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POSITIONS WANTED

Biochemist, Ph.D. Broad experience in enzymology, physiology, hormone action in vitro, metabolites, tissue culture. Papers. Seeks industrial, hospital, government, or academic position. Los Angeles area. Summer 1979. Box 36, SCIENCE. X

Clinical Psychologist/Behavioral Psychopharmacologist, Ph.D. 1971. Seven years of experience in substance abuse research. Psychiatric inpatient experience. Grant support and publications. Desires academic or industrial position with opportunity for research in human psychopharmacology. Résumé available upon request. Box 28, SCIENCE. X

Crystallographer, Ph.D. 1974, with postdoctoral experience, seeks permanent position working independently in x-ray crystallography. Box 30, SCIENCE. X

Diffusion/Dissemination Analyst: M.S. 1978. Publications, experience in network structural analysis, strong background in communication theory. Desires position in research, teaching, or consulting field. Will relocate. Box 40, SCIENCE. X

Environmental Chemist/Toxicologist: Ph.D. medicinal chemistry 1968. Extensive experience developing and using instrumental (GLC, IR, UV-Vis, NMR, AA, AES, MS, fluorescence) and wet chemical methods for wastewater, industrial wastes, drugs and metabolites, pesticides, PCB, halogenated hydrocarbons, toxic metals, coal and petroleum products. Certified laboratory director-clinical toxicology; methods development, quality control, government regulations, publications, chemical-biochemical pharmacology, enzymology, radioisotopes. Seeks industrial, government, or academic position. Box 35, SCIENCE. X

M.D. and Ph.D., Experimental Hematology and Oncology, will relocate laboratory. Research supported by new and renewed grants. Strong background in administration, teaching, and clinical medicine. Seeks tenured academic position. Box 38, SCIENCE. 2/2, 9

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POSITIONS WANTED

Microsurgeon: Ph.D., broad experience in rat, hamster, and mouse microsurgery. Research background in virology, oncology, and tissue cultures. Seeking industrial/university/hospital/research laboratory position in New York. Box 37, SCIENCE. X

Ph.D. 1975: 3-year postdoctoral. Experience in quinones, steroids, tobacco alkaloids, N-nitrosamines; synthesis, radiolabeling, and development of RIA. Publications. Seeks industrial or academic position. Salary negotiable. No geographic preference: United States, Canada, or Europe. Available spring 1979. A Castonguay, 210 Charles Street, Waltham, Mass. 02154. X

Physical Chemist: Ph.D. 1976, postdoctoral experience. Background in theoretical physical chemistry, NMR spectroscopy, computer programming, gas phase synthesis, and teaching experience. Publications. Seeking position in industry, government, or academia. No agencies please. Box 34, SCIENCE X

Protein Chemist/Biochemist: Ph.D. 1968. Specialized in clotting, kine, protein structure-function/modification, experience on isolation, purification, chemical analysis by biochemical/immunochemical techniques, RIA, developed diagnostic reagents. Will relocate. Box 39, SCIENCE. X

Teacher/Neuroscientist, Ph.D. Seeks opportunity to present "Paradox Analysis in Memory Physiology" course; formerly resident scientist in MIT-Neurosciences Research Program and research fellow at Massachusetts General Hospital; research specialty is double-isotopic label analysis of function-related protein turnover in nervous tissue, via ethylene diacrylate cross-linked gel electrophoresis; will also teach physical chemistry, biophysics, or cell physiology. Seeking collaboration with a stereotactically active psychology department. Box 41, SCIENCE. X

POSITIONS OPEN

We are seeking experienced **ACADEMICIANS** with an earned doctorate to function within a multidisciplinary department of oral biology; academic rank is commensurate with experience. Successful candidates will have formal training and significant research experience in oral biology or in one of the major disciplines of oral biology (for example, immunology, biochemistry, physiology, pharmacology, anatomy, pathology, or microbiology; experience preferred in that order). Dentally orientated teaching and research experience and record of extramural funding are desirable qualifications. Candidates must be able to qualify for a joint appointment in the basic science department of their specialty area in the Health Sciences Center and the oral biology faculty of the School of Dentistry, teach dental students and graduate students, and conduct independent research. Please forward curriculum vitae and names of three personal references to:

Dr. Richard P. Sudick
Chairman, Search Committee
Department of Oral Biology
University of Louisville
School of Dentistry
P.O. Box 35260
Louisville, Kentucky 40232

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

ASSISTANT PROFESSORS OF BOTANY

The Department of Botany, University of Maryland, College Park, has the two following tenure-track positions available 1 July 1979:

- 1) **Ph.D. vascular plant cytologist.** Duties include teaching undergraduate and graduate-level courses in cytology and establishing a research program in higher plant cytology.
- 2) **Ph.D. plant morphologist** with interest in paleobotany, developmental morphology, or experimental morphology. Duties include teaching a graduate course in morphology and developing a graduate course and a research program in the area of specialization.

Candidates should submit a statement of research interest, curriculum vitae, graduate transcripts, and names of three references to: **Search Committee, Department of Botany, University of Maryland, College Park, Maryland 20742** before 1 March 1979. *The University of Maryland is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

UCLA ANATOMY—Tenure-track position to develop and direct electron microscope facility associated with a new laboratory nearing completion, the Jerry Lewis Neuromuscular Research Center. Development of independent research programs expected, but must include major emphasis on striated muscle or neuromuscular junctions. Teaching particularly in histology, cell biology, or possibly embryology. Appointment level partly negotiable depending upon experience. Applications should include names of references and be sent to: **Dr. Daniel C. Pease, Department of Anatomy, University of California, Los Angeles, Calif. 90024.** *An Equal Opportunity/Affirmative Action Employer.*

ANIMAL BEHAVIOR. Tenure-track position at assistant professor level. Candidate will be expected to develop active research program in an area such as neurophysiology, hormones and behavior, or behavioral genetics. Teaching responsibilities will include participation in introductory biology and advanced undergraduate or graduate course in area of specialty. Postdoctoral experience required. Preference will be given to applicants with interdisciplinary research. Send curriculum vitae, statement of research interests, and three letters of reference by 20 February to: **Search Committee, Biology Department, Wesleyan University, Middletown, Conn. 06457.** *Wesleyan University is an Equal Opportunity/Affirmative Action Employer and encourages applications from minority groups and women.*

ASSISTANT PROFESSOR (tenure-track) with a background in radiation physics is being sought to serve within the expanding interdisciplinary areas of radiation biophysics, radiation therapy, and associated programs in the biological sciences. Expertise for teaching dosimetry, shielding, and medical physics at the graduate level is required. A Ph.D. is required. Starting date is 15 August 1979. More details will be sent upon request. Send applications, including complete résumé, list of publications, statement of research interests, and three supporting letters, by 15 March 1979 to: **Dr. Ben Friessen, Radiation Biophysics, University of Kansas, 140 NRC, West 15th Street, Lawrence, Kan. 66045.** *An Equal Opportunity Employer.*

ASSISTANT PROFESSOR of ZOOLOGY (Tenure-Track)

Individual trained in genetics, interested in teaching general zoology and courses in specialty. Ph.D. required; postdoctorate and teaching experience preferred. Productive research in developmental genetics required. Salary competitive. Send curriculum vitae and three letters of recommendation by 15 March 1979 to: **Dr. Charles E. Wilde, Jr., Department of Zoology,**

**UNIVERSITY of
RHODE ISLAND**
Kingston, Rhode Island 02881
*An Affirmative Action/Equal Opportunity
Employer*

CELL BIOLOGIST

Applications are invited for a tenure-track appointment as an assistant professor of biology in a dynamic department. Ph.D. required, and evidence of teaching and research capabilities is expected. Candidate must have expertise in tissue culture techniques and ability to manage an existing facility, and must develop a vigorous research program relating to cell structure and function. Teaching responsibilities include introductory cell biology, supervision of graduate students, and development of courses in area of specialty.

Appointment will be effective 1 September 1979. Curriculum vitae, three letters of recommendation, and other relevant material should be sent to:

Dr. Irving Galinsky, Chairman
Department of Biology
Hofstra University
Hempstead, New York 11550

Hofstra University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR BIOCHEMISTRY OR CLINICAL CHEMISTRY

Assistant/associate professor in biochemistry or clinical chemistry. To begin spring or fall quarter 1979. Position contingent upon availability of university funds. Cleveland State University seeks applicant with active research program to teach at undergraduate and graduate levels and to direct graduate research in clinical chemistry Ph.D. program affiliated with the Cleveland Clinic Foundation. Rank and salary commensurate with qualifications. Send résumé, academic transcripts, and names of three references to: **Dr. Frank Bockhoff, Chairperson, Department of Chemistry, Cleveland State University, Cleveland, Ohio 44115.** *Equal Opportunity Employer, M/F/H.*

ASSISTANT PROFESSOR, BIOLOGICAL SCIENCES (repeat announcement). Open positions for scientists with promise of creative and dynamic research programs in any health-related basic science with preference for neurobiology, virology, endocrinology, and reproductive biology. Post-Ph.D. experience and quality of research will be prime considerations. Appointee will be expected to teach one standard course and to develop a specialty course. For especially qualified person, rank of associate professor may be considered. *Women and members of minority groups are urged to apply.* Send résumé to: **A. Eisenstark, Director, Division of Biological Sciences, Tucker Hall, University of Missouri-Columbia, Columbia, Mo. 65211.**

ASSISTANT PROFESSOR, MOLECULAR BIOLOGY

Yale University, Department of Biology, invites applications for an appointment beginning in academic year 1979-1980 or 1980-1981 in molecular aspects of genetics or development. The appointee will be expected to contribute to a strong program of research and scholarship in molecular biology and to participate in undergraduate and graduate teaching. Send curriculum vitae, résumé of past and present research, and names of three referees to:

Chairman
Department of Biology
Yale University
New Haven, Conn. 06520

Yale University is an Affirmative Action/Equal Opportunity Employer.

ASSOCIATE DIRECTOR MONTANA AGRICULTURAL EXPERIMENT STATION

Applications/nominations invited for associate director, Montana Agricultural Experiment Station, Montana State University. Responsibilities include planning, development, direction, and administration of research program. Program encompasses 11 on-campus departments and seven Research Centers; cooperates with USDA-SEA-AR and CES.

Terminal degree, proven scholarly and professional competence, and administrative experience at an Agricultural Experiment Station, desired.

