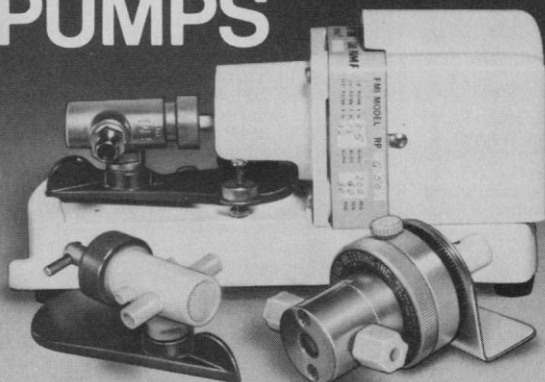


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Experimental Psychologist. M.A. Experience in histology of central nervous system. Some knowledge of surgical procedures with small animals. Knowledge of aging central nervous system. Seeking position in nervous system research. Box 261, SCIENCE. X

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Ph.D. (1975). **Immunology, Immunochemistry, Protein Chemistry.** Experience in RIA, antisera preparation and characterization, membrane antigens, cell culture, and lymphocyte regulation. Seeks industrial position. Box 263, SCIENCE. X

Pharmacology. Ph.D. Teaching experience in medical, undergraduate school; basic medical science background; seeks teaching, research/administrative position, pharmacology, physiology, biology, health sciences. Box 256, SCIENCE. X

POSITIONS WANTED

Molecular Biologist experienced in mammalian cell culture, RNA/DNA isolation, hybridization, computer programming. Seeks postdoctoral position studying cellular basis of aging or cell cycle expression of individual proteins. Ph.D. biochemistry in late 1979. Available early 1980. Box 264, SCIENCE. X

Multidisciplinary Applied Anthropologist. Ph.D. 1973. Extensive research and consulting in water resources planning and environmental impact assessment extending to both the United States and Latin America. Teaching experience in anthropology and civil engineering departments. Postdoctoral fellowships. Books in Chicano studies. Interests include applied cognitive anthropology, planning, environmental analysis, technology assessment, policy analysis, energy research, conflict management, and environmental planning. Familiar with bureaucratic processes (2 years of experience with Corps of Engineers research laboratory). Open to positions in government, universities, and elsewhere in the private sector. Box 265, SCIENCE. X

Pharmacologist/Toxicologist. Ph.D. expected October 1979. Drug metabolism, biochemical pharmacology, enzymology. Isolated hepatocytes. M.S. in pharmacy; 15 years of experience in design, manufacture, and quality control of pharmaceuticals. Desires position in pharmaceutical industry or government. S. Lowitt, 2131 Brookhaven Drive, Sarasota, Florida 33579. X

Public Health Microbiologist. Ph.D., Ms.P.H. 1979. Broad background (both microbiology and chemistry) in industry, academia, and public service. Specialty: mycology. Excellent teacher. Publications and patents. Seeking health science-related position. Box 266, SCIENCE. X

Radiation Biologist/Radiation Oncologist. Ph.D. 1970. Box 267, SCIENCE. 9/21, 28

POSITIONS OPEN

A short-term (6-month) position for an **ACAROLOGIST** will be open on the Texas A & M University Research Team located in Bamako, Mali (West Africa) beginning 1 January 1980. The duration of this position may be extended to at least 2 years, contingent on the person's performance and the availability of funds. The person filling the position will be responsible for aiding the government of the Republic of Mali in investigations concerned with determining the geographical and seasonal occurrence of ticks affecting livestock health in Mali. This person will also train Malian counterparts and technicians in field and laboratory techniques inherent to acarology and will be responsible for liaison with backstop entomologists and other cooperating scientists located at Texas A & M University. A Ph.D. in entomology is preferred with training in acarology or with equivalent experience in taxonomy and ecology of the acari. A speaking knowledge of French is desirable.

Send résumé and transcripts, and request that three letters of recommendation be sent to: **Dr. Fowden G. Maxwell, Head, Department of Entomology, Texas A & M University, College Station, Texas 77843.** Closing date is 1 December 1979, or until suitable candidate is found.

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ANATOMISTS—CELL BIOLOGISTS. The Department of Anatomy is seeking applicants with specialties in the following areas:

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Candidates should possess the Ph.D., M.D., or combined degrees, and should have demonstrated excellence in research. Rank and salary are negotiable depending upon experience. The positions are available immediately. Please send curriculum vitae, list of publications, and letters of reference by 1 January 1980 to:

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Chairman of Anatomy
Tulane Medical School
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New Orleans, La. 70112

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POSITIONS OPEN

Ph.D. and M.S. ANATOMISTS. Ph.D. to teach gross human anatomy, with two other anatomists, to class of 165-first-year medical students. Also develop and teach 15 to 20 lectures per year in human embryology. Serious candidates should submit evidence of excellence in teaching and academic strength in human anatomy and embryology. Clinically oriented or basic research encouraged. Faculty rank/salary commensurate with qualifications. **M.S. ANATOMIST** to function as laboratory assistant in gross, neuroanatomy, and histology laboratories. Send curriculum vitae plus names, addresses, and telephone numbers of four references to: **L. Mennen, D.O., FACOI, Dean for Academic Affairs, College of Osteopathic Medicine, 2105 Independence Boulevard, Kansas City, Missouri 64124.** *Applications encouraged from all qualified persons.*

AQUATIC ECOLOGIST—Ph.D., permanent research position. Expertise in plankton or benthos research with capabilities in systems ecology and biometrics preferred. The successful candidate will be joining an established group with active programs of research in several types of freshwater ecosystems. The selected candidate should demonstrate the potential to attract grant funds, establish a research program, publish, and maintain high professional standards. Level: assistant professional scientist. For full consideration, résumés should be received before 31 October 1979 by: **Dr. Robert W. Gorden, Head, Aquatic Biology Section, Illinois Natural History Survey, 172 Natural Resources Building, Urbana, Ill. 61801.** *An Affirmative Action/Equal Opportunity Employer.*

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Director of Continuing Education at new university-based Center for Occupational Health and Safety. Degree in education plus advanced degrees, publications, and experience in subject areas directly related to occupational health and safety. Teaching experience at secondary school, undergraduate, and graduate levels essential.

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Applications will be accepted until the position is filled. *Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.* Send curriculum vitae and names of three references to:

B. Dwight Culver, M.D.
Professor and Director
Center for Occupational Health and Safety
Department of Community and
Environmental Medicine
University of California, Irvine
Irvine, California 92717

ASSISTANT PROFESSOR. Human physiologist, beginning 1 January 1980. Ph.D. in physiology or in zoology, with major concentration in physiology required. A demonstrated record of excellence in teaching essential. Responsibilities include teaching and coordinating a two-semester course in human anatomy and physiology for nursing students and coordinating program with affiliated hospital schools of nursing. Send letter of application, complete curriculum vitae, and three letters of recommendation by 12 October 1979 to: **Dr. Carl Dee Brown, Chairman, Department of Biology, Memphis State University, Memphis, Tennessee 38152.**

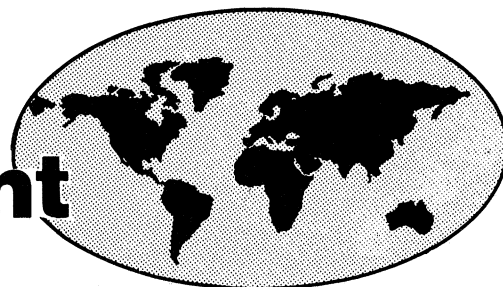
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ASSISTANT PROFESSOR OF MICROBIOLOGY

