) available immediately. Salary: \$12,000. Please send curriculum vitae and three letters of recommendation to: **Dr. Steven W. Leslie, Department of Pharmacology, College of Pharmacy, The University of Texas at Austin, Austin, Texas 78712.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION in enzymology, glycoproteins, and lipids. Send résumé and three letters of recommendation to: **P. E. Kolattukudy, Department of Agricultural Chemistry, Washington State University, Pullman, Washington 99164.** An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION. The Research Department of the Cary Arboretum is seeking a **FOREST PATHOLOGIST** with a working knowledge of the common diseases of the northeastern United States and with research interest in urban tree problems, relating to either abiotic or biotic stress factors. This individual will work closely with an ongoing urban tree improvement program aimed at developing suitable trees for the urban environment. Modern laboratories, excellent library, greenhouse and nursery facilities, and a large collection of living plants are all available. Appointments beginning on 1 July 1979. Salary: \$12,000. Send résumés and names of three references to: **Dr. David F. Karnosky, Cary Arboretum, Box AB, Millbrook, N.Y. 12545.** Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION for candidate with interest in immune deficiency, genetic diseases, and leukemia. Background in cell biology and biochemistry. Please send curriculum vitae to: **M. Kerans, Personnel Department, NEW YORK UNIVERSITY MEDICAL CENTER, 568 First Avenue, New York, N.Y. 10016.** An Equal Opportunity/Affirmative Action Employer, M/F.

POSTDOCTORAL POSITION. Research associate to study chemotaxis in *D. discoideum* slime mold amoebas. Expertise in biochemistry/molecular biology or genetics required. Current emphasis on cell membrane; mechanism of chemotactic signal reception and transmission. Possible for individual to initiate independent line of research. Send curriculum vitae to: **Dr. Claudette Klein, Department of Biochemistry, Saint Louis University Medical School, St. Louis, Missouri 63104.**

POSTDOCTORAL POSITION—MICROBIOLOGY

Postdoctoral position available September 1979 to study the mechanisms of bacterial adhesion to tissues. Position requires Ph.D. in microbiology or biochemistry with a good background in carbohydrate chemistry. Appointment is for 2 years and salary is C\$14,000 to C\$16,000, depending on experience. Please send curriculum vitae and names of two references to: **Dr. J. W. Costerton, Department of Biology, University of Calgary, Calgary, Alberta, Canada T2N 1N4.**

RESEARCH ASSOCIATE—MICROBIOLOGY

Research associate position available immediately to study the bacterial colonization of inert surfaces in aquatic environments. Position requires Ph.D., preferably with some postdoctoral experience, and a good background in biochemistry. Appointment is for 3 years and salary is C\$19,000 to C\$22,000, depending on experience. Please send curriculum vitae and names of two references to: **Dr. J. W. Costerton, Department of Biology, University of Calgary, Calgary, Alberta, Canada T2N 1N4.**

RESEARCH ASSOCIATE—MICROBIOLOGY

Research associate position available immediately to study the synthesis and the chemical nature of bacterial exopolysaccharides. Position requires Ph.D. in microbiology or biochemistry and postdoctoral experience is an asset. Appointment is for 2 years and salary is C\$19,000 to C\$22,000, depending on experience. Please send curriculum vitae and names of two references to: **Dr. J. W. Costerton, Department of Biology, University of Calgary, Calgary, Alberta, Canada T2N 1N4.**

POSITIONS OPEN

POSTDOCTORAL POSITION. Available immediately for work on regulation of gene expression in yeast. Experience in microbial genetics preferred. Send curriculum vitae and names of three references to: **Dr. M. A. Savageau, Department of Microbiology, The University of Michigan Medical School, Ann Arbor, Michigan 48109.** A nondiscriminatory, Affirmative Action Employer.

POSTDOCTORAL POSITION. Ph.D. position available immediately in an established endocrine research laboratory to study the molecular biology and biochemistry of the nuclear receptor for thyroid hormones. Experience in studies of tissue receptors for hormones, drugs, and so forth would be very desirable. Please send curriculum vitae and the names of three references to: **M. I. Surks, M.D., Montefiore Hospital and Medical Center, 111 East 210 Street, Bronx, N.Y. 10467.**

Equal Opportunity Employer, M/F.

POSTDOCTORAL POSITION available beginning September 1979 for individual with background in microbiology and/or biochemistry. Studies involve interactions in the fruiting myxobacteria and include characterization of molecules responsible for intercellular adhesion and cell aggregation. Salary: \$10,000 to \$12,000 depending upon experience. Contact: **Dr. David White, Biology Department, Indiana University, Bloomington, Ind. 47402.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE. Position available 1 April 1979, for recent Ph.D. in organic chemistry. Research involves new syntheses of compounds of biological and medical interest incorporating short-lived radionuclides (carbon-11, fluorine-18, nitrogen-13). Experience with isotopes is desirable. Successful candidate will join an established research team. Interested candidates should send résumé, transcripts, and request three letters of recommendation be forwarded to: **Chairman, Chemistry Department, Brookhaven National Laboratory, Associated Universities, Inc., Upton, L.I., New York 11973.** An Equal Opportunity Employer, M/F.

Department of Neurosciences—Ph.D. **POSTDOCTORAL RESEARCH POSITIONS** available in the following areas: neuroanatomy and neurophysiology of the limbic system and aggressive behavior; axonal transport (metabolism of catecholamines, nerve regeneration); EM analysis of experimental neuropathology/myelin pathology; neuroanatomic and neurophysiologic analyses of psychosomatic disease. Individuals required to participate in Neurosciences Teaching Programs. Positions available for an initial period of 1 year with the possibility of an additional year. Salary negotiable. Send inquiries, curriculum vitae, and three letters of recommendation to: **Dr. Allan Seigel, Department of Neurosciences, College of Medicine and Dentistry of New Jersey, New Jersey Medical School, 100 Bergen Street, Newark, N.J. 07103.** Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH SCIENTIST. Position available immediately for organic or biochemist (Ph.D. or M.D.) with interest in lipid biochemistry. Two areas of research: (i) synthesis, effect, and metabolic fate of unnatural fatty acids, and (ii) lipid structure and metabolism of normal and tumor tissue and cultured cells. Send résumés to: **Dr. Randall Wood, Department of Biochemistry, Texas A & M University, College Station, Texas 77843.** Equal Opportunity/Affirmative Action Employer.