Position available 1 July 1979. Applications must be received by 30 March 1979, accompanied by current curriculum vitae and names of three references.

Montana State University is an Affirmative Action/Equal Opportunity Employer.

Send nominations and applications to:

T. T. Williams, Chairman
Associate Director Search Committee
205 Cobleigh Hall
Montana State University
Bozeman, Montana 59717
Telephone: 406-994-2115

BIOCHEMICAL GENETICIST

The Department of Human Genetics of the New York State Institute for Research in Mental Retardation is seeking a full-time member as a research scientist. Salary: \$20,566 (NIH grant). Requirements: Ph.D., postdoctoral training in biochemical genetics with emphasis on the lysosomal storage disorders (enzyme purification, use of radioactive substrates, electrophoretic techniques, and so forth). Individuals must be citizens or permanent residents of the United States. Send curriculum vitae, brief description of research interests, and three letters of recommendation to: **Dr. Nicholas G. Beratis, Department of Human Genetics, Institute for Research in Mental Retardation, 1050 Forest Hill Road, Staten Island, N.Y. 10314.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

Position available for **ASSISTANT PROFESSOR** in the Department of Physiology. Duties include teaching physiology at the undergraduate and graduate level. Pursue active research program in the area related to the action of pituitary growth hormone on carbohydrate metabolism. Qualifications include Ph.D. in physiology. Three years of postdoctoral experience in research and teaching. Demonstrated research ability as evidenced by publication record. Reply to: **Box 31, SCIENCE**, Code 200HO. A nondiscriminatory, Affirmative Action Employer.

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

Position available for **ASSOCIATE PROFESSOR** in the Department of Physiology. Duties include teaching physiology at undergraduate and graduate levels and pursuing active research program dealing with membrane transport mechanisms in intestinal epithelium. Qualifications include Ph.D. in physiology and postdoctoral research training. Previous experience teaching at graduate and professional levels. Demonstrated research ability as evidenced by publications and record of extramural funding for research. Reply to: **Box 32, SCIENCE**. Code 700FO. A nondiscriminatory, Affirmative Action Employer.

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

Applications are invited for a post at the **ASSISTANT PROFESSOR** level in the Division of Radiation Oncology at the University of California, College of Medicine, Irvine (chief, Dr. Martin Colman). This will be a full-time position with responsibilities for teaching at undergraduate and graduate levels and for clinical service and research in the University of California, Irvine, Medical Center. The applicant should be a Board-certified therapeutic radiologist, preferably with postcertification experience in therapeutic radiology, should be prepared to engage in ongoing research and will have the opportunity to develop new research protocols. The division participates in the Radiation Therapy Oncology Group and the Gynecology Oncology Group. *Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.* Applications, including a short biography and copies of any publications, should be sent to:

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

Closing date: 6 March 1979.

ASSISTANT OR ASSOCIATE PROFESSOR OF PHARMACOLOGY

University of Kentucky, College of Medicine. Applications for the position of assistant or associate professor of pharmacology are invited from candidates whose primary research interests and training are in the areas of autonomic and cardiovascular pharmacology. Responsibilities include the teaching of autonomic and cardiovascular drugs to medical and graduate students and developing a research program. Inquiries with a curriculum vitae and bibliography should be addressed to:

Dr. William R. Martin, Chairman
Department of Pharmacology
Room MR 111 Research Facility #2
University of Kentucky
Lexington, Kentucky 40536
An Equal Opportunity Employer

BIOCHEMIST—The Chemistry Department of the State University College at Oneonta invites applications for a faculty position at the rank of assistant professor beginning fall 1979 semester. Salary is dependent upon credentials. Candidates having the doctorate degree in biochemistry are preferred. Candidates should have a strong interest in lecture and laboratory instruction in biochemistry at the undergraduate level. Excellent opportunities exist for research. Send curriculum vitae, including a description of teaching and research experience, and arrange for three letters of recommendation to be sent to: **Dr. Paul V. Koehn, Chairman, Chemistry Department, State University College at Oneonta, Oneonta, New York 13820.** Closing date for application: 15 February 1979. *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR, TERRESTRIAL PLANT ECOLOGY OR VERTEBRATE ZOOLOGY. Ph.D. tenure-track position open September 1979; involves teaching general biology and courses in specialty, an active research program, and directing graduate students. Send résumé, transcripts, three letters of recommendation, and a statement of research interests and professional goals by 1 March 1979 to: **Dr. P. B. Hofslund, Chairman, Search Committee, Department of Biology, University of Minnesota, Duluth, Minn. 55812.** *An Affirmative Action/Equal Opportunity Employer.*

The Division of Metabolism in the Department of Pediatrics is recruiting for an **ASSISTANT RESEARCH BIOLOGIST**. Applicant must have a Ph.D. in biology (or related field); experience in cell culture, especially in growth requirements of cultural cells, is essential. Applicant will be expected to direct a large cell culture "service" laboratory which supplies media, freezes and thaws cells, and begins primary cell cultures for over 12 separate research laboratories; establish a research program to study optimal growth requirements for human diploid fibroblasts; establish a research program using human diploid fibroblasts to study aging, utilizing specific growth-promoting factors rather than serums. Salary in the University is determined by the level of rank.

The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer. Inquiries should be directed to: **Dr. Jerry A. Schneider, Department of Pediatrics, University of California, San Diego, La Jolla, California 92093.**

BIOCHEMIST

A 2-year appointment at the assistant professor rank. (Ph.D. required.) The person selected will teach chemistry courses for majors and nonmajors direct student research, and have the opportunity to carry out his or her own research in a newly equipped natural sciences building. Opportunities for collaborative research with numerous nearby industrial laboratories and New York Medical College. Submit résumé, names of three references, and research plans by 15 March 1979 to: **Chemistry Search Committee, Division of Natural Sciences, State University of New York, College at Purchase, Purchase, N.Y. 10577.**

An Equal Opportunity/Affirmative Action Employer

The Department of Biological Sciences of the University of Southern California (USC) announces

Two tenure-track positions available 1 September 1979. Candidates with an interest in one or more of the following fields: polychaete biology and evolution, marine benthic ecology, marine population genetics, or terrestrial community ecology should submit an up-to-date, complete curriculum vitae and list of three references to:

Dr. Jay M. Savage, Director
Evolutionary and Ecological Biology
University of Southern California
Los Angeles, California 90007

USC is an Equal Opportunity/Affirmative Action Employer and women and minority candidates are especially welcome as applicants for these positions.

BIOLOGIST—Opening fall 1979 for broadly trained anatomist/physiologist with additional training in invertebrate zoology and genetics. Ph.D. and college experience desired. Salary and rank negotiable. Send résumé to: **David E. Taylor, Chairperson, Division of Science and Mathematics, University of South Carolina at Spartanburg, Spartanburg, S.C. 29303.** *The University is an Affirmative Action/Equal Opportunity Employer.*

ENVIRONMENTAL ENGINEER (Ph.D.). Responsibilities require training in and teaching of state-of-the-art chemical and biological processes of potable and wastewater treatment. Joint teaching in research position with the Department of Biological Sciences and Institute of Applied Sciences. Experience in dynamic modeling highly desirable. Salary and rank open. Complete résumé with three letters of reference should be submitted to:

Environmental Engineer Search Committee
Institute of Applied Sciences
North Texas State University
NT Box 13078
Denton, Texas 76203

POSITIONS OPEN

BIOLOGY FACULTY POSITIONS UNIVERSITY OF PUERTO RICO

Applications are invited for tenure-track faculty positions at all levels of appointment. Ph.D. is required. Preference will be shown to candidates in the areas of microbiology, ecology, plant development biology, and parasitology. However, applications are encouraged from outstanding candidates irrespective of field of interest. A knowledge of the Spanish language is highly desirable. The new faculty members will be expected to establish a vigorous independent research program of outstanding quality and to participate actively in undergraduate and graduate instruction at the department. Application deadline: 1 March 1979. Interested persons should send curriculum vitae, a statement of their research plans and goals, copies of major publications, and the names of at least three references to:

Recruitment Committee
Department of Biology
University of Puerto Rico
Rio Piedras, Puerto Rico 00931

CELLULAR AND DEVELOPMENTAL BIOLOGY—SUNY AT ALBANY

The Department of Biological Sciences invites applications for the position of assistant professor from candidates who have demonstrated excellence in research and who have had significant postdoctoral training. Preference will be given to applicants pursuing studies of cell membranes, of mechanisms of cell-cell interaction or animal virus-cell interaction, and of recognition mechanisms for cell-surface determinants. Outstanding candidates in other areas of cellular and developmental biology will also be considered. Curriculum vitae and bibliography, a summary of research plans, and the names of three referees who are qualified to evaluate your scholarly potential should be sent prior to 1 March 1979, to: **Professor John W. Saunders, Chairman of Search Committee, Department of Biological Sciences, SUNY at Albany, 1400 Washington Avenue, Albany, N.Y. 12222.**

The State University of New York at Albany is an Equal Opportunity/Affirmative Action Employer. Applications from women, minorities, and handicapped are especially welcome.

CELLULAR IMMUNOLOGIST

The Department of Microbiology, University of Massachusetts at Amherst, has a faculty position available 1 July 1979. Research interest and training should be in the area of cellular immunology with particular emphasis on cell-mediated responses to virus infection. Investigators interested in Herpesvirus type 2 or "slow viruses" with interest in membrane interactions are particularly urged to apply.