The Department of Microbiology and Immunology, Washington University School of Medicine, invites applications from highly qualified individuals for an appointment as assistant professor. Applicants should have Ph.D. or M.D. degrees, 2 to 5 years of postdoctoral research experience, and a commitment to medical and graduate student teaching. Teaching competence should be in pathogenic microbiology; research interests should be in microbiology. Send curriculum vitae, brief description of research plans, and names of three referees to: **Dr. Joseph M. Davie, Department of Microbiology and Immunology, Washington University School of Medicine, St. Louis, Mo. 63110** by 1 November 1979. *Equal Opportunity/Affirmative Action Employer, M/F/H.*

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Requires an MS/PhD in Mechanical, Civil or Chemical Engineering and a familiarity with fossil fuel energy supply technologies—both current and advanced. Other essentials include the ability to address issues affecting the entire fuel cycle (resource extraction, processing, transportation, utilization) . . . and evaluate alternative systems from the perspective of energy efficiency, cost/ environmental impacts, institutional implications, market potential and other factors. Project management and/or international experience in less developed countries desired. Write Box 4486.

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Requires a PhD in Sociology and a knowledge of sociological research methods—with specialization in demography. Experience in the analysis of energy systems and related social impacts as well as strong communication skills are essential. International experience, background in economics, and the ability to undertake some program management responsibilities are all highly desirable. Write Box 4498.

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ECONOMIST

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Requires a PhD in Economics with a background in quantitative macroeconomic/energy research and experience analyzing the relationship between energy use and economic growth, costs and benefits of alternative energy systems, and impacts of various energy pricing policies. Ideal candidate will have strong communication skills and knowledge of the economics of less developed countries and/or related work experience. 3-5 years of program management experience desired. Write Box 4500.

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ASSISTANT PROFESSOR OF ANATOMY with doctoral degree and postdoctoral experience in contemporary morphological problems and techniques to join young and energetic faculty. Experienced in teaching of gross anatomy and other areas of morphological science. Candidate should have research area of investigation sufficiently mature to compete successfully for extramural funding. Send curriculum vitae, bibliography, three references, and statement of career goals by 15 December 1979 to: **Search Committee, Department of Anatomy, University of New Mexico School of Medicine, Albuquerque, N.M. 87131. Affirmative Action/Equal Opportunity Employer.**

ASSISTANT PROFESSOR OF BIOLOGY. Biologist with broad background whose primary teaching responsibility would be the organismal biology portion of an introductory biology course. Applicants should have Ph.D. and preferably some postdoctoral experience. Area of research should be preferably one of the following: marine biology, plant or animal virology, or tissue culture research. Department has strong graduate program and offers M.S. and Ph.D. degrees. Position is tenure-track and is available 1 September 1980. Please send letter of application, curriculum vitae, description of research interests and teaching experience, and names of three references before 15 November to: **Dr. Donald J. Plocke, Chairman, Department of Biology, Boston College, Chestnut Hill, Mass. 02167. An Affirmative Action/Equal Opportunity Employer.**

Applications are invited for appointment as **ASSISTANT PROFESSOR** in the **Environmental Engineering Program**. Specialization in biological or physical processes in water and wastewater treatment is desired. Duties will include teaching in both graduate and undergraduate courses as well as development of an active program of research and scholarship. Send curriculum vitae and list of three references to: **Dr. Joseph S. Devinny, Search Committee, BHE, 213, University of Southern California, University Park, Los Angeles, Calif. 90007. University of Southern California is an Equal Opportunity Affirmative Action Employer.**

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Director, Research & Development
Electro-Nucleonics Laboratories, Inc.
4809 Auburn Avenue
Bethesda, Maryland 20014
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POSITIONS OPEN

ASSISTANT PROFESSOR MEMBRANE PHYSIOLOGY

The Department of Physiology and Biophysics at The University of Iowa College of Medicine invites applications for a tenure-track appointment at the assistant professor level. Applicants must have the Ph.D. degree and/or M.D. degree and two or more years of postdoctoral training, with a record of productivity in original research. Candidates should be prepared to conduct a strong independent research program related to cellular aspects of transport across biological membranes, and to take an active role in the medical and graduate teaching activities of the department. Please send curriculum vitae and a brief description of research interests, teaching experience, and career objectives, with names of at least three references, to: **Dr. Robert E. Fellows, Department of Physiology and Biophysics, The University of Iowa College of Medicine, Iowa City, Iowa 52242.**

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ASSISTANT PROFESSOR OF PHYSIOLOGY UNIVERSITY OF CALIFORNIA, SAN FRANCISCO (UCSF)

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**William F. Ganong, M.D., Chairman
Department of Physiology
University of California
San Francisco, California 94143**

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Apply with curriculum vitae and names of three references by 1 December 1979 to: **Professor C. L. Coker, Department of Physics, Kansas State University, Manhattan, Kansas 66506. Kansas State University is an Equal Opportunity/Affirmative Action Employer.**

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RESEARCH ASSOCIATE. Immediate opening for a **BIOCHEMIST** (Ph.D.) to study effects of experimental diabetes on the structure and synthesis of interstitial and basement membrane collagen. Send résumé and list of at least three references to: **Dr. N. A. Kefalides, Director, Connective Tissue Research Institute, University of Pennsylvania, University City Science Center, 3624 Market Street, Philadelphia, Pa. 19104. An Equal Opportunity Employer.**

POSITIONS OPEN

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CHAIRPERSON Department of Biochemistry The University of Pittsburgh School of Medicine

Applications and nominations are invited for the chairmanship of the Department of Biochemistry, which is also the William S. McEllroy endowed Professorship in Biochemistry. Candidates should be recognized scholars and investigators with demonstrated commitment to medical and graduate education.

Curriculum vitae and bibliography may be submitted to: **Dr. Winton Tong, Department of Physiology, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania 15261.**

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Lehigh University is seeking candidates and nominations for a Chair in Solid State Studies in the area of chemistry/materials. Candidates must have an outstanding record and reputation in some aspect of the chemistry of the solid state. Teaching experience is desirable. The chair is associated with the Sherman Fairchild Program for Solid State Studies, an interdisciplinary laboratory funded by a grant from the Sherman Fairchild Foundation, and dedicated to research and education related to the solid state with an emphasis on electronic materials and devices. Applicants should send résumés and names of references by 15 October to:

**Professor Donald M. Smyth
Chairman, Search Committee
Materials Research Center
Building 32
Lehigh University
Bethlehem, Pa. 18015**

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Clinician preferred and patient care responsibilities can be developed.

Previous academic experience and interest in innovative models of medical education are desirable.

Salary competitive and negotiated according to rank. Deadline: 15 October 1979.

Please send curriculum vitae to:

Dr. Leonard Meiselas, Dean
Sophie Davis School of
Biomedical Education
Vice President for Health Affairs
THE CITY COLLEGE OF
THE CITY UNIVERSITY
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138th Street and Convent Avenue
Science Building, 903
New York, N.Y. 10031

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Full-time faculty position available as **program director for microbiology/infectious diseases** at the Sophie Davis School of Biomedical Education in a combined B.S./M.D. curriculum.