NATIONAL SCIENCE FOUNDATION (NSF) DIVISION OF MATERIALS RESEARCH

The National Science Foundation is seeking qualified applicants who are interested in spending 1 or 2 years at NSF as **PROGRAM DIRECTOR** for the Polymers Program in the Division of Materials Research. The position is currently excepted from the competitive civil service and salary ranges from \$32,442 to \$47,500 per annum. Applicants should have a Ph.D. or equivalent in an appropriate discipline and substantial experience in polymer science. Those interested should send current résumés by 15 March 1979 to: **Division of Personnel and Management, Section B, National Science Foundation, 1800 G Street, NW, Washington, D.C. 20550.** Telephone: 202-632-4106. *The National Science Foundation is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS

1979-1980

KING FAISAL UNIVERSITY COLLEGE OF MEDICINE DAMMAM, SAUDI ARABIA

The expanding College of Medicine, now in its fourth year, is accepting applications from qualified men and women for the 1979-1980 academic year in:

CHEMISTRY	PATHOLOGY
BIOLOGY	COMMUNITY
PHYSICS	MEDICINE
BIOCHEMISTRY	EPIDEMIOLOGY
ANATOMY	MICROBIOLOGY
PHYSIOLOGY	PARASITOLOGY
PHARMACOLOGY	

Doctorate or equivalent degree required. Language of instruction is English. Interviews to be held in London and Houston in late February 1979.

SALARY RANGES (annual, paid monthly in Saudi riyals):

Professor: \$26,118 to \$33,378

Associate Professor: \$23,359 to \$29,712

Assistant Professor: \$19,039 to \$24,757

Lecturer: \$11,906 to \$16,444

(30 percent allowance for M.D. degree)

BENEFITS:

Free furnished housing, educational allowances, airfare to and from Saudi Arabia for family of four, 60-day paid vacation, liberal overweight allowance. No Saudi income tax.

Send two copies of résumé and three references to:

Dr. Tawfik Tamimi
Dean, Faculty of Medicine
King Faisal University
c/o Saudi Arabian Educational Mission
2221 West Loop, South
Houston, Texas 77027

or

c/o P.O. Box 2
Sunbury on Thames
Middlesex TW16 6EH England

POSTDOCTORAL RESEARCH TRAINING IN TOXICOLOGY

Postdoctoral positions in the Duke Toxicology Training Program are available immediately. The program is an interdisciplinary approach to toxicology. Each applicant should provide curriculum vitae, a summary of thesis, three references, and a brief statement of specific interests in toxicology. Applicants should identify specific preceptors from the list below.

Role of superoxide and superoxide-derived species in oxygen toxicity and the protective effects of superoxide dismutases, catalases, and peroxidases. Microbiological and tissue culture background and an interest in classical enzymology desired. Professor Irwin Fridovich.

Mechanism of synthesis, storage, and secretion of neurotransmitters using cultured adrenal medulla cells. Professor Norman Kirshner.

Inhalation toxicology: toxicokinetics and pharmacology of nitrate aerosols and other air pollutants. Whole animal and isolated perfused lung techniques will be used. Professor D. B. Menzel.

Studies on phospholipid metabolism, bone marrow cell kinetics, and specific cell antisera. Professor Athos Ottolenghi.

Toxicity and pharmacology of peroxides: chemical synthesis of prostaglandin endoperoxides and effects on human platelets and organs. A strong background in chemical synthesis is desired. Professor Ned Porter.

Effects of age, stress, and other environmental factors on drug and toxicant metabolism using microsomal fractions studied with epr and fluorescence. A strong background in biochemistry or biophysics is desired. Professor G. K. Rosen.

Applicants should respond to: **Dr. D. B. Menzel, Director, Toxicology Training Program, Department of Pharmacology, P.O. Box 3813, Duke University Medical Center, Durham, North Carolina 27710.**

Courses in Biological Sciences at the Hopkins Marine Station Summer 1979

First Session—18 June to 21 July

100H. Marine Algae, I. Abbott

An introduction to the marine algae of the Pacific Coast with emphasis on morphology and taxonomy; field work is emphasized. Prerequisite: elementary botany or general biology.

105H. Subtidal Communities, C. Baxter

Lecture, laboratory, and diving field trips treating the ecology of local shallow water marine communities.

111H. Marine Invertebrates, D. Abbott

Survey of the lower marine invertebrates, echinoderms, and protochordates.

130H. Biological Clocks, C. Pittendrigh

The comparative physiology of innate circadian, circa-tidal, and circa-annual rhythmicity in animals, plants, and unicells. Specific attention is devoted to: (i) the role of clocks in navigation and photoperiodism, (ii) the *Drosophila* system, (iii) the localization of circadian pacemakers within nervous systems, and (iv) the genetics and molecular biology of the clock.

165H. Experimental Neurobiology, S. Thompson and additional staff

An intensive laboratory and lecture course in cellular and organismal neurophysiology. Lectures emphasize: (i) cellular processes such as membrane excitability, synaptic transmission, neuronal metabolism, and neuropharmacology, and (ii) the organization of sensory, motor, and integrative systems. The laboratory offers experience with several marine invertebrate preparations and a wide range of investigative techniques. This course is offered to advanced undergraduates, graduate students, and postdoctoral students.

283H. Bioactive Marine Nature Products, F. Fuhrman

A comprehensive survey of the biological effects of naturally occurring substances from marine animals and plants.

Second Session—23 July to 25 August

112H. Marine Invertebrates (continued), D. Abbott

Continuation of Course 111H, covering the molluscs, annelids, arthropods, and allied lesser phyla. While the two courses form a continuous sequence, either half may be taken separately when space permits.

113H. Introduction to Oceanic Biology, E. Haderlie

Introduction to the ocean as an environment; to its major categories of inhabitants, producer and consumer, benthic and pelagic, invertebrate and vertebrate; and to the functioning of the oceanic ecosystem.

125H. Developmental Biology, D. Epel and R. Quatrano

Lectures and research projects focusing on early embryonic development. Guest lecturers will include M. Bernfield, J. Brothers, E. Davidson, P. Green, L. Kedes, D. Mazia, R. Nuccitelli, M. Paul, R. Schimke, R. Steinhardt, V. Vacquier, and N. Wessells.

160H. Problems in Subtidal Ecology, C. Baxter

Field problems in subtidal ecology. Normally participants continue from 105H.

284H. Marine Pharmacology, F. Fuhrman

The pharmacological actions of naturally occurring substances from marine animals and plants. Major emphasis will be on the mechanism of action of marine neurotoxins and cardiotoxins. (Continuation of 283H, but either may be taken separately.)