Send curriculum vitae and three letters of recommendation to:

Dr. A. Bruce MacDonald, Head
Department of Microbiology
University of Massachusetts
Amherst, Mass. 01003

An Affirmative Action/Equal Opportunity Employer

CELLULAR PHYSIOLOGIST

Assistant professor with postdoctoral research and/or teaching experience. Must have strong interest in undergraduate instruction and supervision of honors research, and also be able to teach in areas of general biology, molecular biology, and animal physiology. Preference will be given to applicants specializing in cellular functions and macromolecular systems. Small but growing program offers a significant opportunity for participation in policy and for personal growth in a rich cultural environment. Send a detailed letter describing interest and qualifications, curriculum vitae, and list of three references by 2 March 1979 to: **Biology Search Committee, Division of Natural Sciences, State University of New York, College at Purchase, Purchase, N.Y. 10577.** *An Equal Opportunity/Affirmative Action Employer.*

CHAIRMAN, Department of Physiology. We are seeking an outstanding leader with demonstrated excellence in teaching, research, and administration to become chairman of our Department of Physiology, September 1979. Please submit complete curriculum vitae and names of four references by 15 April 1979 to: **Robert C. Schlant, M.D., Physiology Chairman Search Committee, Emory University School of Medicine, 69 Butler Street, SE, Atlanta, Georgia 30303; telephone: 404-588-4440.** *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

CHAIRMAN AND PROFESSOR, Department of Computer Science, Oregon State University. Nominations and applications are invited for the position of chairman to commence summer or fall 1979. Applicants must have superior academic credentials, including a Ph.D. in computer science, considerable research experience and interests, and sufficient administrative experience to indicate ability to direct a dynamically growing department into contemporarily relevant areas of research and industrial support. The department presently serves 250 undergraduate majors and 60 M.S. and Ph.D. candidates, including an actively growing satellite program in computer science and engineering serving the computer-related industries in the Portland area. Corvallis is a town of over 40,000 located in the mid-Willamette Valley, approximately 50 miles from either Pacific Ocean or Cascade Mountains. Cultural and recreational opportunities abound in the nearby environs. Salary is on a 12-month basis, and will be competitive for a candidate of superior capabilities in modern computer science. Interested applicants should contact: **Dr. Robert A. Short, Department Chairman Search Committee, Department of Computer Science, Oregon State University, Corvallis, Oregon 97331**, prior to 15 March 1979. *Oregon State University is an Affirmative Action/Equal Opportunity Employer and encourages applications from women, minority, and handicapped people.*

FACULTY POSITION—Ph.D. to assume assistant professorship and combine excellent teaching with high-quality research program. Preference shall be given to experimental inorganic or experimental physical chemists, although outstanding recent Ph.D. recipients with postdoctoral experience are encouraged to apply regardless of area of specialization. Résumé, brief but explicit statement of academic goals, three letters of recommendation, and transcript(s) should be sent prior to 1 March 1979 to: **Dr. Robert W. Kiser, Chairman, Search Committee, Department of Chemistry, University of Kentucky, Lexington, Kentucky 40506.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

DEAN COLLEGE OF SCIENCE THE UNIVERSITY OF TEXAS AT EL PASO

The University of Texas at El Paso is seeking a person to lead, administratively and academically, its College of Science which is composed of five departments: Biological Sciences, Chemistry, Geological Sciences, Mathematics, and Physics. The college has 81 tenure-track faculty positions and offers B.S. and M.S. degrees in all of its departments and a doctor of geological sciences degree. Applicants must possess a Ph.D., demonstrated administrative ability, and research and teaching experience at both the undergraduate and graduate levels so as to qualify for the rank of professor in one of the college's departments. Closing date for application is 28 February 1979, with date of appointment to be 1 June 1979, or 16 July 1979.

Each applicant should send a résumé and the names of at least three persons qualified to evaluate his/her qualifications and accomplishments to:

**Chairman
Search Committee for a Dean, College of Science
Office of the Vice President for Academic Affairs
The University of Texas at El Paso
El Paso, Texas 79968**

The University of Texas at El Paso is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION. Assistant to associate professor. Opening available, effective 1 July 1979, in the field of turbulence with emphasis on experimental methods. Doctorate in engineering required, with research interests in the mechanics and structure of turbulence in reacting flows. Responsibilities include the conduct of fundamental research, teaching undergraduate and graduate courses, and directing graduate students.

To ensure consideration, applications must be received by 23 March 1979. Send curriculum vitae to: **Professor G. S. Samuelsen, School of Engineering, University of California, Irvine, Calif. 92717.**

All qualified applicants are welcome; women and minority candidates are encouraged to apply.

POSITIONS OPEN

CHIEF CURATOR OF EARTH SCIENCES NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY

Nominations and applications are requested from distinguished scholars and academic administrators for the position of **CHIEF CURATOR** of Earth Sciences Division, with an anticipated starting date of early 1980. Salary will depend on experience and qualifications. We especially seek nominations for and applications from individuals who have records of significant and sustained scholarly contributions to a museum-related field of earth sciences and have demonstrated a potential for leadership and administration.

The chief curator must have the vision and leadership capability to maintain and enhance the scholarly excellence of the Earth Sciences Division. As the head of the division, the chief curator is responsible for the operation of the division and hence must have the capability to administer programs, engage the advice of and supervise the curatorial staff, and function effectively in a complex administrative environment.

Nominations should be submitted immediately. Applications including a curriculum vitae and names of four references should be submitted before 1 July 1979 to:

**Search Committee
Earth Sciences Division
Natural History Museum of Los Angeles County
Los Angeles, California 90007**

An Equal Opportunity/Affirmative Action Employer

MUSEUM DIRECTOR. The San Diego Society of Natural History is seeking an **executive director** to supervise an expanding, dynamic museum, including research and curation in the fields of natural history, exhibits, and educational activities. Must have administrative experience and be able to deal effectively with the public. Send résumés by 15 April to: **Search Committee, San Diego Society of Natural History, P.O. Box 1390, San Diego, Calif. 92112.** *An Equal Opportunity/Affirmative Action Employer.*

ADJUNCT PROFESSOR SEARCH ADJUNCT PROFESSOR OF CANCER BIOLOGY

The Cancer Biology Research Laboratory, Department of Radiology, Stanford University School of Medicine, invites applications for this position, which will become available 1 September 1979. The Cancer Biology Research Laboratory operates a multi-faceted program concerned with the cell culture, biological and immunological characterization, and virology of the human and murine malignant lymphomas. Candidates must have had substantial research experience in two or more of the following fields: C-type, RNA tumor viruses, lymphocyte biology, cell culture, cytology and cytogenetics, electron microscopy, and hematopathology. Experience with immunologic procedures such as indirect immunofluorescence assays, competition radioimmunoassay of viral protein, and the culture of "hybridoma" clones for the production of monospecific antibodies would also be highly desirable. The candidate selected would be expected to accept operational responsibility for a major segment of the research program, and for the supervision of one or more research associates and several research technicians, and would also serve as deputy director of the Cancer Biology Research Laboratory. The adjunct professorship is a 6-year, renewable, nontenured appointment, co-terminous with research support. Qualified candidates should send complete curriculum vitae and the names and addresses of four references to:

**Henry S. Kaplan, M.D.
Maureen Lyles D'Ambrogio Professor of Radiology and Director
Cancer Biology Research Laboratory
Department of Radiology
Stanford University Medical Center
Stanford, California 94305**

Stanford University is an Equal Opportunity Employer and welcomes nominations of women and minority group members and applications from them.



THE UNIVERSITY OF MANITOBA

invites applications and nominations for the position of

DEAN OF THE FACULTY OF SCIENCE

The Faculty of Science at the University of Manitoba has a complement of 180 faculty and 90 support staff. Its 12 departments and units span the biological, mathematical, and physical sciences; they offer a full range of undergraduate science programs for approximately 2100 students enrolled in the faculty, courses for a large number of students from other faculties and schools, and M.Sc. and Ph.D. programs for about 280 graduate students.

Candidates should have achieved distinction as scholars in a major field of science, have a commitment to advancing higher education in science, and have strong leadership ability. Relevant administrative experience and knowledge of the Canadian educational system would be assets.

The appointment is expected to commence 1 September 1979 and will be for a renewable term of normally 5 to 7 years.

Please address responses to:

**Provost R. A. Johnson
Chairman**

**Selection Committee for Dean of the Faculty of Science
Room 202, Administration Building
The University of Manitoba
Winnipeg, Manitoba, Canada R3T 2N2**

Applications, nominations, and suggestions will be received until 15 March 1979.

POSITIONS OPEN

CHAIRPERSON, Department of Biology. East Carolina University invites applications and nominations for the position of chairperson of the Department of Biology, starting 15 August 1979 or later. Well-equipped department including 21 faculty of diverse interests. Broad undergraduate program with graduate program to master's level. Applicants should have a record of quality research, proven ability to attract grant funds, a commitment to quality instruction at all levels, academic experience consistent with rank of associate or full professor, and administrative or supervisory experience. Experience in thesis direction at doctoral level desirable. Letter of application, curriculum vitae, and at least three letters of reference should be sent to: **Dr. C. E. Bland, Chairman, Search Committee, Department of Biology, East Carolina University, Greenville, N.C. 27834**. Closing date for receipt of applications is 15 March 1979.

East Carolina University 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.*

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.*

EUKARYOTIC MOLECULAR BIOLOGY DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF IOWA

The department invites applications and nominations for a faculty position at the assistant professor or associate professor level that will become available 1 July 1979. Responsibilities will include participation in the department's medical, graduate, and undergraduate teaching programs as well as in independent research. Applicants should hold a doctoral degree and have postdoctoral experience and/or previous faculty experience. Candidates will be evaluated on the basis of their dedication to excellence in teaching and research and on their capacities to develop a vigorous research program in eukaryotic molecular biology. Applicants should send curriculum vitae, list of publications, a summary of research interests, and have three letters of recommendation submitted on their behalf to:

**Dr. Thomas W. Conway
Chairman, Faculty Search Committee
Department of Biochemistry
University of Iowa
College of Medicine
Iowa City, Iowa 52242**

Deadline for applications and nominations: 1 March 1979.

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

POSITIONS OPEN

EXECUTIVE DIRECTOR OF NATIONAL ASSOCIATION OF BIOLOGY TEACHERS

A Selection Advisory Committee to the National Association of Biology Teachers invites nominations and applications for the position of executive director.

The National Association of Biology Teachers (NABT) is a professional organization of educators and scientists devoted to the improvement of education in the biological sciences. The association maintains its national headquarters in Reston, Virginia. It publishes *The American Biology Teacher* monthly, a newsletter bimonthly, and sponsors an annual convention in addition to many special projects and workshops.

It is desirable for the candidate to have experience in teaching in the biological sciences, a minimum of a baccalaureate in biology or biology education, administrative achievement, and demonstrated capacity to exercise educational leadership. The new director will be expected to assume duties not later than 1 July 1979.

Nominations and applications including current résumés and references may be sent until 1 March 1979 to:

**Phillip R. Fordyce, Chairman
NABT Selection Advisory Committee
Room 211-N Westcott Building
Florida State University
Tallahassee, Florida 32306**

An Equal Opportunity/Affirmative Action Employer

ENVIRONMENTAL EPIDEMIOLOGY—FACULTY POSITIONS. The University of Michigan, School of Public Health, has vacancies for two assistant professors, one in the Department of Environmental and Industrial Health, the other in the Department of Epidemiology. In collaboration with senior faculty, both will assist in developing a new master's program in environmental epidemiology.