Candidate will be expected to coordinate course instruction in microbiology/infectious diseases with external faculty, participate in research and academic governance.

Clinician preferred and patient care responsibilities can be developed.

Previous academic experience and interest in innovative models of medical education are desirable.

Salary competitive and negotiated according to rank. Deadline: 15 October 1979.

Please send curriculum vitae to:

**Sophie Davis School of
Biomedical Education**
Vice President for Health Affairs
THE CITY COLLEGE OF
THE CITY UNIVERSITY
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Postdoctoral position available immediately for an ecologist with strong interest and experience in development of mechanistic simulation models. Fifteen-month position at the Natural Resource Ecology Laboratory, Colorado State University, working with a team of scientists investigating effects of air pollution on terrestrial ecosystems. Salary: \$14,000. Please send curriculum vitae, transcripts, and references to:

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Natural Resource Ecology Laboratory
Colorado State University
Fort Collins, Colo. 80523
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The Department of Biology invites applicants for two faculty appointments from individuals with research interests in cell or tissue biology. Applicants should have demonstrated aptitude to develop independent research programs, and willingness to participate with others in a course in cell and tissue biology for freshman medical students. Send curriculum vitae, bibliography, and reference names and addresses to: **Dr. Hewson Swift, Department of Biology, University of Chicago, 1103 East 57 Street, Chicago, Illinois 60637.**

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

FACULTY POSITION, INORGANIC CHEMISTRY

Applications are invited for a tenured position in the Department of Chemistry at Stanford University. Applicants must have outstanding research credentials in experimental inorganic chemistry and a strong commitment to teaching undergraduates as well as graduates. In applying, send curriculum vitae and bibliography to: **Professor K. O. Hodgson, Department of Chemistry, Stanford University, Stanford, Calif. 94305.** *Stanford is committed to Equal Opportunity through Affirmative Action in employment, and we are especially eager to identify minority persons and women with appropriate qualifications.* The deadline for receipt of applications is 15 October 1979.

FACULTY POSITION AVAILABLE

University of California, Santa Barbara. The Department of Mechanical and Environmental Engineering is seeking a **physical oceanographer** to be the second appointment to a faculty group in an ocean engineering specialty. The candidate must have a Ph.D. A strong history in research and an interest in teaching are required. A background in engineering or applied science is desirable. The level of the regular ladder appointment depends upon the qualifications of the applicant. Appointee must be willing to participate in an interdisciplinary team of marine scientists. Address applications to: **Professor R. S. Hickman, Chairman, Department of Mechanical and Environmental Engineering, University of California, Santa Barbara, California 93106.** Applications accepted through 15 November 1979. *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITIONS

The E. A. Doisy Department of Biochemistry at St. Louis University School of Medicine invites applications for two full-time, tenure-track positions from Ph.D.'s/M.D.'s with demonstrated excellence in research. The candidate for one opening should have a strong background in enzymology with application in a currently interesting field of biochemistry. Applicants for a second position should be qualified in the field of eukaryotic molecular biology. Excellent departmental support is available to encourage rapid initiation of independent research programs. Applicants will be expected to teach medical and graduate students. Salary and rank depend upon qualifications. Curriculum vitae, short description of proposed research, and names of three references should be sent to:

Dr. Carmine J. Coscia
Chairman, Search Committee
E. A. Doisy Department of Biochemistry
St. Louis University School of Medicine
1402 South Grand Boulevard
St. Louis, Missouri 63104

Equal Opportunity/Affirmative Action Employer

FACULTY POSITIONS

The Biology Department, Temple University, expects to make two tenure-track appointments in 1980. These positions require teaching ability at the undergraduate and graduate levels and demonstrated competence in research. Appointments will be made in two of the following areas:

Population biology
Immunology
Comparative physiology
Ethology

Appointees will participate in the teaching of genetics, microbiology, mammalian physiology, or evolutionary biology to undergraduates and develop graduate courses in the area of specialty. Successful candidates would be expected to develop an active research program.

Send curriculum vitae, a description of present and future research plans, and names of references to: **Dr. Barbara L. Brownstein, Department of Biology, Temple University, Philadelphia, Pa. 19122.**

FACULTY POSITIONS

The Department of Chemistry at Indiana University anticipates several tenure-track openings at the assistant professor level. We are interested in candidates with training in analytical, inorganic, organic, or theoretical chemistry. These positions will require the ability to organize and present, effectively, courses at both the graduate and undergraduate levels. Moreover, potential candidates are expected to have a solid record of accomplishment in research and to show promise of developing vigorous, independent programs of scholarly investigation. To apply, submit a brief biographical sketch, a publication list, names of three references, and a short résumé of ideas for the development of teaching and research programs. Deadline for applications is 1 November 1979. Please apply to:

Dr. Adam Allerhand, Chairperson
Department of Chemistry
Indiana University
Bloomington, Indiana 47401

Indiana University is an Equal Opportunity/Affirmative Action Employer.

Ph.D. **GENETICIST** to work in service and research laboratory at university-affiliated mental retardation facility. Salary range: \$20,000 plus maximum negotiable. Application deadline: 31 October 1979. Anticipated starting date: 19 November 1979. Send curriculum vitae and three letters of reference to:

Jaime L. Frias, M.D.
Division of Genetics
Department of Pediatrics
Box J296 JHMC
University of Florida
Gainesville, Florida 32610

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POSTDOCTORAL FELLOW— NEUROPHYSIOLOGY

Available immediately. Applicants should have interests in voltage clamp analysis and computer simulation of neurons and neural circuits mediating simple behaviors in *Aplysia*. Send curriculum vitae and names of three references to: **Dr. John H. Byrne, Department of Physiology, University of Pittsburgh School of Medicine, Pittsburgh, Pa. 15261.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

STANFORD UNIVERSITY GEOCHEMIST—PETROLOGIST

The Department of Geology in the School of Earth Sciences invites applications for a faculty position beginning September 1980. Areas of interest include (but are not limited to) geochemical processes in the crust and mantle of the earth including isotope geochemistry, thermodynamics, kinetics, element distribution, and phase equilibria studies. Teaching responsibilities might include graduate and undergraduate courses in geochemistry and igneous petrology. Level of appointment is open, but we are particularly interested in a creative person, with a well-established record in research. Applications should include (i) a résumé of education, professional experience, and published research, (ii) a brief statement of plans for future research, and (iii) the names of four references. Send to: **Professor J. G. Liou, Department of Geology, Stanford University, Stanford, Calif. 94305**, by 1 December 1979. *Stanford University is an Equal Opportunity/Affirmative Action Employer.*

HEAD, DEPARTMENT OF BIOCHEMISTRY

The University of Arizona invites applications and nominations for the position of head of the Department of Biochemistry. This department encompasses the biochemistry activities of the Colleges of Liberal Arts, Agriculture, and Medicine. The appointee will be expected to have an active personal research program, and to provide administrative leadership in the teaching, research, and interdepartmental efforts of the Department of Biochemistry at the undergraduate, graduate, and medical school levels. Curriculum vitae should be sent no later than 1 October 1979 to: **Rubin Bressler, M.D., Chairman, Biochemistry Search Committee, Room 6334, Arizona Health Sciences Center, Tucson, Arizona 85724.** *The University of Arizona is an Equal Opportunity/Affirmative Action Employer.*