For more information and an application form please write to: **The Academic Secretary, Hopkins Marine Station, Pacific Grove, California 93950.** Applications for the summer session close on 31 March 1979; except for the experimental neurobiology course, the deadline is 30 April 1979.

POSITIONS OPEN

The Department of Biology, University of Pennsylvania, invites applications for a **FULL PROFESSORSHIP**, beginning July 1979 or 1980. Applicants should be active in developmental biology, cell biology, and/or genetics (a previous announcement in *Science* (17 November, p. 793) describes the interests and goals of the department). Send curriculum vitae, description of research interests, and names and addresses of references to:

Dr. D. J. O'Kane, Chairman
University of Pennsylvania
212 Biology Building/G5
Philadelphia, Pennsylvania 19104

An Equal Opportunity/Affirmative Action Employer

NATIONAL SCIENCE FOUNDATION (NSF) DIVISION OF ASTRONOMICAL SCIENCES

The Division of Astronomical Sciences invites applications for two positions as **PROGRAM DIRECTOR** in the Astronomy Research Section to review and process proposals for grants in astronomy. Applicants should have a record of productive research. Send application/curriculum vitae and names of at least three references to: **National Science Foundation, Division of Personnel and Management, Section B, Washington, D.C. 20550** by 15 March 1979. *NSF is an Equal Opportunity/Affirmative Action Employer.*

PROJECT MANAGER/ENVIRONMENTAL CHEMIST—For a demonstration project to determine the effectiveness of retention/detention drainage system for reducing nitrogen, phosphorus, and other pollutant loadings in nonpoint source agricultural runoff. The project, funded by Florida legislature, will be conducted in Okeechobee County, Florida. Minimum requirements are 3 years of working experience, including supervisory experience in environmental water chemistry, and master's degree in appropriate discipline or equivalent training and experience; \$20,072.

LIMNOLOGIST—Chemical limnologist to conduct research and evaluation of eutrophication of Lake Okeechobee, Florida. Duties include assessment of existing water chemistry data, design of future research/monitoring programs, and preparation of formal reports including recommendations for management alternative to preserve and protect the natural environment. Minimum requirements are 2 years of working experience in chemical limnology or eutrophication modeling and bachelor's degree in limnology or chemistry or master's degree with specialization in chemical limnology or eutrophication modeling; \$16,244. Attractive fringe benefits. Send résumé to: **South Florida Water Management District, Employee Relations Office, P.O. Box "V," West Palm Beach, Florida 33402.** *Equal Opportunity Employer.*

UNIVERSITY OF PENNSYLVANIA MEDICAL SCHOOL

The Department of Biochemistry and Biophysics has a position available for a **RESEARCH ASSISTANT PROFESSOR**. The position is immediately available and is non tenure-track. Applicants should have a Ph.D. degree and have at least 5 years of research experience in the area of pancreatic islet physiology, biochemistry, and morphology. Send applications to: **Dr. David Trentham, Department of Biochemistry and Biophysics, University of Pennsylvania, Philadelphia, Pa. 19104.** The deadline for applications is March 1979. *An Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT PROFESSOR OF WILDLIFE ECOLOGY. Position open starting May 1979. Ph.D. with emphasis on small mammal biology, forest ecology, and quantitative science. Send curriculum vitae, transcripts, copies of publications and grant proposals, and four letters of recommendation prior to 25 March 1979 to: **Dr. Richard D. Taber, College of Forest Resources, 115 Anderson AR-10, University of Washington, Seattle, Wash. 98195.** *An Equal Opportunity/Affirmative Action Employer.*

CORNELL UNIVERSITY

Position available 1 March 1979 for **RESEARCH ASSOCIATE** with practical experience in planetary geomorphology and photointerpretation to analyze Viking Orbiter Images. Participation in compilation of data bank of time-variable, aeolian phenomena on Mars. Ph.D. in planetary sciences or related subject desirable but not necessary. Send curriculum vitae and two letters of recommendation to: **J. Veverka, Space Sciences Building, Cornell University, Ithaca, N.Y. 14853.**

POSITIONS OPEN

RADIATION SCIENTISTS

U.S. Environmental Protection Agency (EPA), Office of Radiation Programs, Criteria and Standards Division.

Several positions are available for radiation physicists, radiobiologists, nuclear engineers, epidemiologists/biostatisticians, and health physicists. The division is responsible for promulgating environmental standards, federal guidance, and general radiation protection policy within the agency. Challenging opportunities to work on radiation waste management, radioactive air pollution, natural radioactivity, non-ionizing (RF) radiation, and related problems of interest to environmental scientists. Experienced scientists or trainees at the B.Sc., M.Sc., and Ph.D. levels are invited to apply for these job opportunities.

These positions are in the permanent federal career Civil Service or appointments in the Commissioned Corps of the U.S. Public Health Service. The GS level or rank will be commensurate with training and experience. The positions are located in Washington, D.C.

Interested individuals should submit Personal Qualifications Statement SF-171, obtainable at the U.S. Civil Service Commission offices or U.S. post offices, and/or résumés with transcripts to:

Pat S. Keitt
Personnel Management Division (PM-212)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

An Equal Opportunity Employer

RESEARCH ASSOCIATE POSITION: Duration of 1 to 2 years, M.D./Ph.D.; non tenured position. All science and medicine specialties. Submit curriculum vitae and area of interest to:

Rubin Bressler, M.D.
Department of Internal Medicine
University of Arizona
College of Medicine
Tucson, Arizona 85724

The University of Arizona is an Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.

RESEARCH ASSOCIATE—VIROLOGY

Available 1 January 1979; 1 to 3 years; biophysical/biochemical characterization of defective herpesvirus DNA; oncogenic transformation by defective herpesviruses. Prefer virologist or biochemist with experience in cell culture, molecular hybridization, and electrophoresis. Salary: \$10,000 to \$12,000 per year. Send résumé, transcripts, and names of three references to: **Dr. Byron K. Murray, Department of Microbiology, VIRGINIA COMMONWEALTH UNIVERSITY, Richmond, Va. 23298; telephone: 804-786-0393.** *An Equal Opportunity/Affirmative Action Employer, M/F.*

RESEARCH ASSOCIATE

D.V.M. positions available for tumor immunologist with virology or immunochemistry background. Applicants must have several years of experience in research of immune mechanism in laboratory animals. Salary range: \$15,000 to \$19,000. Submit replies to: **Box 51, SCIENCE.**

THE AUSTRALIAN NATIONAL UNIVERSITY

Applications are invited for appointment as **RESEARCH FELLOW IN ELECTRON MICROSCOPY** in the Research School of Earth Sciences. Candidates should be persons trained in electron microscopy, whose background is in structural geology, physics, or materials science. The successful applicant will be expected to carry out research in deformation structures or other defect structures in minerals and rocks, and to be generally responsible for the GEOL 200kV STEM electron microscope and its use in the rock deformation group headed by Dr. M. S. Paterson. There will be opportunity for collaboration in research projects in experimental rock deformation at high temperatures or in other research within the school. This post was previously advertised with closing date of 31 October 1978. All earlier applicants will be considered. Appointment: 3 years in first instance with possibility of extension for 5 years. Salary within range A\$15,786 to A\$20,606 per annum. Current exchange rates A\$1:NP58:U.S. \$1.15. Superannuation benefits. Reasonable appointment expenses. Assistance with housing. Further details from: **Registrar, P.O. Box 4, Canberra ACT 2600, Australia** with whom applications close 9 March 1979.