The epidemiology applicant should have an M.D. degree and/or Dr. P.H. or Ph.D. in epidemiology. Research experience and/or training in environmental, occupational, cardiorespiratory, cancer, health service, or evaluative epidemiology would be an advantage.

The environmental health applicant should possess a doctoral degree in environmental health sciences or equivalent with a strong human health orientation and a good background in biostatistics and epidemiology. The candidate should have demonstrated teaching and research interests.

Curriculum vitae should be sent to: **Chairman of either Department of Environmental and Industrial Health or Department of Epidemiology, University of Michigan, School of Public Health, Ann Arbor, Michigan 48109**.

The closing date for applications is 15 April 1979.

The University of Michigan is a nondiscriminatory, 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

MOLECULAR GENETICIST—Tenure faculty position available 1 July 1979 as associate professor in the area of molecular organization of the genetic material especially as related to the control of gene expression or closely related areas. Candidates should have an established independent research program. Limited teaching at graduate level. Some institutional support and a biological containment facility available. Send résumé, brief summary of present and planned research, and three letters of reference to: **Dr. J. Oliver Lampen, Director, Waksman Institute of Microbiology, Rutgers University, P.O. Box 759, Piscataway, New Jersey 08854**. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITION IN FOREST ECOLOGY available 1 July 1979. Research on nutrient cycling and root zone dynamics of Pacific Northwest forests, with emphasis on young, managed forests. Leadership ability extremely important. Assistant professor; 12-month basis. Ph.D. (completed or near completion) required; \$18,000 to \$22,000 salary, dependent upon qualifications. Send letter of application, curriculum vitae, transcripts, and three letters of reference by 1 April 1979 to:

**John Gordon, Head
Department of Forest Science
School of Forestry
Oregon State University
Corvallis, Oregon 97331**

Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.

FACULTY POSITION IN REFORESTATION RESEARCH available 1 July 1979. Research on reforestation of difficult sites, with emphasis on improved seed and seed handling techniques, with heavy participation in continuing education programs. Assistant professor; 12-month basis. Ph.D. (completed or near completion) required; \$18,000 to \$22,000 salary, dependent upon qualifications. Send letter of application, curriculum vitae, transcripts, and three letters of reference by 1 April 1979 to:

**John Gordon, Head
Department of Forest Science
School of Forestry
Oregon State University
Corvallis, Oregon 97331**

Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.

FACULTY POSITIONS IN NUTRITION AND BIOCHEMISTRY

The Department of Biological Chemistry invites applications for two faculty positions at the level of assistant or associate professor. Applicants are expected to have demonstrated originality and productivity in research and the potential for excellence in teaching.

Applications from those in all areas of research will be considered; however, for one position, preference will be given to those who are by experience biochemical nutritionists, with an interest in lipid, nitrogen, or energy metabolism. In addition to research work, the successful applicant will be expected to develop courses in biochemical aspects of nutrition and to participate in other departmental courses as appropriate.

For the second position, preference will be given to those interested in cell receptors, cell surfaces, or the glycoproteins of normal or transformed cells.

The department participates in the training of medical, graduate, and undergraduate students. The successful applicants will be appointed to the faculty of the School of Medicine and of the College of Science and Engineering.

Send curriculum vitae, a brief statement of research plans, and the names of three people who would be willing to send letters of recommendation to: **Search Committee, Department of Biological Chemistry, Wright State University, Dayton, Ohio 45435**.

Applications will be considered until 15 March or thereafter as needed to locate suitable candidates. *Wright State University is an Equal Opportunity/Affirmative Action Employer.*

DEPARTMENT OF CELLULAR, VIRAL, AND MOLECULAR BIOLOGY UNIVERSITY OF UTAH MEDICAL CENTER

Applications are being solicited for a **FACULTY POSITION** (tenure-track) at the assistant/associate professor level in our department. The individual should have a Ph.D. or M.D., a minimum of 2 years of postdoctoral experience, and the potential for establishing a vigorous and independent research program. The individual should also be willing and able to play an active role in our graduate program in cellular, viral, and molecular biology and to teach in the Medical School basic science curriculum.

This University and Department are Equal Opportunity Employers.

Please send résumé and three letters of recommendation to:

**Donald F. Summers, M.D.
Department of Viral, Cellular, and Molecular Biology
University of Utah
5C126 Medical Center
Salt Lake City, Utah 84132**

Appointment of

Director Dental Unit

The Medical Research Council invites applications for the post of DIRECTOR of a new Dental Unit. The first choice for the location of the new unit is Bristol, but other locations are not excluded.

The research programme of the unit will be a matter for discussion between the new Director and the Council, having regard to the particular interests of the candidate selected.

Candidates should be persons of high scientific standing – preferably, but not necessarily, with a dental qualification – and proven ability in leading a research team.

The salary will be within the range for the Council's Special Appointments Grade, which is equivalent to the Universities' professorial range.

Further particulars, including details of the method of application, may be obtained from Miss N. S. Jones, 20 Park Crescent, London W1N 4AL.

This post is open to both male and female applicants.

The final date for the receipt of applications is 31 March, 1979.

MRC

Medical Research Council

Immunopharmacologists PhD's (2)

Share significantly in an expanding, exciting asthma research effort

Immediate openings for a Senior or Group Leader level Immunopharmacologist as well as a Senior Immunopharmacologist particularly familiar with cellular aspects of immunobiology.

Research activities will include monitoring and coordinating ongoing immunopharmacology projects as well as developing innovative techniques for screening/profiling anti-asthma drugs utilizing various *In Vivo/In Vitro* immunologic and anti-inflammatory test systems.

USV Laboratories, located in Westchester County, has modern facilities and a well-trained technical staff. Position level and salary commensurate with experience and qualifications. Please send curriculum vitae with salary requirements to:

Manager, Selection and Placement

USV
LABORATORIES

One Scarsdale Road
Tuckahoe, New York 10707

An Equal Opportunity Employer M/F

2 FEBRUARY 1979

**STATE
OF
KUWAIT**

**KUWAIT
UNIVERSITY**

**ENVIRONMENTAL/
GEOMORPHOLOGY—
GEOLOGY
DEPARTMENT**

The Department invites applicants for a 2 year renewable appointment starting September 1979. Qualifications include a Ph.D., experience in teaching environmental geology and geomorphology and willingness to participate (*on rotating basis*) in instructing elementary courses in marine, geo-statistics and introductory Geology. The candidate will be expected to assist in developing research programs in Geology and teaching in the Graduate School which opens shortly. Applicants should send resume and three letters of reference to:

**KUWAIT
UNIVERSITY**

Department of
Administrative Affairs
P.O. Box 5969,
Kuwait.

POSITIONS OPEN

FACULTY POSITIONS—MICROBIOLOGY. Two positions at the assistant or associate professor rank beginning 15 August 1979. Applicants must have a strong background in microbiology and expertise in immunology, microbial genetics, microbial ecology, virology, or some other area of microbiology. Postdoctoral research and/or academic experience is preferred. Appointees will be expected to teach undergraduate and graduate courses, supervise master's and Ph.D. students, and establish vigorous research programs. Curriculum vitae, including lists of publications and graduate courses, statements of teaching and research interests, and three letters of recommendation, should be sent before 15 March 1979 to: **Dr. Howard Hetzel, Chairman, Department of Biological Sciences, Illinois State University, Normal, Ill. 61761.** An Equal Opportunity/Affirmative Action Employer.

The Department of Biology at Indiana University-Purdue University, Indianapolis, anticipates the possibility of an opening for a tenure-track **FACULTY POSITION** at the rank of assistant professor to commence in August 1979. The successful candidate is expected to contribute to a course in **INTRODUCTORY ZOOLOGY** and teach one upper level or graduate course in the applicant's field of specialization such as **ENDOCRINOLOGY, COMPARATIVE ANATOMY, or CHEMICAL or MOLECULAR ASPECTS OF EMBRYOLOGY.** Development of an active program of research and scholarship is required. Please send résumé, including a statement of research goals and transcripts, by 28 February 1979, and arrange to have three letters of recommendation sent to:

**Dr. Ralph Ockerse, Chairman
Department of Biology
School of Science
Indiana University-Purdue University
at Indianapolis
1201 East 38 Street
Indianapolis, Indiana 46205**

An Affirmative Action/Equal Opportunity Employer

HEMODIALYSIS RESEARCH PROJECT DIRECTOR

We are an established private research institute looking for a project director who will initiate and supervise projects in clinical hemodialysis. You would be a senior scientist, Ph.D. or M.D., interested in evaluation of dialysis technology in a clinical setting. Experienced in formulating and managing clinical trials especially of extracorporeal devices. Reply in strict confidence to: **Box 25, SCIENCE.**

HYDROLOGIST/GEOLOGIST. A tenure-track teaching/research position will be available September 1979 at the assistant professor level for a hydrologist or geologist with interest in surface or ground water quality or quantity modeling. Applicant should have ability to teach introductory courses in geology; experience in remote sensing is desirable; a Ph.D. is required. Position is a joint appointment with the Department of Geography and Institute of Applied Sciences. Apply to: **Dr. Terry G. Jordan, Department of Geography, North Texas State University, Denton, Texas 76203.** An Equal Opportunity Employer.

Ph.D., LIPID BIOCHEMIST, to direct a busy lipid and lipoprotein research laboratory at the Massachusetts Institute of Technology (MIT) Arteriosclerosis Center (Robert S. Lees, M.D., director). The work will include the following techniques and experience with them is required: gas liquid chromatography; qualitative and quantitative lipid separations; lipoprotein biochemistry and immunology. Please submit résumé to: **MIT Personnel Office, 400 Main Street, Cambridge, Mass. 02139. Attention: Job No. R78-55.**

PEDIATRICIAN. Faculty position: Department of Pediatrics, University of Louisville School of Medicine. Pediatrician with subspecialty training in pediatric nephrology. Applicant must have pediatric Board-eligibility or -certification in pediatrics and pediatric nephrology. Demonstrated teaching, research, clinical competence, and desire for an academic future are necessary. The individual will be responsible for teaching, service, and research programs in pediatric nephrology in a children's hospital and as a consultant to area practitioners. Submit curriculum vitae to: **Billy F. Andrews, M.D., Professor and Chairman, University of Louisville School of Medicine, P.O. Box 35260, Louisville, Ky. 40232.** The University of Louisville is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

VISITING LECTURER, BIOLOGY College of Arts and Sciences

Visiting lecturer, biology; full-time. One-year appointment beginning 1 September 1979. Will be expected to teach comparative vertebrate anatomy and introductory biology courses. Ph.D. or ABD in biology with teaching experience.

