

AAAS MASS MEDIA SCIENCE FELLOWS PROGRAM

AAAS invites outstanding natural and social science students, preferably those at the graduate level, to apply for the 1980 Mass Media Science Fellows Program. Students majoring in English, journalism, or other nonscientific fields are not eligible for these Fellowships.

Fellows will work as reporters, researchers, and production assistants for 10 weeks during the summer at radio stations, television stations, newspapers, and magazines throughout the United States. Fellows will have the opportunity to participate in the news-making process, to increase their understanding of editorial decision-making and information dissemination, and to develop skill in conveying to the public a better understanding and appreciation of science and technology. AAAS pays a \$200 weekly stipend and travel expenditures. Deadline for receipt of applications is 15 February 1980. Minority and handicapped candidates are especially encouraged to apply.

For further information and an application, write:

Mass Media Science Fellows Program
AAAS, 8th floor
1776 Massachusetts Avenue, NW
Washington, D.C. 20036



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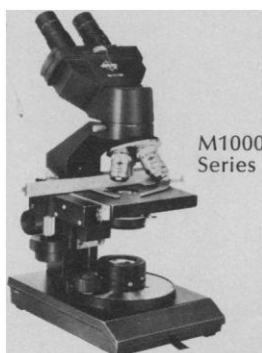
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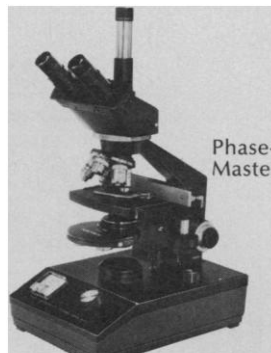
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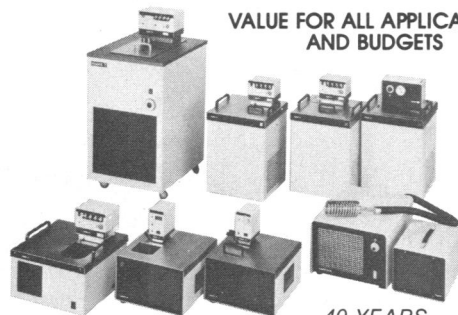
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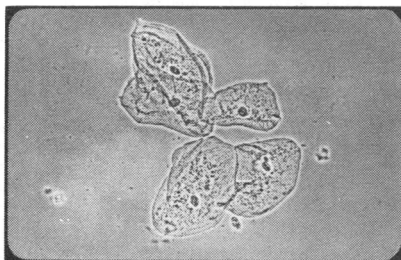
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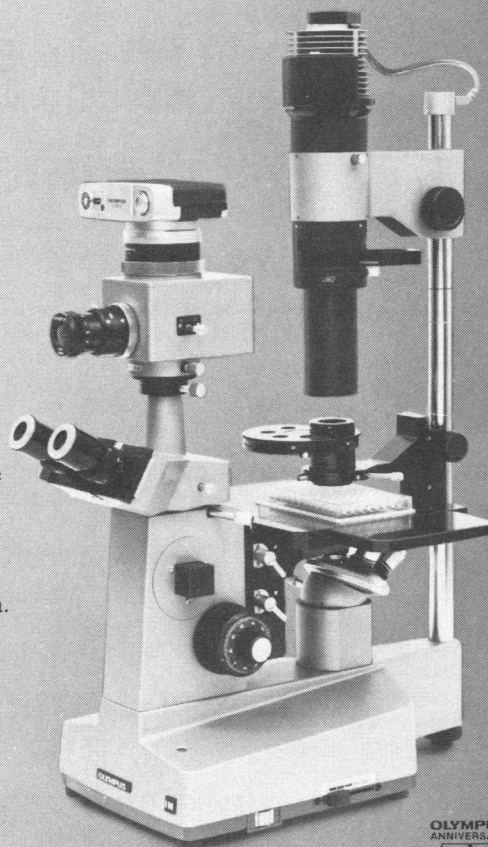
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Congressional Science and Engineering Fellowships

Applications Invited

The Congressional Science and Engineering Fellow Program provides an opportunity for accomplished and societally aware postdoctoral to mid-career scientists and engineers to participate in and contribute to the public policy-making processes within the Congress for approximately 1 year. Fellows work as special legislative assistants within the congressional staff system.