POSITIONS OPEN

RESEARCH ASSOCIATE: Department of Chemistry, Massachusetts Institute of Technology, seeks a heterocyclic chemist to assume the leadership of a β -lactam research group starting 15 July 1979. Requirements: Ph.D. in organic chemistry with a minimum of 1 year of experience (pre- or postdoctoral) as a group leader; 40 hours per week; \$11,000 to \$12,000 per year. Send résumé to: **Professor J. C. Sheehan, Department of Chemistry, Massachusetts Institute of Technology, Cambridge, Mass. 02139.**

RESEARCH ASSOCIATE

Immediate opening for a Ph.D. with experience in biochemical and cytological techniques to study the role of microtubules and other cytoskeletal elements during animal virus infections. Of particular interest will be RNA (murine leukemia) and DNA (adenovirus) tumor viruses. Send curriculum vitae and request three referees to submit letters of reference to: **Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545.**

An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE. Postdoctoral position available 1 April 1979 for a Ph.D. preferably in physical biochemistry to study lipid-protein interactions in biomembranes. Previous training in the area of molecular spectroscopy will be an asset. Please send résumé and two letters of recommendation to: **Dr. J. K. Reed, Department of Chemistry, University of Toronto, Toronto, Canada, M5S 1A1.**

RESEARCH ASSOCIATE

Must have a master's or doctoral degree in microbiology, immunology, or biochemistry. Two years of related experience. Project involves molecular and cellular aspects of cancer research. Contact:

Personnel Office
The University of Texas Health
Science Center at San Antonio
7703 Floyd Curl Drive
San Antonio, Texas 78284

An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE Biochemistry of Genetic Recombination

Postdoctoral position at University of Maryland Baltimore County (UMBC), for in vivo and in vitro studies of DNA recombination and repair. Extensive interaction and collaboration with molecular biology groups at nearby National Institutes of Health and Johns Hopkins University. Experience in molecular genetics or nucleic acid biochemistry highly desirable but not essential. To begin summer 1979; earlier or later dates possible. Salary: \$14,000 to \$15,500, plus fringe benefits. Candidates with M.S. degree and demonstrated capacity for independent research will be considered. Send curriculum vitae and two letters of recommendation to: **Dr. John Hays, Department of Chemistry, UMBC, Catonsville, Md. 21228.** *UMBC is an Affirmative Action/Equal Opportunity Employer.*

Applicants are invited to apply for a **RESEARCH PHYSICIST POSITION** at the Harvard College Observatory at an annual salary of \$17,500 to \$18,500. This person will prepare a rocket-borne Lyman Alpha Coronagraph for measurements of temperature and densities in the solar corona at several solar radii from the sun center. Will develop and perform instrument tests, radiometric and wavelength calibration, and instrument stray light measurements. Will evaluate and test multispectral microchannel plate detectors or other detectors for extreme ultraviolet. Will participate in the data reduction and scientific analysis. Requires a Ph.D. including 3 years of doctoral training in rocket-borne astronomical spectroscopy. Knowledge of multi-spectral microchannel plate detectors and ultraviolet radiometry and rocket-borne spectroscopy is necessary and familiarity with electronics and solar physics is desirable. Submit résumé to: **Dr. John L. Kohl, Harvard College Observatory, 60 Garden Street, Cambridge, Mass. 02138.** *Harvard University is an Equal Opportunity Employer.*

RESEARCH SUPERVISOR—Position available in cell culture and virology. Salary: \$10,106 to \$11,116; 24 months minimum, on grant. Send résumé and three letters of recommendation to: **Department of Personnel, College of Medicine, Box 28, University of South Florida, Tampa, Fla. 33612.** *The University of South Florida Medical Center is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

SENIOR FACULTY POSITION CORNELL UNIVERSITY

The Department of Chemistry is seeking an organic chemist to fill a tenured faculty opening at the associate professor level. We are particularly interested in candidates whose research is in the area of synthesis, but we will also consider candidates who have made important contributions to other areas of organic chemistry. Candidates must have an outstanding record in research, and must be interested in graduate and undergraduate teaching. Please send curriculum vitae and publication list to: **Dr. Benjamin Widom, Chairman, Department of Chemistry, Cornell University, Ithaca, New York 14853.**

Cornell University is an Equal Opportunity/Affirmative Action Employer.

SENIOR SCIENTIST, WATER RESOURCES ENGINEERING/OCEANOGRAPHY

Ecological Analysts, Inc., a national environmental consulting firm, has an immediate opening in its Walnut Creek, California, office for an individual with a Ph.D. and a minimum of 2 years of experience, or a masters degree and a minimum of 4 years of experience. Preferred areas of expertise include hydrodynamic/water quality analyses and modeling of estuarine and coastal environments and hydrodynamic studies of water intake/discharge structures. Demonstrated project management, report writing, client interaction, and program marketing are essential prerequisites. Salary negotiable and commensurate with experience. Mail résumé, summarizing previous projects and marketing experience, educational background, salary requirements, present responsibilities, and list of references, to:

**Corporate Personnel—WRE/WAL
Ecological Analysts, Inc.
York Building, 8600 LaSalle Road
Towson, Md. 21204**

An Equal Opportunity Employer, M/F

SOCIAL/CLINICAL PSYCHOLOGIST, rank open. Must be qualified to teach courses in clinical psychology and be able to contribute to an established applied social research programme. Must have an established research programme or extensive graduate experience in the field of behavioral medicine. Salary commensurate with rank and qualifications. Starting date is 1 September 1979. Apply to: **Dr. G. R. Skanes, Head, Department of Psychology, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1B 3X9.** Position subject to availability of funds.