Visiting lecturer, biology; full-time. Marine environmental biology. One-year appointment beginning 1 September 1979. Will be expected to teach aquaculture and biology core courses. Ph.D. or ABD in biology with teaching experience.

All positions subject to the availability of funds.

Salary: \$12,500 to \$18,900.

Deadline: 1 March 1979.

Send résumé to: **Dr. Sanford A. Moss, Chairman, Search Committee, Department of Biology, Southeastern Massachusetts University, North Dartmouth, Mass. 02747.**

Southeastern Massachusetts University is an Equal Opportunity/Affirmative Action Employer. Applications from members of minority groups and women are particularly encouraged.

PATHOLOGIST—Dartmouth Hitchcock Medical Center has an opening for a well-trained, Board-qualified or -certified pathologist prepared to play a major role in anatomic pathology, particularly surgical pathology, with an active interest and at least 5 years of experience in educational programs for residents and medical students in an academic medical center. Individuals applying should have experience in the utilization of electron microscopic and immunofluorescent techniques. In addition, candidates should have demonstrated a serious interest and effort in biomedical research. Applications will be accepted through 28 February 1979.

Direct inquiries to: **George D. Sorenson, M.D., Chairman, Department of Pathology, Dartmouth Medical School, Hanover, N.H. 03755.**

Equal Opportunity/Affirmative Action Employer

PEDIATRICIAN. Faculty position: Department of Pediatrics, University of Louisville School of Medicine. Pediatrician with subspecialty in pediatric gastroenterology. Applicant must have pediatric Board-eligibility or -certification in pediatrics and pediatric gastroenterology; and demonstrated teaching, research, clinical competence, and desire for academic future. The individual will be responsible for teaching, service, and research programs in pediatric gastroenterology in a children's hospital and as a consultant to area practitioners. Please submit curriculum vitae to:

**Billy F. Andrews, M.D.
Professor and Chairman
Department of Pediatrics
University of Louisville School of Medicine
P. O. Box 35260
Louisville, Kentucky 40232**

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

Ph.D. IN IMMUNOLOGY OR EXPERIMENTAL HEMATOLOGY to work in in vitro laboratory on research involving human monocytes and hematopoietic stem cells. Extramural funding supports the position in Department of Medicine, Division of Medical Oncology. Send curriculum vitae and letter to: **Roy S. Weiner M.D., Chief, Division of Medical Oncology, Box J-277, J. H. Miller Health Center, University of Florida, Gainesville, Fla. 32610.**

PHYSIOLOGICAL TECHNICIAN to work as a research and teaching assistant. Experienced in the preparation of mammals for acute and chronic surgery, electrical recording and stimulation. Knowledge of electrophysiological instruments and anesthetic techniques desirable. Salary range: \$12,200 to \$15,800. Begins 1 September 1979. Send applications by 1 March to: **Dr. William S. Battersby, Department of Psychology, Queens College, City University of New York, Flushing, N.Y. 11367.**

An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION, neuropharmacology. Available immediately. To study effects of chronic alcohol opiate treatments on synaptosomal ion transport, membrane composition, and membrane physical properties. Experience with membrane transport, lipid techniques, fluorescent probes, or differential scanning calorimetry desirable but not essential. Send résumé and list of references to: **Dr. R. Adron Harris, Department of Pharmacology, University of Missouri School of Medicine, Columbia, Mo. 65212.**

POSITIONS OPEN

POSTDOCTORAL POSITION. Research on the molecular biology of insect development, hormonal control of mRNA synthesis, and in vitro transcription. Experience in nucleic acid hybridizations desired. Send résumé and names of three references to: **Dr. S. Sridhara, Department of Biochemistry, University of Mississippi Medical Center, 2500 North State Street, Jackson, Miss. 39216.** The University of Mississippi Medical Center offers Equal Opportunity in Education and Employment, M/F.

POSTDOCTORAL POSITION. Conformational attributes of proteins and synthetic model systems studied by kinetic, spectroscopic, and other methods. Requires background in biophysical chemistry and/or peptide synthetic chemistry. Available immediately. Salary: \$11,000 to \$13,000. Send curriculum vitae and three letters of recommendation to: **Dr. Henry E. Auer, Department of Biochemistry, Medical College of Wisconsin, P.O. Box 26509, Milwaukee, Wis. 53226.** Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION in membrane protein sequencing is available immediately. The project involves microsequencing of membrane proteins. Expertise in automated protein sequencing is required. One-year salary and benefits guaranteed, continuation dependent on fellowship or other arrangements. Send curriculum vitae, two letters of reference, and names of two other references to: **Dr. Juris Ozols, Department of Biochemistry, University of Connecticut, Health Center, Farmington, Conn. 06032.** An Equal Opportunity Employer, M/F.

POSTDOCTORAL POSITION. Available immediately for research on cell membranes as potential targets for anticancer agents. Work involves a variety of biochemical and biophysical methodologies including cell culture and magnetic resonance techniques. Send résumé to: **Dr. T. R. Tritton, Department of Pharmacology, Yale University School of Medicine, New Haven, Conn. 06510.**

POSTDOCTORAL POSITION available immediately. Strong background in biochemistry is essential. Project involves biochemical studies on cell-membrane proteins and on cell respiration. Experience in enzymology and tissue culture desirable. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. S. C. Mohos, Department of Pathology, New York Medical College, Valhalla, N.Y. 10595.** Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION (BIOPHYSICAL) available spring, summer, or fall for a combined spectroscopic, kinetic, thermodynamic, and enzymatic study of the binding of anticancer drugs to DNA, oligonucleotides, and polynucleotides of defined sequences. Experience in spectroscopy (FT-NMR, circular dichroism, or fluorescence), nucleic acid chemistry, or enzymology preferred. State of the art instrumentation (including a new Supercon NMR instrument) is available for this research program. Interested applicants should submit curriculum vitae, transcript, and three letters of recommendation to: **Professor Thomas R. Krugh, Department of Chemistry, University of Rochester, Rochester, New York 14627.**

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

POSTDOCTORAL RESEARCH POSITION available for a period of 1 to 2 years to collaborate with a research group studying the developmental genetics of RNA metabolism and spermatogenesis in *Drosophila melanogaster*. The applicant must possess a Ph.D. and have had previous experience in *Drosophila* genetics and contemporary molecular techniques. The position is available immediately and the stipend will be comparable to that received by NIH postdoctoral fellows. Interested persons should contact: **Dr. Barry Kiefer, Department of Biology, Wesleyan University, Middletown, Conn. 06457.** Wesleyan University is an Affirmative Action/Equal Opportunity Employer.

**ASSISTANT OR ASSOCIATE
PROFESSORS, BIOLOGY
COLLEGE OF ARTS AND SCIENCES**

Assistant or associate professor, biology; tenure-track position. To teach courses in vertebrate physiology with particular emphasis on the physiology of marine and estuarine fishes. Expected to teach general physiology, comparative physiology, and advanced ichthyology. Qualifications: Ph.D. in biology by 1 March 1980, with teaching experience.

Assistant or associate professor, biology; tenure-track position. To teach courses in biological oceanography with particular emphasis on zooplankton dynamics and trophic efficiency. Expected to teach descriptive oceanography, biological oceanography, and core courses. Coordinate use and maintenance of the University's research vessel. Qualifications: Ph.D. in biology by 1 March 1980, with teaching experience.

Assistant or associate professor, biology; tenure-track position. To teach courses in microbiology with research experience in microbial physiology. Expected to teach general microbiology, microbial physiology, and genetic mechanisms. Qualifications: Ph.D. in biology by 1 March 1980, with teaching experience.

Assistant or associate professor, biology; tenure-track position. To teach courses in cell biology with experience in transmission electron microscopy. Expected to teach biology of cells, molecular biology, and core biology courses. Qualifications: Ph.D. in biology by 1 March 1980, with teaching experience.

All positions subject to the availability of funds. Salary: \$12,500 to \$18,900 (assistant), and \$17,300 to \$26,300 (associate).

Deadline: 15 March 1979.

Send résumé to: Dr. Sanford A. Moss, Chairman, Search Committee, Department of Biology, Southeastern Massachusetts University, North Dartmouth, Mass. 02747.

Southeastern Massachusetts University is an Equal Opportunity/Affirmative Action Employer. Applications from members of minority groups and women are particularly encouraged.

**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
BIOLOGY
PHYSICS
BIOCHEMISTRY
ANATOMY
PHYSIOLOGY
PHARMACOLOGY**

**PATHOLOGY
COMMUNITY
MEDICINE
EPIDEMIOLOGY
MICROBIOLOGY
PARASITOLOGY**

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 FELLOWSHIPS IN
VIRAL ONCOLOGY AND RELATED
DISCIPLINES**

A number of postdoctoral fellowships are available for research in the fields of viral oncology and related disciplines in several departments at the University of Wisconsin-Madison, including the Departments of Bacteriology, Biochemistry, Biophysics, Genetics, Human Oncology, Medical Microbiology, Oncology, Pharmacology, and Physiological Chemistry. These National Research Service Fellowships pay \$10,000 to \$14,000 per year, depending on experience.

The training program is under the direction of Howard M. Temin, with Paul Kaesberg as co-director. Other trainers include: J. Anderregg*, Fred Blattner*, Ernest Borden*, Richard Burgess*, James Dahlberg, Julian Davies, Harry Hinze*, Martha Howe*, Ross Inman*, William McClain*, Janet Mertz*, Masayasu Nomura, June Osborn, William Reznikoff*, Rex Risser, Roland Rueckert, O. Smithies*, Bill Sugden*, Wacław Szybalski*, Duard Walker, and Robert Wells*.

Training consists of research experience in the laboratory of one trainer, as determined by available openings (* indicates opening for 1979-1980), and regular contact with the entire group at twice-weekly seminars.