As the coordinator for the program, which includes 20 sponsoring scientific and engineering societies, AAAS arranges a carefully structured orientation program, guides the placement process, and arranges seminars throughout the year. In addition, AAAS sponsors one Fellow of its own (persons in all fields of science and engineering are eligible) and cosponsors at least one additional Fellow. Minority and handicapped candidates are especially encouraged to apply.

Cooperating sponsoring societies now are accepting applications for the 1980-81 Fellowships. Stipends, application procedures, and deadline dates vary by society. All Fellowships begin 1 September 1980. Applicants should contact the sponsors listed below directly at the earliest possible date.

American Association for the Advancement of Science

Director, Congressional Science and Engineering Fellow Program,
1776 Massachusetts Avenue, NW, Washington, D.C. 20036

American Chemical Society

Dr. Annette Rosenblum, 1155 16th Street, NW,
Washington, D.C. 20036

American Geophysical Union

Dr. Fred Spilhaus, 1909 K Street, NW, Washington, D.C. 20006

American Institute of Aeronautics and Astronautics

Mr. Johan Benson, Suite 606, 1625 Eye Street, NW,
Washington, D.C. 20006

American Physical Society

Dr. Mary Shoaf, 335 East 45 Street, New York, N.Y. 10017

American Psychological Association

Dr. Joann Horai, 1200 17th Street, NW, Washington, D.C. 20036

American Society for Microbiology

Dr. Robert F. Acker, 1913 Eye Street, NW, Washington, D.C. 20006

American Society of Mechanical Engineers

Mr. Mitchell Bradley, Jr., Washington Representative,
Suite 603, 2029 K Street, NW, Washington, D.C. 20006

Acoustical Society of America

Ms. Betty Goodfriend, 335 East 45 Street, New York, N.Y. 10017

Biophysical Society (in cooperation with the American Society for Photobiology)

Dr. E. L. Hess, 8706 Yarmouth Court, Potomac, Md. 20854

Conference Board of the Mathematical Sciences

(coordinator for Fellowship sponsored jointly by the American Mathematical Society, Mathematical Association of America, and Society for Industrial and Applied Mathematics) Dr. Truman Botts, Suite 457-8,
1500 Massachusetts Avenue, NW, Washington, D.C. 20005

Duke University Round Table on Science and Public Affairs

Dr. William Bevan, Duke University, Durham, N.C. 27706

Federation of American Societies for Experimental Biology

Mr. Walter Ellis, 9650 Rockville Pike, Bethesda, Md. 20014

Institute of Electrical and Electronics Engineers

Mr. Thomas Suttle, IEEE Washington Office, 2029 K Street, NW,
Washington, D.C. 20006

Society for Research in Child Development

Dr. Eileen Blumenthal, 815 15th Street NW, Washington, D.C. 20005

For additional information, write: **Dr. William G. Wells, Jr., Science Policy Programs Manager, AAAS, 1776 Massachusetts Ave., NW, Washington, D.C. 20036.**

PRINCETON PRESCRIBES

The Role of Medicine

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THOMAS McKEOWN

Defining nutrition, environment, and behavior as more central to health than clinical and curative measures, Dr. McKeown argues that the role of medicine is distorted, medical science and services are misdirected, and society's investment in health is misused. He calls for greater emphasis on the origins of disease and on the care of patients who provide no scope for active measures.