STUDY DIRECTOR

Committee on Vision, Assembly of Behavioral and Social Sciences, National Academy of Sciences, National Research Council, seeks a study director. Responsibilities include writing and technical editing of committee working group reports, liaison with committee executive council and working groups, and organization of meetings. Qualifications include Ph.D. or equivalent in psychophysics or psychophysiology of vision, 2 to 5 years of relevant research experience, effective oral and written communication skills, and administrative experience. Submit résumé and samples of published writing to: **Dr. Milton A. Whitcomb, Committee on Hearing, Biocoustics and Biomechanics, National Academy of Sciences, 2101 Constitution Avenue, NW, Washington, D.C. 20418.** *An Equal Opportunity Employer.*

SYSTEMATIC BOTANISTS. The Department of Botany, Smithsonian Institution, solicits candidates with active research programs in monographic and/or floristic botany. Preference given to applicants with Ph.D. and demonstrated interest in evolutionary interpretation. Salary starting at \$19,263, depending on qualifications. Send statement of general research goals, curriculum vitae, U.S. Civil Service Standard Form 171, names of three references, and set of reprints to: **Dr. Dieter C. Wasshausen, Chairman, Department of Botany, Smithsonian Institution, Washington, D.C. 20560.** Closing date: 1 June. *The Smithsonian Institution is an Equal Opportunity Employer.*

TOXICOLOGIST

Toxicologist with proven abilities in technical administration, written and oral communication, to coordinate scientific activities of expert panel reviewing safety of ingredients, to have responsibilities for scientific and administrative aspects of the program including preparation of literature searches, summaries, draft reports, as well as administration of meetings, contracts, finances and staff. **Box 50, SCIENCE.**

QUEEN ELIZABETH II FELLOWSHIPS PHYSICAL AND BIOLOGICAL SCIENCES

To commemorate the Royal Visit to Australia in 1963 the Australian Government established the Queen Elizabeth II Fellowships scheme. Under this scheme up to ten fellowships may be awarded each year for full-time research by young scientists of exceptional promise and proven capacity for original work. These are postdoctorate awards tenable in an Australian university or approved research institution normally for 2 years. Tenure of a fellowship is expected to commence within 9 months of the announcement of the award.

QUALIFICATIONS: They should have a Ph.D., or equivalent qualifications, in one of the physical or biological sciences (which are deemed to include mathematics and the scientific aspects of statistics, engineering, metallurgy, agriculture, and medicine). Details of eligibility can be obtained at one of the three addresses below. Applications will also be considered from candidates for the Ph.D. degree if their thesis has been submitted for examination.

STIPEND: A\$17,131 per annum, increased to \$18,403 per annum at age of 28 years.

ALLOWANCES: Are payable in respect of a fellow's dependent spouse (\$500 per annum), each dependent child (\$200), superannuation payments (up to 10 percent of stipend), appropriate insurance coverage and necessary travel expenses.

APPLICATIONS: Persons interested in applying for the above fellowships could obtain application forms and a statement of the conditions of award from: **Secretary, Queen Elizabeth Fellowships Committee, Department of Science, P.O. Box 449, Woden A.C.T. 2606, Australia; the Minister (Scientific) Canberra House, 10-16 Maltravers Street, London, WC2R 3 EH, U.K.; or the Australian Embassy, 1601 Massachusetts Avenue, Washington, D.C. 20036.** Applications for the next round of awards, which will be announced in June 1979 close at the Canberra address on 16 March 1979.

BIOLOGY LABORATORY TEACHING WORKSHOP

June 4 through 8, 1979

The University of Calgary

Sources of Living and Supplementary Materials for Laboratory Instruction Don Igelsrud (Calgary)

Preparing Karyotypes of *Rattus norvegicus*, *Mus musculus*, and *Rana pipiens* Joseph Larsen (Illinois)

An Investigative Study of Sick Potatoes Daniel Burke (Mercer)

The Elucidation of the Biochemical Pathway for Pigment Production in *Serratia marcescens* Marcia Allen (Stanford)

An Investigative Laboratory in Cell Permeability Ruth Von Blum (Berkeley)

Plant and Animal Tissue Culture Lester Eddington (Biola)

Animal Behavior, and Introduction to Statistical Analysis Eugene Kaplan (Hosstra)

The Structural Organization of Living Cells and Cell Organelles Osiris and Susan Boutros (Pittsburgh)

The Honey Bee, *Apis mellifera*, an Ideal Laboratory Animal Jon Glase (Cornell)

Digestive Enzymes of the Cockroach C. Leon Harris (SUNY Plattsburgh)

Brassica campestris, an Ideal Higher Plant for Teaching Loy Crowder (Cornell)

Liver and Muscle Glycogen—Effect of Fasting and Exercise Bruce Virgo (Windsor)

The Study of a Freshwater Stream—an Investigative Laboratory Richard Montgomery and William Elliott (Hagerstown Junior College)

The workshop will be limited to 50 participants and is intended for persons with permanent positions who are responsible for undergraduate laboratory teaching. Each presentation will last about four hours and will be limited to 25 participants. Participants will be selected by the Committee to Establish a Laboratory Biology Teaching Organization and Library (Jon Glase-Cornell, Don Igelsrud-Calgary, Patricia Paulus-Texas Christian, and Ruth Von Blum-Berkeley). The participants will form the nucleus of a new biology laboratory teaching organization. The group hopes to increase communication between the research and laboratory teaching communities to produce better living materials for instruction. Interested persons should write to the committee indicating their position and experience. They should also submit examples of their teaching materials. The materials submitted for selection of participants will be placed in the laboratory Biology Teaching Library if applicants wish. Write to: Laboratory Biology Teaching Library, Department of Biology, The University of Calgary, Calgary, Alberta, Canada T2N 1N4 Phone (403) 284-6127

DIRECTOR OF INFORMATION SERVICES

New Mexico Institute of Mining and Technology seeks a Director of Information Services with a wide range of public-information skills: News writing; writing, editing, and layout of brochures and posters; both still and movie photography; and community relations. Familiarity with darkroom procedures and photo-offset printing is also required. Experience in writing on technical topics for the general public is desired.

New Mexico Tech is a small technical university of 1100 students offering degrees through the Ph.D. and with extensive research and development activity. Four divisions comprising the Institute are the College, the Bureau of Mines and Mineral Resources, the Research and Development Division, and the Petroleum Recovery Research Center. The Director of Public Information has responsibility for the public-information program of the entire Institute, supervises two other professionals as well as support staff in the print plant and the photo lab, and manages a budget. The Director cooperates closely with students, faculty, division directors, and other administrators, and reports directly to the president.