HEALTH PHYSICS FACULTY POSITION. An opening is anticipated for an assistant professor. The primary role will be as a participant in an on-going research program, as well as graduate teaching and service functions. Emphasis on environmental health physics and related radiation chemistry preferred. Minimum requirements are doctoral degree in area of radiation protection or closely related area with some experience in health physics/radiation chemistry. Send curriculum vitae to: **David Gur, Sc.D., Department of Radiation Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, Pa. 15261.** *The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.*

IMMUNOLOGIST—CELL BIOLOGIST— HEMATOLOGIST

A position is available for a Ph.D. or M.D. with a major interest in studying normal and malignant cell-surface membrane markers using hybridoma technology. The successful candidate will have the opportunity to pursue an independent research program, but will be responsible for directing a service laboratory devoted to the production of monoclonal antibodies. Although experience in hybridoma technology would be useful, it is not necessary. Send curriculum vitae and the names of three references to: **Dr. Joseph Simone, St. Jude Children's Research Hospital, P.O. Box 318, Memphis, Tennessee 38101.** *Equal Opportunity Employer.*

POPULATION GENETICIST

The Department of Biology at the University of California, Riverside, invites applications for a faculty position in population genetics beginning 1 September 1980. Candidates must have evidence of ability to initiate and sustain a productive, high-quality research program and show enthusiasm and skill in teaching at both the undergraduate and graduate levels. Teaching duties may include introductory biology, genetics, and upper division and graduate courses in population and genetics. Appointment will be made at the associate professor level. Applicants should send curriculum vitae, statement of teaching and research interests, reprints, and letters from three referees. *The University of California is an Equal Opportunity/Affirmative Action Employer. Applications are invited from all qualified individuals, especially women and members of minority groups.* Send applications to:

Professor R. Ruibal, Chairman
Department of Biology
University of California
Riverside, California 92521

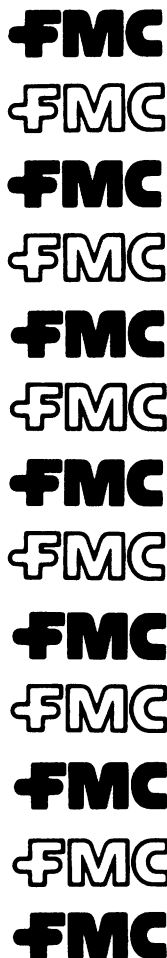
Teratologist

A supervisory position is currently available for a qualified Teratologist possessing an MS Degree in the Biological Sciences or the equivalent in training and experience. The candidate must be able to design, conduct, analyze, and report teratology and reproductive studies in accordance with FDA guidelines.

Wyeth Laboratories Inc., a national pharmaceutical firm located in suburban Philadelphia, Pa., offers an excellent starting salary and comprehensive benefits. Interested applicants should submit a detailed resume including salary requirements to:

Wyeth **WYETH**
Laboratories Inc.
P. O. Box 861
Paoli, Pa. 19301

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Ph.D. or M.S. Training and experience in immunochemical and immunodiagnostic techniques and procedures essential. Responsible for development of simplified immunoassay test systems.

Product Development Leader \$30k

B.S. in bioengineering or chemical engineering. Experience in pharmaceutical formulation and delivery, clinical assay development, or applied physical chemistry essential. Responsibilities include modifying laboratory inventions to meet market needs.

Send resumes to Personnel Manager:

FMC Corporation
Marine Colloids Division

P.O. Box 308
Rockland, Maine 04841

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Department Head Position

Nominations and applications are invited for the position of Head, Electrical Engineering Department, Carnegie-Mellon University. Qualifications sought include earned doctorate, established reputation in Electrical Engineering, experience in teaching and education, leadership and administrative abilities. Candidates should qualify for the rank of Full Professor. Applications, including resume, list of publications and references should be received prior to November 15, 1979.

Contact:

Dr. M.H. Kryder
Chairman, Search Committee
Electrical Engineering
Department
Carnegie-Mellon University
Pittsburgh, PA 15213

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POSITIONS OPEN

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

Position available 1 January 1980 for **INSTRUCTOR** in the Department of Obstetrics and Gynecology. Duties include supervision and training of family practice residents; teaching (formal lectures) residents and students; patient care, obstetrical and gynecological; and administration/research in reproductive endocrinology. Necessary qualifications: M.D. in obstetrics and gynecology, complete residency in obstetrics and gynecology, Board-certification or qualification, and fellowship preferred. Reply to: **Box 269, SCIENCE, Code 200HO. A non-discriminatory, Affirmative Action Employer.**

University of California, Irvine, Department of Pediatrics, is recruiting for a **MEDICAL GENETICIST** at the assistant or associate professor (line or in-residence) level. Requirements: expertise in biochemical genetics. Duties include: clinical management of inborn errors of metabolism; instruction to medical and allied health professionals; research; and participation in departmental academic activities. *All qualified candidates welcome; women and minorities encouraged to apply.* Send curriculum vitae and three references to: **Kenneth W. Dumars, M.D., Professor, Pediatrics Department, University of California, Irvine, Irvine, Calif. 92717.** Application closing: 22 October 1979.

METEOROLOGIST

This is a 2-year teaching and research position in the Atmospheric Science Program of the Department of Land, Air, and Water Resources. The person selected will have a doctorate in meteorology or in atmospheric science or a doctorate in a related science plus professional meteorological experience. The incumbent will be expected to teach a total of three quarter courses in one or more of the areas: atmospheric physics, air pollution meteorology, synoptic meteorology, and dynamic meteorology, and to support one or more of the ongoing research activities within the department. These include the study of large-scale air-sea interaction, marine and continental planetary boundary layer dynamics, and the modeling of mesoscale flows in complex terrain. Research support will be provided by the department. This position is at the assistant professor level and carries a 12-month salary of \$19,700 and up, depending on qualifications. The position becomes available immediately, with the expectation that the person selected will be available for service on or before 1 January 1980.

Applicants should submit curriculum vitae, statement of teaching and research experience and interests, undergraduate and graduate transcripts, list of publications, reprints, and names and addresses of at least three references, to be sent to: **John J. Carroll, Meteorologist Search Committee, Department of Land, Air, and Water Resources, University of California, Davis, California 95616; telephone: 916-752-3245/1406.** Closing date is 15 October 1979.

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

PHARMACOLOGY—Research associate position available immediately. Studies will include drug metabolism and disposition of anthracycline antitumor agents in vivo and the effects of these agents on cellular and subcellular targets in vitro. Candidates should have broad training in pharmacology and biochemistry. Ph.D. degree in molecular or biochemical pharmacology preferred. Send curriculum vitae, list of publications, and names and addresses of three references to: **Dr. M. Israel, Division of Pharmacology, SIDNEY FARBER CANCER INSTITUTE, 44 Binney Street, Boston, Mass. 02115.** *Sidney Farber Cancer Institute, a teaching affiliate of Harvard Medical School, is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION available for Ph.D. trained in immunobiological research. Experience in cell hybridization studies is desired. The research emphasis for this position includes the generation of monoclonal antibodies to human tumor and transplantation antigens. Salary range is \$11,500 to \$12,500. The position is available immediately. Please send letters of inquiry along with curriculum vitae to: **Box 270, SCIENCE. An Equal Opportunity Employer.**

RESEARCH POSITION for technician with experience in cell hybridization studies. The focus of these studies will be in human transplantation and cancer immunology. Salary will depend on training and experience. Position available immediately. Send résumé to: **Box 271, SCIENCE. An Equal Opportunity Employer.**

POSITIONS OPEN

ORGANIC/PHOTOCHEMISTRY RESEARCHER

Battelle, one of the world's leading research and development organizations, has an immediate opening for a B.S. or M.S. in biochemistry or organic chemistry. Research experience in organic synthesis and/or enzyme technology is desirable. You will assist senior research scientist in studies of photosynthesis and related areas.