Postdoctoral candidates who are U.S. citizens or permanent residents are invited to send complete curriculum vitae with detailed research experience, background, field of interest, and date available to:

Helen Iverson
McArdle Laboratory for Cancer Research
University of Wisconsin
450 North Randall Avenue
Madison, Wisconsin 53706

The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer and does not discriminate on the basis of sex or race with regard to either admissions or employment in the educational programs or activities which it operates.

UNIVERSITY OF CALIFORNIA, IRVINE

The DEPARTMENT OF DEVELOPMENTAL AND CELL BIOLOGY anticipates recruiting for the positions described below to be effective as early as the 1979-1980 academic year:

ASSISTANT PROFESSORS (TWO)

Comparative Regulatory Physiologist:

An individual is sought with research interests in one or more of the following areas: comparative endocrinology, muscle or respiratory physiology, transport physiology, or adaptational biochemistry. Research orientation should be quantitative and broadly comparative.

Developmental Biologist:

Applications are invited from persons with interests and experience in the study of pattern formation in development, especially in the nervous system or in plants or single cells.

Both of the above appointees are expected to establish a productive research program and to participate in instruction at both undergraduate and graduate levels. Candidates must have a Ph.D. degree and postdoctoral experience is desired.

LECTURER POSITIONS

Two 1-year positions are available in the fields of developmental, cellular, or physiological biology. The candidates should be qualified to coordinate the laboratories in large undergraduate courses and/or give lectures in a nonmajor course in physiology. Teaching experience and the Ph.D. degree are required.

POSTDOCTORAL POSITIONS

Several postdoctoral positions are available in the following areas with the indicated faculty: comparative invertebrate marine physiologist (G. C. Stephens); action of peptide receptors in *Hydra* (H. Lenhoff); ultrastructural biochemistry of immobilized enzymes acting in the solid state (H. Lenhoff); subcellular laser microsurgery (M. Berns); and cell immunologist working with monoclonal antibodies (M. Berns).

Applicants should submit curriculum vitae and three letters of recommendation to: Chair, Search Committees, Department of Developmental and Cell Biology, University of California, Irvine, California 92717.

All qualified candidates welcome; minorities and women encouraged to apply.

**ENZYMOLOGISTS
San Francisco Bay
Area**

SYNTEX, a leading International Pharmaceutical/Life Sciences Company, is initiating a program in the area of recombinant DNA and seeks qualified individuals to become involved in this specialized research.

One or more senior-level positions are available for individuals to assume responsibility for this program. You must have sound practical experience with restriction nucleases, DNA ligase, plasmids & gene expression.

Positions require PhD in Enzymology/Biochemistry, along with 3-5 years exp. in molecular biology of DNA with particular emphasis in recombinant DNA technology. Support positions for BS or MS level Biochemists are also available.

SYNTEX offers excellent work environment, competitive salaries & attractive benefits package. Please send resume, including salary history, to Ralph Torrence, Professional Employment, SYNTEX, 3401 Hillview Ave., Palo Alto, CA 94304. We are an equal opportunity employer.

SYNTEX

**UNIVERSITY OF
MALAYA
Faculty of Science**

Applications are invited for the posts of **LECTURER IN THE DEPARTMENT OF GENETICS & CELLULAR BIOLOGY** in the field of **VIROLOGY/BACTERIOLOGY**.

Candidates should possess a good basic degree in Microbiology and have teaching and research experience in the required field. They should also possess at least a Master's degree or a Ph.D. in the required field.

Salary Scales (All inclusive) [Approx. stg. equiv.]: £3602x168-3939/4107x168-4443/4780x280-6182/Review Pint £6462x336-6799. The commencing salary for Lecturers with a Ph.D. degree shall be £4107 p.a.

Further particulars and application forms are obtainable from the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF.

Applications should be lodged as soon as possible.

POSITIONS OPEN

POSTDOCTORAL POSITIONS

Two postdoctoral research associate positions available starting anytime after 1 June 1979. One position available in laboratory of Dr. Allan M. Lefer (cardiovascular physiology), the other in the laboratory of Dr. Marlys H. Gee (pulmonary physiology). Cardiovascular position concerns study of myocardial ischemia, coronary flow, cardiogenic shock, and role of prostaglandins and other vasoactive humoral substances. Pulmonary position concerns study of pathophysiology of pulmonary edema, mechanisms of transvascular fluid and protein transport, and mechanisms of clearance of edema fluid. Stimulating medical university environment in rapidly developing research-oriented department. Projects are fully funded. Send curriculum vitae and three letters of recommendation to: **Dr. A. M. Lefer** (cardiovascular position), or **Dr. M. H. Gee** (pulmonary position), Department of Physiology, Jefferson Medical College, Thomas Jefferson University, Philadelphia, Pa. 19107.

Thomas Jefferson University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS

Postdoctoral positions available at Brown University under NRSA training program for U.S. citizens or permanent residents who hold the Ph.D., M.D., or equivalent degrees. Positions are available at the early postdoctoral level to work with the following faculty: K. Adamsons, G. Clowes, J. Coleman, M. Czech, J. Fain, P. Galletti, G. Johnson, W. Oh, and R. Schwartz. The major areas of research training are: mechanism of insulin action on fat cell membranes, mode of insulin action on liver and fat cells, beta cell and islet culture devices, insulin resistance in obesity, role of insulin in the development of glucose control during maturation, and reconstitution of adenylate cyclase. Inquiries should be directed to: **Dr. John N. Fain, Box G, Division of Biology and Medicine, Brown University, Providence, Rhode Island 02912.** *An Equal Opportunity/Affirmative Action Employer.*

UNIVERSITY OF MIAMI DEPARTMENT OF BIOCHEMISTRY POSTDOCTORAL RESEARCH ASSOCIATE

Applications are invited for the position of research associate in the Department of Biochemistry, University of Miami School of Medicine. A biochemist with experience in immunological techniques and cell biology would be preferred. Duties will include studies on procedures for enzyme modification that result in products with increased therapeutic usefulness [see, for example, *Trends in Biochemical Sciences* (1978) 3, 79-83]. Salary according to experience. Only highly motivated individuals need apply. Further information from and applications to: **Dr. J. J. Marshall, Department of Biochemistry D4-9, University of Miami School of Medicine, P.O. Box 016960, Miami, Florida 33101.** Applications should include the names of three referees.

POSTDOCTORAL RESEARCH POSITION. Two-year position available immediately for research on the regulation of ribosome biosynthesis in lower eukaryotes (*Neurospora*). Recent Ph.D. (biochemistry, molecular biology, genetics) with experience in ribosomes or nucleic acids preferred. Send curriculum vitae and three letters of reference to: **Dr. Peter J. Russell, Biology Department, Reed College, Portland, Oregon 97202.**

An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION: available July 1979.

For study of corticosteroid action on intestinal ion transport. We are interested in individuals with previous experience in steroid receptors or voltage clamp techniques. Send résumé and names of three references to: **Dr. Henry J. Binder, Department of Medicine, Yale University, New Haven, Connecticut 06510.** *Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE

Required to engage in radiobiological research involving charged particles. At least 2 years of relevant postdoctoral experience desirable with expertise in the culture of mammalian cells and the use of densely ionizing radiations including neutrons and heavy charged particles. Apply with résumé to: **Dr. Eric J. Hall, Radiological Research Laboratory, College of Physicians and Surgeons of Columbia University, 630 West 168 Street, New York, N.Y. 10032.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTGRADUATE RESEARCH DEPARTMENT OF BIOLOGY PRINCETON UNIVERSITY

NIH postdoctoral training grant positions for recent Ph.D.'s in the areas of biochemical and genetic aspects of cell differentiation (Doctors T. Cline, E. Cox, A. Newton, and P. Schedl), cell biology and development (Doctors J. Bonner, E. Cohen, M. Steinberg, and G. Witman), and behavioral and population genetics (Doctors J. Ender, J. Gould, R. May, and W. Quinn) are available beginning summer 1979. Applications should include curriculum vitae and summary of research interest. Closing date: 2 April 1979. Inquiries or applications should be sent to: **Dr. E. C. Cox, Chairman, Department of Biology, Princeton University, Princeton, N.J. 08540.** *Princeton University is an Equal Opportunity/Affirmative Action Employer.*

PROFESSOR

Position available 1 September 1979, to teach undergraduate general microbiology, advanced bacteriology to advanced undergraduate and graduate students, and to develop a graduate course in pollution microbiology. To develop a research program in environmental microbiology at the Ph.D. level. Successful candidate must have Ph.D. degree in microbiology, national reputation in environmental and pollution microbiology, and publications. Salary range: \$22,000 to \$28,000. Submit résumé by 1 March 1979 to:

Dr. Paul S. Cohen
Department of Microbiology
UNIVERSITY OF RHODE ISLAND
Kingston, Rhode Island 02881
An Affirmative Action/Equal Opportunity Employer

RESEARCH ASSISTANT PROFESSOR

The Graduate Center for Materials Research, University of Missouri-Rolla, invites applications for a nontenure-track position that begins March 1979. Duties include ESCA and Auger electron spectroscopy investigation of materials, and cooperative work with faculty and students involved in surface research. Original research initiated by the person filling this position will be encouraged. The candidate must have a Ph.D. in physics, chemistry, ceramic engineering, metallurgy, or materials science and a minimum of 1 year of experience in surface science research. Starting salary in the range of \$15,000 to \$20,000, depending on qualifications. Send résumé and references to: **Professor L. L. Levenson, Graduate Center for Materials Research, University of Missouri-Rolla, Rolla, Missouri 65401.**

WASHINGTON: RESEARCH ASSISTANT PROFESSOR, Department of Anesthesiology, University of Washington, School of Medicine. Minimum qualification: at least 2 years or more of postdoctoral experience in central chemical regulation of ventilation. Position dependent on outside research funding. *The University of Washington is an Affirmative Action/Equal Opportunity Employer.* Write, enclosing curriculum vitae, to: **Thomas F. Hornbein, M.D., Professor and Chairman, Department of Anesthesiology, RN-10, University of Washington School of Medicine, Seattle, Wash. 98195.**

RESEARCH ASSOCIATE—Position available for research associate with experience in hormone analysis. Candidate must have familiarity with all equipment used in an endocrinology laboratory and be able to carry on research in a semi-independent manner. Qualifications: master's in physiology or chemistry and minimum of 2 years of experience in radioimmunoassay and radioreceptor techniques. Minimum salary: \$11,700. Please send résumé to: **Maureen V. Murphy, Employment Manager, BETH ISRAEL HOSPITAL, 330 Brookline Avenue, Boston, Mass. 02215.** *An Equal Opportunity Employer.*

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

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

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TERATOLOGIST/ REPRODUCTION TOXICOLOGIST

Battelle, one of the world's largest contract research and development organizations, has an immediate opening for an M.S./Ph.D. with at least 2 years of experience in the conduct of studies to examine the embryo-fetal toxic and teratogenic potential of environmental agents or in conducting teratology studies.