Applicants should have professional training in public-information work and at least three years of relevant experience, preferably in a college or university, or in a research organization. Breadth of skills and flexibility to handle multiple responsibilities, often under time pressure, are important qualities. Familiarity with the State of New Mexico and its news media is desired. The salary is open, depending on experience and qualifications.

Applicants should submit a detailed letter and letter and resume and the names of several references to the Chairman of the Search Committee, Dr. George S. Austin, Bureau of Mines and Mineral Resources, Campus Station, Socorro, N. M. 87801. Deadline for receipt of applications: February 16, 1979.

New Mexico Institute of Mining and Technology

New Mexico Tech is an equal opportunity/affirmative action institution.

POSITIONS OPEN

POSTDOCTORAL POSITION

Available immediately for a Ph.D. interested in research on the photoaffinity labeling of ribosome binding sites. Previous experience with nucleic acid and/or protein chemistry helpful. Send curriculum vitae, including names of three references, to: **Dr. Ira Schwartz, Department of Biochemistry, University of Massachusetts, Amherst, Mass. 01003.** An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study immunity to infectious diseases and cancer. Training in basic immunology is desirable. Campus housing available. Send résumé to:

**Dr. Robert J. North, Director
Trudeau Institute
P.O. Box 59
Saranac Lake, N.Y. 12983**

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL RESEARCH ASSOCIATE

Position available immediately for recent Ph.D. to investigate nitrogen transformation in acid forest soils in laboratory lysimeters. Primary interest is in measuring gaseous movement of nitrogen from the soil as N_2 , N_2O , NO_2 , and NH_3 using ultrasonic gas chromatography. Applicants should have experience with this apparatus. Salary begins at \$12,000 with incremental increases over the 2-year span of the study.

Send curriculum vitae, transcripts, and three letters of reference to: **G. K. Voigt, School of Forestry and Environmental Studies, Yale University, 370 Prospect Street, New Haven, Connecticut 06511.** Yale University is an Affirmative Action/Equal Opportunity Employer.

PROVOST: EDUCATION DIVISION THE MASSACHUSETTS GENERAL HOSPITAL

To serve as chief administrative officer of a new multidisciplinary, degree-granting academic unit within a major teaching hospital. Division programs will include: master's degrees in dietetics, nursing, physical therapy, and speech-language pathology; upper-division bachelor's degrees in radiologic technology and respiratory therapy, and a graduate certificate program in social work. Applicants should hold an earned doctorate, have experience in educational administration, be strongly committed to interdisciplinary education, and able to provide creative leadership in development of new academic programs. Experience in health care and in education of health professionals strongly preferred. Immediate opening; review of applications begins 1 March. Inquiries, nominations, and applications with current résumés and names of three professional references should be sent to: **Cynthia Snow, Secretary, Provost Search Committee, Education Division, Massachusetts General Hospital, Boston, Mass. 02114.**

Affirmative Action/Equal Opportunity Employer

SYSTEMS ECOLOGIST, SAN DIEGO STATE UNIVERSITY. Permanent faculty position beginning late summer 1979. Assistant or associate professor. Salary commensurate with experience, ranges from \$14,256 to \$21,624. Duties include teaching courses in ecological modeling, directing M.S. and Ph.D. students, research, and supervising use of ecology computer. Ph.D. required; preference given to candidates with postdoctoral and teaching experience. Send curriculum vitae and three references to: **William Hazen, Biology Department, San Diego State University, San Diego, Calif. 92182** before 15 April 1979.

An Equal Opportunity/Affirmative Action/Title IX Employer.

TOXICOLOGY FACULTY APPOINTMENTS. Two assistant professor positions in toxicology, Department of Environmental and Industrial Health, the University of Michigan. A doctoral degree in toxicology or related field, with evidence of academic research background in toxicology, is required. Specified training in pharmacokinetics or inhalation toxicology is desirable. The successful candidates will be expected to participate in graduate training and to develop an active research program. Deadline for applications is 15 March 1979. Summer or fall appointments, 1979. Applicants should submit curriculum vitae and have three letters of recommendation sent to: **Dr. Herbert Cornish, Department of Environmental and Industrial Health, School of Public Health, The University of Michigan, Ann Arbor, Mich. 48109.** A nondiscriminatory, Affirmative Action Employer.

POSITIONS OPEN

UROLOGIST—Full-time and part-time faculty in major Midwestern university; assistant professor rank; opportunity for academic career development with participation in teaching, consultation, and research. Board-eligibility required; quality university medical faculty background and interest in uroynamics or oncology. *Equal Opportunity Employer.* **Box 53, SCIENCE.**

WILDLIFE BIOLOGIST

Applications invited for faculty position in wildlife biology. Position available 1 July 1979 as tenure-track appointment at associate or assistant professor level. Ph.D. degree required. Preference given to individuals with at least one degree in wildlife science and professional expertise in one or more of following areas: quantitative methods, ecosystem modeling, natural resource decision-making; applied animal behavior, remote sensing, management of forest wildlife species. Duties include teaching at graduate and undergraduate levels and development of a research program. Submit curriculum vitae and names and addresses of three references before 1 April 1979 to: **Chairman, Wildlife Search Committee, School of Natural Resources, University of Vermont, Burlington, Vermont 05405.**

An Affirmative Action Employer

SYMPOSIA

**Symposium on Energy and Human Health:
Human Costs of Electric Power Generation
Sponsored by the University of Pittsburgh and
Ohio River Basin Energy Study**

**19 to 21 March 1979
Pittsburgh Room
William Penn Hotel
Pittsburgh, Pennsylvania**

Topics to be included: methodologic problems in detecting health effects; environmental and occupational health aspects of coal and uranium mining, coal and nuclear power plants and fuel cycles, transportation of fuels and wastes, power transmission, and waste disposal.

There is no registration fee, but the number attending will be limited.

For a program and registration information write to:

**Edward P. Radford, M.D.
Department of Epidemiology
Graduate School of Public Health
University of Pittsburgh
Pittsburgh, Pa. 15261**

An International Symposium on Ribosomes will be held 4 to 8 July 1979, at the University of Wisconsin-Madison under the auspices of the Harry Steenbock Symposia Committee. Persons interested in receiving application forms and other information should write to: **J. Davies, Department of Biochemistry, University of Wisconsin-Madison, Madison, Wis. 53706.** Requests for applications must be received by 28 February 1979.