We offer an excellent salary and career development opportunity along with a comprehensive benefits package. Send résumé in confidence to: **Dick Shaw, Personnel Advisor,**



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B.C. RESEARCH SEEKS A PETROLEUM MICROBIOLOGIST

The successful candidate will:

- Undertake a major contract study in applied petroleum microbiology on behalf of an industrial client,
- Develop and promote a continuing research program with oil and gas industries,
- Supervise contract research projects related to hydrocarbon extraction, processing, and degradation, and
- Liaise with federal and provincial research agencies and industrial clients.

The successful candidate will possess an M.S. or Ph.D. degree in bioengineering or technical microbiology.

The following attributes will be of value:

- Several years of relevant experience in petroleum industry and/or contract research,
- An ability to write and speak effectively, and
- High human-relation skills.

B.C. Research is the technical operation of a non-profit, independent society, the British Columbia Research Council. It is located on the University of British Columbia campus in Vancouver.

For confidential consideration, please send your résumé with salary history and requirement to:

Dr. C. C. Walden
Associate Director

B.C. Research
3650 Westbrook Mall

Vancouver, British Columbia, Canada V6S 2L2

POSTDOCTORAL—PHYSICAL BIOCHEMISTRY.

Experimental and/or theoretical research on dynamic aspects of macromolecular structure. Detection of internal motions by measuring transport properties, including diffusion, sedimentation, viscosity, scattering, and fluorescence depolarization. Target systems: tRNA myosin, immunoglobulins, fibrinogen. **Dr. Stephen C. Harvey, Biophysics Section, Department of Biomathematics, University of Alabama in Birmingham, Birmingham, Alabama 35294. Telephone: 205-934-2269. An Equal Opportunity/Affirmative Action Employer, M/F.**

POSTDOCTORAL POSITION to isolate components required for nitrogen regulation of the synthesis of glutamine synthetase in *Salmonella*. Work will involve studies in a coupled in vitro transcription-translation system. Strong background in bacterial physiology, bacterial genetics, or biochemistry required. Position available immediately. Salary: \$14,000 per year. Send résumé and names of three references to: **Sydney Kustu, Department of Bacteriology, University of California, Davis, California 95616.**

POSTDOCTORAL POSITION available 1 October for studies of the photo and nutritional control of chloroplast, mitochondrial, and microbody development in *Euglena*. Experience with protein purification, immunological techniques, and cell-free translation desirable. Salary: \$10,000 to \$12,000 per year. Initial appointment is for 1 year, but may be extended for two additional years. Send curriculum vitae and three letters of reference by 28 September to: **Dr. S. D. Schwartzbach, School of Life Sciences, 303 Lyman Hall, The University of Nebraska-Lincoln, Lincoln, Nebraska 68588. Telephone: 402-472-1682. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL OR ADVANCED RESEARCH ASSOCIATE. Glycoconjugates of the nervous system. Fall 1979. Salary commensurate with experience. Please send curriculum vitae and three letters of recommendation to: **Dr. Robert Ledeen, Department of Neurology, Albert Einstein College of Medicine, Bronx, New York 10461. Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS IN IMMUNOLOGY. Research involves study of immunologic aspects of multiple sclerosis and experimental allergic encephalitis. Recent Ph.D. in immunology preferred. Write: **Lynn E. Spittler, M.D., University of California Medical Center, San Francisco, California 94143.**

A **POSTDOCTORAL POSITION** available to study various aspects of comparative muscle structure, physiology, or biochemistry. Individual to work with group examining the phenomenon of thick filament shortening seen in several invertebrate muscles. Position requires Ph.D., preferably with experience in some aspect of muscle research. Salary: \$13,000 to \$16,000, depending on experience. Please send curriculum vitae and names of three references to: **Dr. M. M. Dewey or Dr. B. Walcott, Anatomical Sciences, Health Sciences Center, State University of New York at Stony Brook, Long Island, New York 11794. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION. Fall/winter 1979. Research in cell motility and division. Training in molecular biology, electron microscopy, or somatic cell genetics. Send curriculum vitae and references to: **Dr. Arthur H. Lockwood, University of North Carolina, School of Medicine, Swing Building, Chapel Hill, North Carolina 27514.**

POSTDOCTORAL POSITION IN ELECTRON DIFFRACTION CRYSTAL STRUCTURE ANALYSIS

A position is available after 1 November 1979 for research on the development and application of electron diffraction techniques for organic crystal structure analysis (small molecules and linear polymers). Quantitative use of transmission e.d. data will include application of the direct phasing technique used in x-ray crystallography with concomitant evaluation of the deleterious influence of *n*-beam dynamical interactions and crystal deformations on the success of such structural analysis. The applicant should have a background in diffraction physics and crystallography and should be able to operate an electron microscope. Appointment initially for 1 year; probably renewable. Address applications with three references to: **D. L. Dorset, Molecular Biophysics Department, Medical Foundation of Buffalo, Inc., 73 High Street, Buffalo, New York 14203.**

POSTDOCTORAL POSITION IN BIOCHEMISTRY

Available immediately to study the nature, distribution, and biosynthesis of surface glycolipids of parasitic protozoans and helminths. Salary: \$13,000 to \$15,000 for at least 2 years. Send curriculum vitae and two references to:

Dr. George G. Holz, Jr.
Department of Microbiology
Upstate Medical Center
Syracuse, N.Y. 13210

Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION available October 1979. Two-year appointment in clinical biochemistry areas dealing with cigarette smoke inhalation and bodily functions. Background in biochemistry, organic chemistry, or life sciences essential. Salary open, depending on experience. Send résumé and references to: **Dr. P. Hill, Head, Lipid Metabolism, Department of Nutrition, American Health Foundation, Valhalla, New York 10595.**

THE TRUDEAU INSTITUTE

POSTDOCTORAL POSITION immediately available in a laboratory engaged in assessing the role of suppressor cells in chronic bacterial infections. Background training in bacteriology and cellular immunology is desirable. The starting salary is \$13,500. Campus housing is available. Send résumé to: **Dr. Frank M. Collins, Trudeau Institute, Inc., P.O. Box 59, Saranac Lake, N.Y. 12983. An Equal Opportunity Employer.**

POSTDOCTORAL POSITION IN IMMUNOLOGY/ MICROBIOLOGY

Available immediately. Prospective or recent Ph.D. to study the role of endotoxin in disease. Experience in antibody production and radioimmunoassay highly desirable. Excellent opportunity for development in strong immunology community at the Center for Immunology of SUNY at Buffalo and Roswell Park Memorial Institute. Academic appointment and salary negotiable, depending upon qualifications. Send resume and references to Dr. James P. Nolan, Chairman; Department of Medicine; SUNY at Buffalo School of Medicine; 462 Grider Street; Buffalo, NY 14215 (716) 898-4814.