Excellent career opportunities, competitive salary and benefits package. Send résumé in confidence to: **Leslie G. Hill, Manager, Employment.**



Columbus Laboratories
505 King Avenue
Columbus, Ohio 43201
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TERRESTRIAL BIOLOGIST

Major utility requires terrestrial biologist for Environmental Affairs Department. Position involves working with other biological, physical science, and socioeconomic professionals. As a member of this interdisciplinary team, this person will be responsible for conducting field studies and preparing the portions of environmental impact statements within area of expertise. Duties also include consulting with company operating personnel, evaluating new projects and analyzing proposed legislation and regulations. Masters degree in terrestrial biology and 5 years of related experience or a Ph.D. degree in terrestrial biology required. Office location—mid-Atlantic states. Please submit resume and salary history to:

Box 16, SCIENCE

An Equal Opportunity Employer M/F/H



The International Atomic Energy Agency seeks for its laboratory at Monaco a senior marine alpha radioactivity specialist. An advanced university degree in chemistry, physics or chemical oceanography and 10 years experience in polonium and plutonium techniques are essential. Initial contract two years. Emoluments depending on experience US\$35,000 per annum tax-free. Additional allowances if married. Travel and removal expenses paid. Six weeks annual leave. Send curriculum vitae under VN 61/78 to IAEA, Division of Personnel, P. O. Box 590, A-1011 Vienna, Austria.

**CSIRO
RESEARCH SCIENTIST
DIVISION OF FISHERIES
AND OCEANOGRAPHY
PERTH, WESTERN AUSTRALIA**

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

FIELD: BIOLOGICAL OCEANOGRAPHY.

GENERAL: the division is Australia's principal marine research institution with about 70 scientists investigating the physical, chemical, and biological features including fisheries of the oceans around Australia. Headquarters of the division are at Cronulla, Sydney, with regional laboratories in Perth, Brisbane, and a field laboratory at Karumba. On-line access to a Cyber 76 computer is available. Two well-equipped medium-sized chartered vessels are available for oceanographical research and there are several smaller CSIRO vessels. (Generous removal and resettlement costs including rental assistance for a reasonable period will be paid.)

DUTIES: to initiate and carry out research in primary and secondary productivity of limestone reefs off Southwestern Australia, with particular attention to the interaction between offshore and onshore influences as determinants of the stability of the benthic ecosystem.

QUALIFICATIONS: a marine ecologist is required with experience in plant and animal physiological and biochemical ecology and knowledge of biochemical techniques and the use of radioactive isotopes. Minimum formal qualifications are a Ph.D. or equivalent.

SALARY: research scientist: A\$14,829 to A\$18,177 per annum or senior research scientist: A\$18,819 to A\$21,543 per annum.

TENURE: indefinite with superannuation.

Applications stating full personal and professional details, the names of at least two referees, and quoting reference number 320/608 should reach: The Chief, Division of Fisheries and Oceanography, CSIRO, P.O. Box 21, Cronulla, New South Wales 2230, Australia, by 16 February 1979.

**SPECIAL WORKSHOP
White Noise Analysis of
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Instructors: V. Z. Marmarelis, G. P. Moore, and R. A. Auriemma.

A lecture and demonstration course for physiologists and engineers in the use of multiple, continuous, and discrete random inputs for the quantitative analysis of physiological systems.

For information write or call:

**White Noise Workshop
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Biomedical Engineering
University of Southern
California
University Park
Los Angeles, California
90007**

Telephone: 213-741-6708

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G.D. Searle & Co., Research & Development Division, is seeking an experienced analytical chemist to manage our Methods Development and Special Projects section.

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Qualifications include Ph.D. in Analytical Chemistry or Biochemistry with appropriate post doctoral training. In addition 3-5 years experience in industry, government or university hospital laboratory with demonstrated capacity to do original analytical research are essential.

Please submit resume with salary history or requirements in confidence to:

Peter J. Vozas

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POSITIONS OPEN

RESEARCH ASSOCIATE POSITION

The condensed matter theory group at The James Franck Institute of The University of Chicago expects to have available research associate positions starting in September 1979. All interested candidates are invited to apply to one of the following: M. Cohen, J. Hertz, L. Kadanoff, K. Levin, or G. Mazenko, The James Franck Institute, 5640 South Ellis Avenue, Chicago, Illinois 60637. Letters of application should include a résumé and the names of three references, and should be received by 21 February 1979.

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

RESEARCH FELLOW IN NUTRITION, Harvard School of Public Health. Postdoctoral position immediately available in the Department of Nutrition for a candidate with a Ph.D. in nutrition or related area to direct research on the biological assessment of vegetable proteins using infant monkeys. Duties include anthropometry, metabolic balance, body composition, and so forth, with special emphasis on protein metabolism. Handling of experimental animals and ability to work with supporting animal personnel essential.

Send résumé and names of three references to: Dr. Daniel L. Gallina, Department of Nutrition, Harvard School of Public Health, 665 Huntington Avenue, Boston, Mass. 02115.

Harvard University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH/TECHNICAL ASSOCIATE

Ph.D. biochemist with experience/interest in neurochemistry to study enzymes of purine metabolism, amino acid levels, development of enzyme assays, purification of proteins, kinetic studies, nucleic acids, and so forth. Excellent salary/benefits. Send résumé to: Dr. Sudhir Kumar, Director, Perinatal Laboratory and Research, Christ Hospital, 4440 West 95th Street, Oak Lawn, Ill. 60453. Telephone: 312-425-8000, extension 5690. *Equal Opportunity Employer.*

SCIENTIST/JOURNALIST

The Research News section of *Science* has an opening for a scientist who also is a good writer. Of particular interest are applicants with training in chemistry or physics, but individuals with backgrounds in other physical sciences are also encouraged to apply. Energy coverage will be among the writer's responsibilities. The position requires an individual with good judgment about significant developments in subjects ranging from plasma and nuclear science to organic chemistry to industrial processes. Equally important are good instincts about news. Applicants with a Ph.D. and some experience in journalism will be given preference.

Address résumé, statement of interest, and one writing sample that illustrates the required qualities to: Carol Dickert-Scherr, Personnel Office, *Science*, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005. (We regret we cannot accept telephone inquiries.) *An Equal Opportunity Employer.*

SCIENCE

VIROLOGIST. Assistant professor. Ph.D. required. Major responsibilities include teaching an undergraduate course in virology and participating in the teaching of other microbiology courses. The individual will be expected to develop a research program and direct graduate students in the area of virology. Send curriculum vitae and three letters of reference no later than 15 March 1979 to: Dr. Marvin Rogolsky, Department of Biology, University of Missouri, Kansas City, Missouri 64110. *University of Missouri is an Equal Opportunity Employer.* Available fall 1979.

POSITIONS OPEN

RESEARCH ASSOCIATE. Ph.D. in microbiology and 3 years of experience in field of baculoviruses. Full-time, nontenured, grant-supported position. Salary up to \$16,000 on 12-month basis. Apply by 15 February 1979 to: Dr. George S. Beaudreau, Department of Agricultural Chemistry, Oregon State University, Corvallis, Ore. 97331. *Oregon State University is an Equal Opportunity/Affirmative Action Employer in compliance with Section 504, Rehabilitation Act of 1973.*

PROGRAMS

DOCTORAL PROGRAM IN PROBLEMS OF TECHNOLOGY AND PUBLIC POLICY

The Department of Engineering and Public Policy at Carnegie-Mellon University offers an interdisciplinary research-oriented Ph.D. for persons with an undergraduate degree in engineering or the mathematical or physical sciences. Persons with more advanced training or experience are especially welcome. Some financial support is available. Contact: Engineering and Public Policy, Graduate Program, 19843, Carnegie-Mellon University, Pittsburgh, Pa. 15213.

TRAINEESHIPS

COMPUTERS IN MEDICINE—One-year National Library of Medicine traineeship for academically oriented physicians and postdoctoral scientists. Starts 1 July 1979. Fundamentals of computer science taught with emphasis on clinical practice and medical research. No formal mathematical training required. No pay-back clause. For brochure, write: Aran Safir, M.D., Director, Institute of Computer Science, Mount Sinai School of Medicine, 1 Gustave Levy Plaza, New York, N.Y. 10029.

FELLOWSHIPS

POSTDOCTORAL TEACHING FELLOWSHIP

Cornell University seeks a postdoctoral teaching fellow to participate in development and administration of introductory biology course. Introductory biology teaching experience required. One-year appointment with possible extension to 2-year maximum. For application guideline, write to: Dr. Jon Glase, 310 Roberts Hall, Cornell University, Ithaca, N.Y. 14853. Application deadline: 15 April 1978.

Cornell University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS. Two available immediately; five available summer/fall 1979. The Center for the Study of Aging and Human Development at Duke University announces openings in Research Training Programs in the study of adult development and the study of aging. Opportunities for research training in most biomedical, behavioral, and social science fields. Salary: \$10,000 to \$13,200, and research budget. Reply, with curriculum vitae, to: Dr. Ilene C. Siegler, Box 3003, Duke Medical Center, Durham, N.C. 27710. *An Equal Opportunity Employer.* Deadline: 30 April 1979.

POSTDOCTORAL POSITIONS. Multidisciplinary postdoctoral fellowships available immediately through an NRSA in diabetes and endocrinology. Research areas include molecular endocrinology, hormone secretion and action, hormone-receptor interactions, eukaryotic gene regulation, and reproduction physiology. Ph.D. or M.D. required. Send résumé and references to: Dr. Daryl Granner, Department of Medicine and Biochemistry, University of Iowa, Iowa City, Iowa 52240.