TRAINING PROGRAMS

PRE- AND POSTDOCTORAL TRAINEESHIPS AND FELLOWSHIPS in an interdepartmental program in **EXPERIMENTAL PARASITOLOGY** are available, as of 1 September 1979, at the University of Massachusetts, Amherst. Training is provided in the biological, immunological, physiological, and biochemical aspects of protozoal, helminth, and arthropod parasites. Write to: **Dr. B. M. Honigberg, Parasitology Program, Department of Zoology, University of Massachusetts, Amherst, Mass. 01003.** An Affirmative Action/Equal Opportunity Employer.

GRADUATE TRAINING IN ENVIRONMENTAL TOXICOLOGY. A program of research experience and course work prepares students for the Ph.D. degree. Faculty research includes biochemical, behavioral, physiological, and developmental toxicology, with major programs in inhalation and heavy metals toxicology. Fellowships and tuition waivers are available. For information write: **Dr. Victor G. Laties, Acting Director, Toxicology Training Program, P.O. Box Toxicol, University of Rochester School of Medicine and Dentistry, Rochester, New York 14642.**

TRAINING PROGRAMS

PRE- AND POSTDOCTORAL TRAINING IN ENVIRONMENTAL TOXICOLOGY. Beginning 1 July 1979 the Environmental Health Science Center at Oregon State University (OSU) will administer an inter-departmental program leading to the Ph.D. in either biochemistry and biophysics, food science and technology, or pharmacology and toxicology. Research emphasis is on the metabolism and mode of toxic action of environmental contaminants. Candidates with degrees in chemistry, biochemistry, or the biological sciences will be considered for the postdoctoral positions—prior experience in toxicology is not essential. Only U.S. citizens or permanent residents are eligible for support from this National Research Service Award sponsored by NIEHS. For further information write to: **Dr. Ian J. Tinsley, Program Director, Environmental Health Sciences Center, Oregon State University, Corvallis, Ore. 97331.** OSU is an Equal Opportunity/Affirmative Action Employer in compliance with Section 504 of the Rehabilitation Act of 1973.

SUMMER RESEARCH

FIELD BIOLOGY. Stipends of \$1500 are available for postdoctoral summer research at the Mountain Lake Biological Station of the University of Virginia. Proposals for studies on a wide variety of terrestrial and fresh water environments at Mountain Lake will be considered. Deadline: 1 May 1979. Write to: **James L. Riopel, Director, Mountain Lake Biological Station, Gilmer Hall, University of Virginia, Charlottesville, Va. 22903.** Equal Opportunity/Affirmative Action Employer.

ASSISTANTSHIPS

ANATOMY TEACHING ASSISTANTSHIPS

Predocutorial teaching assistantships available for graduate study leading to the Ph.D. degree in anatomy. Specific faculty research interests include: cellular immunology, ultrastructure and development of respiratory, digestive and cardiovascular systems, cell cycle kinetics, reproductive physiology, ultrastructural virology, physical anthropology, comparative neurology, experimental teratology, epidermal cell proliferation, and radiological anatomy. Stipends are \$4686 per year and are awarded on a competitive basis. For application and catalog write to: **Dr. Joseph Bast, Director of Graduate Studies, Department of Anatomy, University of Kansas Medical Center, College of Health Sciences and Hospital, Kansas City, Kansas 66103.** Applications will be considered for fall 1979 semester and early applications are encouraged. An Equal Opportunity/Affirmative Action Employer.

ASSOCIATESHIPS

At the University of Toronto, a **RESEARCH ASSOCIATESHIP** is available. Experience in nucleic acid chemistry, protein biosynthesis and microbiology genetics preferred. A Ph.D., 2 years of postdoctoral experience, and three letters of reference required. Write:

**Professor M. C. Ganoza
Banting and Best Department of Medical Research
112 College Street
Toronto, Ontario, Canada M5G 1L6**

GRADUATE STUDY

ANATOMY GRADUATE PROGRAM TEXAS TECH UNIVERSITY SCHOOL OF MEDICINE

The Department of Anatomy provides graduate programs leading to the M.S. and Ph.D. degrees. Research areas include: developmental and reproductive biology, mineralized tissues and neurobiology. Deadline: 30 April. Address correspondence to: **Dr. David L. Bolender, Department of Anatomy, Texas Tech University School of Medicine, Lubbock, Texas 79430.**

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Further particulars are available, by postcard request please from **The Recruitment Office (MB3561/2), The Open University, P.O. box 75, Walton Hall, Milton Keynes, MK7 6AL** England or by telephone from **Milton Keynes 63406**: there is a 24 hour answering service on 63868.

Applications including curriculum vitae should be returned by 30th March.

GRADUATE STUDY

GRADUATE STUDIES IN NEUROBIOLOGY. The Division of Neurobiology of the Department of Physiology, State University of New York (SUNY) at Buffalo, offers highly individualized training directed towards a Ph.D. in physiology with a specialization available in cellular neurobiology, primate CNS neurophysiology, and developmental neurochemistry. The program is also part of an Interdisciplinary Graduate Group in Neurosciences which allows students additional or alternative opportunities for training in conjunction with faculty in the Departments of Pharmacology, Biochemistry, Anatomy, Biophysics, Biology, and Psychology. All applicants admitted to the Department of Physiology receive waiver of tuition plus an assistantship stipend of \$4205 per year. Students with advanced degrees are also encouraged to apply. GRE scores for aptitude and one advanced test required. Send inquiries to: Dr. Donald S. Faber, Director, Division of Neurobiology, 317 Cary Hall, SUNY at Buffalo, Buffalo, N.Y. 14214.

GRADUATE TRAINING IN BASIC MEDICAL SCIENCES

The College of Medicine, University of South Alabama, invites applications from qualified individuals interested in pursuing the Ph.D. degree in basic medical sciences. Applications are now being accepted for June 1979 entrance into the graduate program leading to the doctorate with specialization in either anatomy, biochemistry, microbiology/immunology, pharmacology, or physiology. This is a unique program designed to accept both qualified nondegree-holding students after only 3 years of appropriate undergraduate study as well as applicants holding degrees. Fellowships are available which provide tuition and stipends. For further information write:

Edwin R. Hughes, M.D., Director
Graduate Program in Basic Medical Sciences
Medical Sciences Building, Room 2152
University of South Alabama
Mobile, Alabama 36688

FELLOWSHIPS

FELLOWSHIPS IN HEALTH COMPUTER SCIENCES

Predoctoral, postdoctoral, and postprofessional NIH fellowships for training in the application of computers to health fields are available starting 1 July 1979. Candidates should have an interest in health computer sciences and experience in health sciences. Predoctoral candidates should have a master's degree in the natural sciences. Postdoctoral candidates should have either an M.D. degree (training may be combined with a clinical residency) or a Ph.D. degree in the natural sciences. Health professionals should have a B.A. or equivalent degree. Send inquiries and applications before 2 April 1979 to: Dr. Lynda Ellis, Box 511, Mayo Building, University of Minnesota Medical School, Minneapolis, Minn. 55455.