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DEPUTY DIRECTOR SCIENCE AND TECHNOLOGY

This position reports to the Laboratory Director and is responsible to the Director for Laboratory-wide coordination and review of all scientific and technical programs. The Deputy Director for Science and Technology works with the Laboratory Director in selecting Laboratory objectives; determining program character, planning and schedule; recruiting and selecting of senior management personnel; and in reviewing programs. The Deputy Director will have oversight of all science and technology within the Laboratory, with particular responsibilities for the applied research and development programs.

Applicants for this position should possess a broad background with a significant record of achievement in science, technology and management, and particular expertise in the applied nuclear sciences. Suitable candidates may presently be in an industrial, government or academic environment functioning, for example, as: R&D Vice Presidents; major program or project directors; research laboratory division directors; engineering school deans.

The Argonne National Laboratory is a multipurpose energy research Laboratory operated for the United States Department of Energy by the University of Chicago and the Argonne Universities Association.

Send resume with salary requirements to
Ronald A. Johns, Box DLD, Argonne National Laboratory,
9700 So. Cass Avenue, Argonne, IL 60439.



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The qualified candidate for the position of Head of Toxicology must have a PhD or equivalent in the Biological or Biochemical Sciences with 5 or more years in senior toxicology functions. Duties include both scientific and administrative assignments in planning, supervision of short and long term animal safety studies, and evaluation and reporting of data. Interaction with all groups in drug safety and development project teams is important.

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The successful applicant for the opening as Research Scientist for Reproductive Pathology should have a PhD or equivalent with enough experience to direct the activities of a small group in evaluating the effects of potential drugs on reproduction in animals.

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POSITIONS OPEN

POSTDOCTORAL POSITION available immediately for Ph.D. in biochemistry. Extensive experience in protein purification and characterization required for research on structure of a urinary protein associated with hereditary nephritis. Salary: \$12,000 per annum. Send résumé to: **Dr. C. L. Atkin, Department of Biological Chemistry, University of Utah, 410 Chipeta Way, Salt Lake City, Utah 84108. Equal Opportunity/Affirmative Action Employer.** Deadline for application 1 January 1980.

POSTDOCTORAL POSITION

Position available on a research project to study the process of fire and extinguishment. Both experimental and theoretical work are involved. Must be able to use advanced mathematical methods on problems of multicomponent fluid dynamics and heat transfer in analyzing the results. Contact: **Professor H. W. Emmons, Division of Applied Sciences, Harvard University, Cambridge, Mass. 02138. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION

Applications are invited for either a **postgraduate research biologist** or an **assistant research biologist** in the Department of Biology to study embryonic development of amphibian neurons in vivo and in cell culture. Applicants must have Ph.D. plus several years of postdoctoral training. Experience in tissue culture, neuronanatomical and neurochemical techniques is a must. Should have demonstrated independent research ability and is expected to carry out an active research program. Salary ranges are \$13,596 to \$17,076 per annum and \$19,700 to \$25,900 per annum, respectively. Please send résumé and three letters of recommendation to:

**Dr. Nicholas Seitzer
Biology Department B-022
University of California, San Diego
La Jolla, Calif. 92093**

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

POSTDOCTORAL POSITION available immediately (for 34 months) to study *Paramecium* excitable membrane proteins. Experience in protein biochemistry required. First-year stipend: \$12,000 and benefits. Send curriculum vitae and names of three references to: **Dr. J. Van Houten, Department of Zoology, University of Iowa, Iowa City, Iowa 52242.**

Two **POSTDOCTORAL POSITIONS** available immediately in growing department of biochemistry.

Position 1: One-year position, possible renewable for a second year; to study CO binding to cytochromes; requires Ph.D. degree in biochemistry or related area, with experience in purification of membrane-bound proteins or with preparation and characterization of liposomes.

Position 2: One-year position to synthesize substrate analogs of collagen as inhibitors of collagenase; requires a Ph.D. degree in organic chemistry with experience in organic synthesis or solid-phase peptide synthesis and familiarity with modern techniques of purification and structure determination.

Send curriculum vitae, transcripts, and names of two references by 1 October 1979 to: **Dr. Robert D. Gray, University of Louisville School of Medicine, Department of Biochemistry, P.O. Box 35260, Louisville, Kentucky 40232. The University of Louisville is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION at the Johns Hopkins University School of Medicine. Available between January and July 1980. Research and training in the neurobiology of cardiovascular control. Strong background in modern techniques of neurophysiology or neuroanatomy recommended. Applicants should send their curriculum vitae and bibliography to: **Dr. Lawrence Schramm, The Johns Hopkins University School of Medicine, 226 Traylor Building, 1721 East Madison Street, Baltimore, Maryland 21205.**

POSTDOCTORAL RESEARCH ASSOCIATE position available immediately, for 2 to 3 years, to collaborate in studies of dorsal horn organization. Experience with electrophysiological techniques and computer programming essential. Salary starting at \$11,000, commensurate with experience. Send curriculum vitae and three letters of recommendation before 15 November 1979 to: **Dr. Paul B. Brown, Department of Physiology and Biophysics, West Virginia University Medical Center, Morgantown, West Virginia 26506. West Virginia University is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION available for study of structure function relationship of proteins. Projects concern enzymatic and chemical methylation of membrane proteins, pituitary polypeptides, cytochromes, and nuclear proteins. Send inquiries, curriculum vitae, and references to: **Howard Schurr, Administrator, Fels Research Institute, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, Pa. 19140. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE

A position as a postdoctoral research associate is available in the laboratory of Dr. William R. Jeffery beginning 1 December 1979 or earlier, to study the structure and function of messenger ribonucleoprotein in eukaryotic cells. Applicants are required to have a Ph.D. and research experience in two or more of the following areas: RNA biochemistry, electron microscopy of macromolecules, two dimensional electrophoretic analysis of proteins, cell microinjection methods, and protein: protein or protein: nucleic acid cross-linking. A salary of \$12,000 to \$15,000 per year will be offered, depending on experience. Candidates must send curriculum vitae which demonstrates evidence of scientific productivity and contains the names and addresses of three references by 1 November 1979 to: **Dr. William R. Jeffery, Department of Zoology, University of Texas at Austin, Austin, Texas 78712. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE POSITIONS available 1 October 1979 for studies on the movement and allocation of metabolites in higher plants. Research will focus on underlying regulatory mechanisms and their molecular nature. Background should be in biochemistry, plant physiology, molecular biology, or microbiology. Research experience in transport phenomena, membrane properties, or nitrogen metabolism is desirable. Salary: \$12,000 to \$14,000, depending on experience. For further information and application forms, please send résumé to:

**Dr. Philip Filner, Acting Director
Michigan State University—Department of Energy
Plant Research Laboratory
Michigan State University
East Lansing, Michigan 48824**

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

POSTDOCTORAL/RESEARCH ASSOCIATE to study the interactions of steroid hormone receptors and nucleus in normal and malignant tissue. Background in DNA or chromatin biochemistry, or protein isolation with up to 4 years of postdoctoral experience. A term of appointment of at least 2 years is anticipated. Salary will be consistent with experience and training. Contact: **Dr. Walter B. Panko, Departments of Pathology and Cell Biology, Baylor College of Medicine, Houston, Texas 77030. An Equal Opportunity Employer.**