PREDOCTORAL AND POSTDOCTORAL TRAINING IN NEUROBIOLOGY AND MEMBRANE BIOPHYSICS

The Department of Physiology and Biophysics, University of Miami, School of Medicine, emphasizes cellular and molecular approaches to biological problems and offers training in neurobiology, developmental neurobiology, and membrane biophysics. Fellowships, traineeships, and assistantships are available. For details, write: Dr. David Wilson, Department of Physiology and Biophysics, University of Miami, School of Medicine, Box 016430, Miami, Fla. 33101. *An Equal Opportunity/Affirmative Action Employer.*

FELLOWSHIPS

DISTINGUISHED POSTDOCTORAL FELLOWSHIP

The James Franck Institute of The University of Chicago will award The James Franck Fellowship to an outstanding candidate in any area of either experimental or theoretical condensed matter physics.

The position carries a \$16,000 stipend for 2 years beginning in fall 1979. Letters of application should include a résumé, the names of three references to be contacted, and should be addressed to: Professor Robert Gomer, Director, The James Franck Institute, The University of Chicago, 5640 South Ellis Avenue, Chicago, Illinois 60637. Applications should be received by 21 February 1979. Preprints of unpublished work would be welcome.

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EVOLUTIONARY BIOLOGY

Postdoctoral fellowship position in the Department of Anatomical Sciences, State University of New York (SUNY) at Stony Brook beginning 1 July 1979. The candidate should have research interest in one or more of the following deals: (i) application of mathematical methods to problems of classification in systematics and/or functional analysis, (ii) vertebrate functional anatomy, and (iii) vertebrate paleontology. The department at present has extensive facilities for morphological studies of primate evolution but applicants with other interests are encouraged to apply. Some teaching in gross anatomy for medical professionals will be expected. Applications should be submitted by 30 April to:

Dr. Norman Creel
Anatomical Sciences
Health Sciences Center
SUNY at Stony Brook
Long Island, N.Y. 11794

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THE DEWITT WALLACE READER'S DIGEST FELLOWSHIP IN GERIATRIC MEDICINE AT THE NEW YORK HOSPITAL-CORNELL MEDICAL CENTER.

A multidisciplinary program in aging recently inaugurated at The New York Hospital-Cornell Medical Center, provides training in the care of geriatric patients at The New York Hospital, The Burke Rehabilitation Hospital, chronic care facilities, and outreach clinics. This program incorporates research training in basic and clinical gerontology. Physicians who are Board-eligible in internal medicine and interested in leadership positions in academic geriatric medicine should communicate with: Dr. Marc E. Weksler, Irving Wright Professor of Medicine, The New York Hospital-Cornell Medical Center, New York, N.Y. 10021.

POSTDOCTORAL FELLOWSHIP REQUEST

Positions are available for recently graduated Ph.D.'s for research in the following areas: (i) studies in cellular hyperthermia in combination with radiation and chemotherapy, (ii) cellular radiation biology, (iii) cellular and biochemical actions of anti-cancer agents both alone and in combination, and (iv) the biology and treatment of hormone-responsive tumors. Funding for the positions is from an NCI training grant (American citizens only) at \$10,000 for the first year. Please send curriculum vitae to: Dr. Frederick A. Valeriote, 4511 Forest Park Boulevard, Suite 411, St. Louis, Missouri 63108. *Equal Opportunity/Affirmative Action Employer, M/F/H.*

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THE AUSTRALIAN NATIONAL UNIVERSITY

Applications are invited from candidates who hold a PhD degree or who hold medical, dental or veterinary qualifications and have had some research experience. The Departments in the School and their fields of research are: *Biochemistry* (Head, Professor F. Gibson, FAA, FRS): Biochemical and genetic studies on bacterial membranes; oxidative phosphorylation, active transport, NADH dehydrogenase, ubiquinone biosynthesis. Kinetic mechanism and regulation of enzymes concerned in aromatic biosynthesis. *Clinical Science* (Acting Head, Dr M.A. Denborough): Biochemical and pharmacological studies on membrane function in relation to human disease. Emphasis at present is on calcium, cyclic nucleotide and prostaglandin metabolism, asthma, diseases of muscle, malignant hyperpyrexia, platelet function, atherosclerosis, thrombosis and haemostasis, osteogenesis imperfecta, clinical pharmacology and clinical immunology. *Experimental Pathology* (Acting Head, Dr W.J. Cliff): Research in this Department, which traditionally combines morphological and biochemical studies, has been on *cardiovascular disease*, in terms of the earliest occlusive lesions, endothelial permeability and experimental arterial grafting; topography, differentiation and regression of vascular beds; *neoplasia*, in terms of cyclic nucleotide metabolism and levels in body fluids for cancer diagnosis, and the effects of ionizing radiation on mammalian tissues, and *degenerative diseases* with the search for a hormone for fibrous tissue contraction with the induction and treatment of arthritis and with the study of both local and systemic changes associated with inflammation; the mechanisms of cellular and subcellular motility, using cinephotomicrographic, fine structural, cytochemical and biochemical techniques. *Human Biology* (Head, Dr R.L. Kirk): Human population genetics; disease susceptibility and red cell metabolism and function. *Immunology* (Head, Professor B. Morris, FAA): Genetic basis of disease resistance in economic livestock; physiological studies of the immune response; transplantation biology, immunobiology of cancer, tolerance, foetal-maternal inter-actions, physiology of the lymphoid apparatus, immunological studies of cattle chimeras. *Medical Chemistry Group* (Head, Dr D.J. Brown). The group studies the synthesis, properties, stereochemistry, and biological activity of heterocycles (carbocyclic molecules including nitrogen or another foreign atom) related to natural pyrimidines, pteridines, or purines; the equilibria involving metal ions and cell constituents such as amino acids or proteins; and the spectroscopic properties of simple molecules. Attention is being given to the therapeutic applications of such research. *Microbiology* (Head, Professor G.L. Ada, FAA): Reactions of antigens with lymphoid cells, particularly T cell recognition of membrane antigens; structure, synthesis and function of viral nucleic acids; tissue culture studies of the growth and genetics of pox, polio and other viruses; immune defence mechanisms against viruses, bacteria and tumours, immunogenetics; the chemistry, antigenic properties and epidemiology of influenza virus; epidemiology and adaptation of arboviruses; activities of lymphocyte sub-populations and responses to modified antigens, properties and roles of histocompatibility antigens. *Pharmacology* (Head, Professor D.R. Curtis, FAA, FRS): Neuropharmacology of central synaptic transmission, including that of central pain pathways; neurochemistry of central amino acid receptors. *Physical Biochemistry* (Head, Professor L.W. Nichol): Physical and chemical characterization of biological macromolecules; interacting protein systems including studies on subunit assembly, self-associations and acceptor-ligand binding; amino acid sequence of lactoferrin; comparative studies of protein denaturation and hydration; physical and kinetic studies on sulphatases and related enzymes; molecular conformation and structure-activity relations of drugs and neurotransmitters; enzyme transition state analogues. *Physiology* (Head, Professor P.O. Bishop, FAA, FRS): Sensory neurophysiology especially in relation to vision and visual optics, neurohistology and the biophysics to muscular contraction. Appointments normally will be for two years but in exceptional circumstances may be for three years and extended to a total period of five years. It is hoped that the successful candidates will be able to take up their appointment in the first half of 1979. APPLICANTS SHOULD ARRANGE FOR REPORTS FROM THREE ACADEMIC REFEREES TO BE SENT TO THE UNDERSIGNED IN SUPPORT OF THEIR APPLICATION. Commencing salary will be in accordance with qualifications within the range \$15,179-\$19,813 per annum Australian currency. Current exchange rates \$A1 : 58NP : \$US1.14. A salary loading of up to \$5,000 per annum may be paid to an applicant holding appropriate medical qualifications. Reasonable appointment expenses are paid. Superannuation benefits are available for applicants who are eligible to contribute. Assistance with housing. The University reserves the right not to make an appointment or to make an appointment by invitation at any time. Further information may be obtained from the Heads of the respective Departments. Prospective applicants should write to the Academic Registrar, ANU, PO Box 4, Canberra ACT 2600, Australia with whom applications close on 15 FEBRUARY 1979.

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are certainly important, but until less than a generation ago there was little appreciation of mankind's basic need for abundant, swiftly and efficiently produced, handsomely legible copies of whatever has previously been committed to paper.

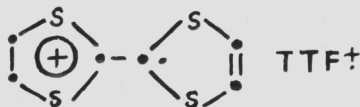
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ities for tailoring photoconductivity for other uses are limitless and easier.

We are one of several high-technology companies who feel a need to know more about the chemical physics of organic photoconductors before getting down to commercial nitty-gritty, our copier success notwithstanding. Organic photoconductors and organic dark conductors that could be linked as polymers and cast from a solvent would suit our talents nicely.

When he was still a professor, Dr. Perlstein participated in the construction of tetrathiafulvalene (TTF). As a cation it complexes notably with

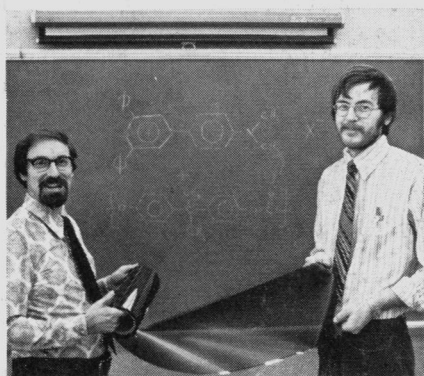


anionic tetracyanoquinodimethane (TCNQ) to form a conductive salt. The



planar radical ions, each with an unpaired electron, stack up so that electrons run up and down the TCNQ stack and holes up and down the TTF stack. So much research has been lavished by other labs on TTF/TCNQ that Perlstein and Larry Isett (*joining Kodak Research Laboratories colleague Perl-*

stein in posing symbolically with the photoconductive belt from a Kodak copier) have been seeking their thrills elsewhere. Dr. Isett has come up with *bis(tetrathiotetracene)triiodide*, a new organic metal with a conductivity in the good direction at room temperature no worse than about 1/1000 that of copper. (Electrical and magnetic details in *Phys. Rev. B* 18:439 [1 July '78].) For a copy of Perlstein's tutorial "*Organic Metals*"—*The Intermolecular Migration of Aromaticity* write Dept. 55-S, Kodak, Rochester, N.Y. 14650. If you would rather have a rational solution to the problem depicted below, use that same address.



about such materials. Jerome H. Perlstein (*left above*) was an inorganic chemist until seized with fervor for the notion that with organics the possibil-



*"That's the group for the stockholders' guided tour of Advanced Technology...
We're just waiting in line to use the copier."*