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MARINE BIOLOGICAL LABORATORY Woods Hole, Massachusetts invites applications for

MACY FOUNDATION FELLOWSHIPS AND SCHOLARSHIPS FOR BLACKS AND OTHER MINORITIES

The Josiah Macy, Jr. Foundation has provided funds to support blacks and other minority groups in educational and research activities at the laboratory. Preference is given to the needs of faculty members and students in 4-year, predominantly black colleges. Fellowships of up to \$5500 may be used to defray the costs of housing, personal expenses, and travel, as well as laboratory fees, for faculty who wish to improve their research and teaching skills through a summer of independent investigation. Scholarships of lesser amount may be used for tuition, travel, and personal expenses for applicants accepted to Marine Biological Laboratory summer and January courses.

Applications and additional information are available from: Admissions Office, Marine Biological Laboratory, Woods Hole, Mass. 02543; telephone: 617-548-3705.

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FELLOWSHIPS

CANCER BIOLOGY TRAINING

Pre- and postdoctoral fellowships are available in the biochemistry of cancer, environmental carcinogenesis, metabolic regulation, biology of neoplastic transformation of liver cells, and in mutagenesis in mammalian cells. Must be a U.S. citizen or have permanent immigrant status. The predoctoral fellowships will only be awarded for study leading to the Ph.D. degree in biochemistry or microbiology. Applications and additional information are available from:

Dr. Edward Bresnick
Department of Biochemistry
The University of Vermont
College of Medicine
Burlington, Vermont 05405

PREDOCTORAL FELLOWSHIPS in physiology and biophysics. Training in cardiovascular, cell, endocrine, muscle, neuro-, renal, and respiratory physiology. Applicants must submit GRE scores (verbal, quantitative, and one advanced test). Deadline for applications is 16 April 1979. For application materials write: Department of Physiology and Biophysics, West Virginia University Medical Center, Morgantown, West Virginia 26506.

POSTDOCTORAL FELLOWSHIPS IN BIOCHEMISTRY AND IMMUNOLOGY

Research areas are: (i) cell surface proteins involved in immune recognition—background in protein biochemistry and immunology desired; (ii) biochemical and functional characterization of a tumor factor which suppresses host defense mechanisms and confers transformed phenotype to normal cells—background in biochemistry or cell biology desired; and (iii) cellular immunology. Apply, indicating area of interest, to: Secretary, Immunobiology Research Center, University of Wisconsin, 1150 University Avenue, Madison, Wisconsin 53706. *Affirmative Action/Equal Opportunity Employer, M/F.*

POSTDOCTORAL FELLOWSHIPS

Positions become available from time to time for persons with an M.D., or Ph.D. to conduct research as a member of a group in any one of the following areas: neurophysiology; electrophysiology and biophysical theory; membrane phenomena, biophysics and active transport; cellular neurophysiology; cardiovascular physiology; circulation; respiration; behavioral and sensory physiology; and physiology of the heart and muscle, or other related specialties. Applicants are expected to be familiar with advanced research techniques relevant to the area of interest and must have strong academic background. Stipends usually range from \$10,000 to \$14,000, depending upon postdoctoral experience. Applicants with own private funding will also be considered. Applicants should submit curriculum vitae with a list of publications and names of references to: Professor Wilfried F. H. M. Mommaerts, Chairman, Department of Physiology, University of California, 53-259 CHS, Los Angeles, California 90024. *The University of California is an Affirmative Action Employer with an Equal Opportunity Program. Women and minorities are encouraged to apply.*

NEUROLOGY FELLOWSHIP. Two-year appointment beginning July 1979, for M.D. with clinical and research experience to work in field of taste and smell disorders. Research areas include human nerve growth factor, isolation and activity of salivary and nasal mucous proteins, anatomy and physiology of taste bud receptors and trace metal metabolism in patients with neurological and neuromuscular disorders. Clinical areas include head trauma, brain tumors, and olfactory phantoms with and without accompanying seizure activity. Salary commensurate with experience. Send curriculum vitae with bibliography to: Dr. Robert I. Henkin, Director, Center for Molecular Nutrition and Sensory Disorders, Georgetown University Medical Center, Washington, D.C. 20007. *An Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIP. Position available beginning 1 September 1979 for individual with background in physiology and pharmacology; some experience and interest in techniques and methodology for measurement of cardiovascular parameters and coronary blood flow. Project concerns a study of the role of prostaglandins in cardiovascular function. Send curriculum vitae and names of three references to: Gabor Kaley, Ph.D., Professor and Chairman, Department of Physiology, New York Medical College, Valhalla, N.Y. 10595. *Affirmative Action/Equal Opportunity Employer.*

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP. Two years; available immediately for basic research related to gastroenterology (intestinal transport and/or induction of hepatic enzymes). Send curriculum vitae and names of three references to:

Dr. Leon Lack
Box 3185
Department of Pharmacology
Duke University Medical Center
Durham, N.C. 27710

FELLOWSHIP. Pediatric endocrinology/diabetes. Clinical, clinical research, and research training appointment available for start of 1979-1980 academic year. Excellent opportunities in many areas are afforded through full liaison with Basic Science, Internal Medicine, and Obstetrics-Gynecology Departments and the Diabetes Research and Training Center. Contact: Dr. Ian Burr, Departments of Pediatrics and Physiology, Vanderbilt University School of Medicine, Nashville, Tennessee 37232.

IMPERIAL CANCER RESEARCH FUND LONDON, ENGLAND Visiting Fellowships

The Council of the Fund invites applications for visiting fellowships to be held in any of the following: the Central Laboratories of the Fund at Lincoln's Inn Fields; Mill Hill Laboratories; the Breast Cancer Unit, Guy's Hospital; Cancer Epidemiology and Clinical Trials Unit, Oxford University; Medical Oncology Unit, St. Bartholomew's Hospital; or Tumour Immunology Unit, University College, London.

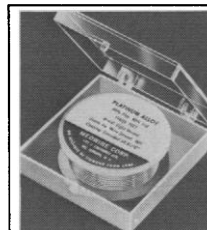
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