POSTDOCTORAL TRAINEE POSITION IN ENVIRONMENTAL TOXICOLOGY. Training program available immediately. Environmental Health Sciences Center, Oregon State University, administers a training program sponsored by NIEHS. Emphasis is on metabolism and mode of action of environmental contaminants. Only U.S. citizens or permanent residents with recent degrees in biochemistry or the biological sciences can be considered; prior experience in toxicology not essential. For further information contact: **Dr. Ian J. Tinsley, Program Director, EHSC, Oregon State University, Corvallis, Ore. 97331. Applications close 31 October 1979. An Equal Opportunity/Affirmative Action Employer in compliance with Section 504, Rehabilitation Act of 1973.**

PRE- and POSTDOCTORAL POSITIONS are available for individuals with microbiology background for studies on the protein synthesizing system with special emphasis on ribosomes—topography, biogenesis, and function. Teaching opportunities available. Reply with résumé to: **Dr. Bruce H. Sells, Professor and Director, Laboratories of Molecular Biology, Faculty of Medicine, Health Sciences Centre, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1B 3V6.**

RESEARCH POSITION, permanent, at university hospital in Midwest. Immunochemist or immunologist with biochemical background. Doctorate required. Work on immunodiagnosis and therapy of human cancer. Familiarity with antibody fractionation, labelling, and immunoassays desirable. Excellent benefits and salary.

Box 252, SCIENCE

POSITIONS OPEN

Position available immediately for a **POSTGRADUATE RESEARCH BIOLOGIST** in the Department of Biology to work in cellular immunology. The 1- to 3-year position is open for the study of the development of T cell function in young animals. Applicants should have a Ph.D. degree, and a background in cellular immunology. Salary range: \$13,596 to \$17,076 per annum. Please send curriculum vitae to:

**Dr. Richard H. Dutton
Department of Biology, M-001
University of California, San Diego
La Jolla, Calif. 92093**

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

Thomas Jefferson University seeks applicants for a **PROFESSOR AND CHAIRPERSON** of its Department of Pathology. Selection criteria will include leadership ability; broad interests in medical and paramedical teaching at graduate and undergraduate levels; scientific achievements; national and international endeavors in the field, and a desire to build a dynamic department. Interested persons should submit letters of application, with complete curriculum vitae and references, to: **Russell W. Schaedler, M.D., Search Committee for Chairperson of the Department of Pathology, Department of Microbiology, Jefferson Alumni Hall, 1020 Locust Street, Philadelphia, Pa. 19107. Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE IN BIOCHEMISTRY

Must be filled immediately. A Ph.D. degree in biochemistry, organic, or physical chemistry, preferably with some experience in enzymology or organic synthesis of model compounds for enzymological studies. Salary in the range of \$15,500 to \$18,500 per year. Renewable after first year for up to 3 years or longer, depending upon availability of funds. Apply to: **Dr. I. K. Vijay, Animal Sciences Center, University of Maryland, College Park, Maryland 20742; telephone: 301-454-3928.**

RESEARCH ASSOCIATE—Position open for Ph.D. biochemistry with at least 3 years of experience with protein phosphorylation enzymology to conduct research on hormone receptor adenyl cyclase interactions in cardiac tissue. Salary: \$18,000 per year. Send résumé to:

Box 272, SCIENCE

RESEARCH ASSOCIATE BIOCHEMICAL PHARMACOLOGY

A **POSTDOCTORAL/RESEARCH ASSOCIATE** position available October 1979 in biochemical pharmacology as related to studies on isolation of pharmacologically active peptides and protein precursors involved in murine and human tumors. Applicant should have recent Ph.D. or equivalent in pharmacology or biochemistry. Salary up to \$17,000. Possibility of eventual tenure-track. Send résumé (include telephone number) and names of two references to: **Dr. L. M. Greenbaum, Chairman, Department of Pharmacology, Medical College of Georgia, Augusta, Georgia 30912.**

The Medical College of Georgia is an Affirmative Action/Equal Opportunity Educational Institution.

RESEARCH ORNITHOLOGIST—Applications are invited for a research collaborator to study marine and estuarine birds in areas being considered for oil and gas leases in Alaska. Research will emphasize distribution and the determination of critical habitats and species. Background in statistics and computer programming desirable. Salary: \$12,000 plus benefits. Applications accepted until 15 October. Send curriculum vitae and two letters of recommendation to: **Alaska Project, Point Reyes Bird Observatory, 4990 Shoreline Highway, Stinson Beach, Calif. 94970.**

RESEARCH POSITION, postdoctoral or permanent, at university hospital in Midwest. Immunologist with cell biological background and skill. M.D. or Ph.D. required. Work on immunodiagnosis and therapy of human cancer. Familiarity with in vitro and in vivo assays measurement of cell-mediated immunity desirable. Excellent benefits and salary.

Box 268, SCIENCE

X-RAY CRYSTALLOGRAPHER—Research associate to conduct x-ray diffraction studies on liquid crystals in well-equipped laboratory. Required Ph.D. or equivalent experience. Salary: \$11,000 to \$15,000 annually, depending on qualifications. Reply to: **Dr. Leonid V. Azarov, Director, Institute of Materials Science, University of Connecticut, Storrs, Conn. 06268, before 22 October 1979. An Equal Opportunity Employer.**

UNIVERSITY OF PENNSYLVANIA

The Department of Biology, University of Pennsylvania, invites applications for a **FULL PROFESSORSHIP** beginning 1 July 1980. Applicants should be active experimentalists and experienced teachers in developmental biology.

The department is also pleased to announce the availability of tenure-track positions at the assistant or associate professor (nontenured) level in each of the following areas beginning with the 1980 academic year:

1) **Cell Physiology**—Preference given to active researchers concerned with the molecular basis for the initiative and regulation of cell motility or other dynamic processes occurring in the cytoplasm-cytokinesis, endocytosis, transcellular transport of macromolecules, exocytosis, and so forth.

2) **Animal Physiology**—Preference given to applicants whose research involves both whole animal and in vitro cell systems and is concerned with the molecular bases for the action of mediators-hormones, proteins, endorphins, chemotransmitters, neurotransmitters, and so forth, of homeostatic phenomena or physiologic changes.

3) **Plant Physiology**—Preference given to botanists working at the cellular or molecular level using plant systems to approach problems of differentiation, growth, gene expression, or energy metabolism.

4) **Biology—Preclinical Interface**—Preference given to active researchers in the areas of immunology, animal virology, parasitology, bacteriology, pathology, or pharmacology.

Applicants must be prepared to teach an undergraduate introductory general biology, physiology, or botany course as well as an upper-class or graduate level course in their area of expertise. A previous announcement (*Science*, 17 November 1978, page 793) describes the interests and goals of the department.

Please send curriculum vitae, brief outline of projected research programs, reprints of your most relevant publications, and names and addresses of three or more referees who would be willing and competent to write letters of recommendation. Further, please arrange to have one letter sent immediately and directly by a recommender of your choice to:

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

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Researchers

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Researcher Agriculture

In this position, you will investigate the best systems for protected agriculture under arid Kuwait conditions.

We require a PhD in Agricultural Engineering, or a related discipline, and a minimum of 4 years' experience in greenhouse system design, operation, productivity and evaluation.

Researcher Poultry Nutrition

Working to investigate the variables affecting poultry nutrition and management in Kuwait, you will design nutritional management studies of various housing systems, using a minicomputer to obtain the lowest cost feed formulation and analysis of experimental data.

We require an M.Sc. in Poultry Nutrition and Physiology and 5 or more years' research experience.

Kuwait Institute offers attractive salaries commensurate with qualifications and experience, furnished housing, liberal fringe benefits including round trip air tickets and free medical benefits.

Please airmail your complete resume by **October 24, 1979** to: **Mr. Habib Al-Sahhaf, Personnel Manager, Kuwait Institute for Scientific Research, P.O. Box 24885, Safat, Kuwait, State of Kuwait.**

Kuwait Institute for Scientific Research

POSITIONS OPEN

SCIENTIST

NMR SPECTROSCOPIST—Ph.D. with experience in NMR needed to operate and maintain existing 100-MHz Varian FT-XL-100 NMR. The workscope will include routine sample analysis and self-initiated or collaborative research projects. Hands-on operational experience is mandatory. Send résumé in complete confidence with three references to:

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SENIOR FACULTY POSITION IN EPIDEMIOLOGY to organize and teach graduate courses in the epidemiology of tropical and arboviral diseases; and to initiate research in ecology and taxonomy of arboviruses, and their pathogenesis in vectors. Candidate should have an M.D. degree. Preferably with tropical experience. Apply before 15 December 1979 to: Director, Yale Arbovirus Research Unit, Department of Epidemiology and Public Health, 60 College Street, New Haven, Connecticut 06510. An Equal Opportunity/Affirmative Action Employer.

ISRAEL SENIOR PHYSIOLOGIST

The Faculty of Health Sciences in Beersheva requires a senior scientist to be responsible for the teaching and research in physiology in a recently established Medical School and a School of Allied Health Professions. Challenging position in young progressive faculty with innovative curriculum. Write enclosing curriculum vitae and references to: Dean, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beersheva, Israel.

The University of Michigan, School of Natural Resources, is seeking applicants for academic year, **TEACHING-RESEARCH POSITIONS** at the assistant professorial level in the areas of: (i) **NATURAL RESOURCE POLICY AND ADMINISTRATION**, (ii) **PLANT ECOLOGY**; also assistant/associate professorial level in: (iii) **UPLAND**, and (iv) **BIG GAME WILDLIFE MANAGEMENT**. An earned Ph.D. or equivalent career experience is desired. Applications should be sent to: William J. Johnson, Dean, School of Natural Resources, 3516 Dana Building, The University of Michigan, Ann Arbor, Mich. 48109. A nondiscriminatory, Affirmative Action Employer.

FELLOWSHIPS

GENETICS POSTDOCTORAL FELLOWSHIPS are available at the University of Rochester for 1979-1980 and 1980-1981. Intensive training in independent research is offered in human, eukaryotic, prokaryotic, viral, molecular, and population genetics. Unusual opportunities available in human genetic disease research. Applicants must have an M.D. or Ph.D. and be United States citizens or permanent residents. For further information, write: Peter T. Rowley, M.D., Director, Genetics Postdoctoral Training Program, Box 641, University of Rochester School of Medicine, Rochester, New York 14642.

POSTDOCTORAL FELLOWSHIPS are available in the Department of Biological Chemistry at the University of California, Irvine. These fellowships are available for 1 or 2 years, studying under the sponsorship of the following faculty members:

Kivie Moldave: genetic and metabolic regulation of translation in eukaryotes; **C. S. McLaughlin**: biochemical genetics of RNA and protein synthesis; **Stu Arfin**: genetic and biochemical regulatory mechanisms in mammalian systems; **Ken Ibsen**: mechanisms responsible for controlling the expansion of pyruvate kinase isozymes in normal, neoplastic, and cultured hepatocytes; **David Tiemeler**: the organization and expression of the mammalian endogenous retroviruses using the recombinant DNA technology, electron microscopy, DNA sequencing and in vitro transcription; and **John Wasmuth**: biochemical genetics of cultured somatic mammalian cells.

For further information contact the individual faculty member or write to: **Marti Dennis, Management Services Officer, Department of Biological Chemistry, University of California, Irvine, Irvine, California 92717.** The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

FELLOWSHIPS

JOINT INSTITUTE FOR LABORATORY ASTROPHYSICS (JILA)

Applications are invited for **Research Associateships** (recent Ph.D.'s) and **Visiting Fellowships** (senior scientists). JILA (jointly run by the U.S. National Bureau of Standards and the University of Colorado) is devoted to research, study, and teaching in low-energy atomic and molecular physics, theoretical astrophysics, precision measurements, and other closely related areas. Applications for research associateships can be accepted anytime throughout the year, but completed applications for visiting fellowships must be received by 18 January 1980. Further information can be obtained from: **Secretary, Visiting Scientists Program, JILA, University of Colorado, Boulder, Colo. 80309.** The University of Colorado is an Affirmative Action/Equal Opportunity Employer.

—Unique Opportunity— Stanford University

**NSF Postdoctoral Fellowship in
Molecular Biology and Computer Science**
\$14,000 per annum

Applicants should be familiar with the techniques of modern molecular biology and be interested in entering the field of computer science. Previous programming experience is useful but not essential. Responsibilities will include development and maintenance of a knowledge base of current laboratory techniques for use with an advanced model of automated experimental planning. One goal of this program is to train an individual for a career in computer science as applied to molecular biology and genetics. While the fellowship will be awarded through the Department of Computer Science, the fellow will interact regularly with research groups in the Departments of Biochemistry and Medicine.

Send résumé and the names of three references to either:

Dr. Douglas Brutlag
Department of Biochemistry
or

Dr. L. H. Kedes
Department of Medicine
Stanford University
School of Medicine
Stanford, California 94305

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PROGRAM

PROFESSIONAL PROGRAM: DOCTOR OF OPTOMETRY (O.D.). Accelerated program of two calendar years specifically designed for the Ph.D. in the sciences to earn the O.D. degree. Excellent opportunities in health related teaching and research; opportunity for an independent professional career. Program starts June 1980. **Division of Vision Sciences, The New England College of Optometry, 424 Beacon Street, Boston, Mass. 02115.** Telephone: 617-261-3430, extension 34.

COURSE

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Department of Preventive Medicine and
Community Health
Galveston, Texas 77550
Telephone: 713-765-1803

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Commission on International Relations (USSR/EE)
National Academy of Sciences
2101 Constitution Avenue
Washington, D.C. 20418

Applications are invited from American scientists interested in professional visits (1 to 12 months) between 1980 and August 1981 in the USSR, Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania, and Yugoslavia. Applicants must be U.S. citizens and have a doctoral degree in the natural or social and behavioral sciences. Deadline for submitting applications is 16 November 1979; but applications materials must be requested no later than 26 October 1979.

MARKET PLACE

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

The cattle ranchers, suffering losses of \$350 million a year in meat and milk production, saw their livelihoods at stake. And while Count Dracula may have been kept in his place by a wooden stake, the ranchers needed a better solution.

The U.S. Agency for International Development (AID) funded U.S. Fish and Wildlife Service scientists who devised a control method. An anticoagulant solution, diphenadione, based on a Kodak intermediate, was developed by a chemical firm. It is smeared on vampire bats after they are trapped in nets. The bats, grooming each other, ingest it and die as they live—by bleeding. The purpose is not to eradicate the species, but to control them. Since other bat species do not associate with vampire bats, this method selectively controls only *Desmodus rotundus*, and only in those areas where they pose a threat to domestic livestock and human needs.

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