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In the form of letters to public officials, Efraim Racker presents a strong case in favor of the funding of basic medical research, and criticizes trends toward crash campaigns and "target" programs to cure specific diseases. A winner of the Presidential Medal of Science, he advocates knowledge of the fundamentals of biological and bio-chemical processes as essential for gaining an understanding of disease processes, prevention, and cure. Cloth, \$12.50. Paper, \$4.95

Princeton University Press

Princeton, New Jersey 08540

Congressional Science and Engineering Fellowships

The American Association for the Advancement of Science (AAAS), which coordinates the Congressional Science and Engineering Fellow Program, is pleased to announce that the Biophysical Society and the American Society for Photobiology have joined 16 other professional societies in seeking applications for a Congressional Science Fellow for 1980-81. AAAS will also select and sponsor one Congressional Science and Engineering Fellow; persons in all fields of science and engineering are invited to apply for the AAAS Congressional Science Fellowship. Handicapped persons and minorities are especially encouraged to apply.

Fellows spend 1 year working as special legislative assistants on the staffs of various members of Congress or congressional committees. Stipends for the AAAS and the Biophysical Society and the American Society for Photobiology Fellowships are \$19,500 plus a nominal sum for travel and relocation expenses.

Applicants should write directly to the appropriate society listed below. The deadline for receipt of applications for both the AAAS and the Biophysical Society and the American Society for Photobiology Fellowships is 15 February 1980. Information about the entire Congressional Science and Engineering Fellow Program, including the addresses of all participating societies, is available from the AAAS.

Dr. E. L. Hess, Coordinator, Congressional Science Fellowship Program, 8706 Yarmouth Court, Potomac, Maryland 20854.

Dr. William G. Wells, Jr., Science Policy Programs Manager, AAAS, 8th floor, 1776 Massachusetts Ave., NW, Washington, D.C. 20036.

Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year. Advertising closing for a particular Friday issue is Wednesday, 3 1/2 weeks before. Advertising is accepted only in writing; no abbreviations. Also, personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, or handicap.

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Effective 1 January 1980, the display rate for SCIENCE will be \$180 per 25 millimeters, minimum, per insertion.

POSITIONS WANTED

Biochemical/Biomedical Consulting desired, Ph.D. chemist with 6 years of experience in blood coagulation biochemistry. Protein purification, chromatography, electrophoresis, coagulation assays, and technical writing are specialties. Box 335, SCIENCE. X

Bioengineer. Ph.D. 1974, M.S.M.E. Diversified research experience; numerous publications. Seeks challenging interdisciplinary position. Box 321, SCIENCE. X

Cardiovascular Pharmacologist/Physiologist. Ph.D. 1973. Trained and experienced in cardiac circulatory hemodynamic and biochemical research (digitalis, antiarrhythmic, antianginal, and antihypertensive agents) in various animal models. Experienced in membrane biochemistry, (Na⁺, K⁺)-ATPase, cardiac sarcoplasmic reticulum. Teaching experience. Publications, grants, and research facilities available. Seeks position in academic, federal, or industrial laboratories. Box 334, SCIENCE. X

Environmental Biologist/Biochemist. B.S. plus work towards M.S. Currently chemist for small town. Has experience with EPA and personnel management. Seeks position in research, laboratory, or field. R. Wattinger, Route 1, Box 39-D, Reva, Virginia 22735. X

Boston. Nonstress position, **literature research, clerical, light typing, or other.** Supportive job atmosphere. Biochemistry imbalance. Degree. High IQ. Box 332, SCIENCE. 12/7, 21; 1/4, 18

Immediate position wanted. Ph.D. **Pharmacologist** with experience teaching physiology; chemistry background. Write, giving job description. 5556 North Wayne, Chicago, Illinois 60640. 12/7, 14, 21

POSITIONS WANTED

Mathematical Biologist/Health Physicist. Ph.D., 26 years of experience in health physics at Oak Ridge National Laboratory. Seeks consulting job in kinetics problems-pharmacokinetics-metabolic models, and so forth. Telephone: 615-574-6261 during the day, or 615-482-4532 at night. Or write: S. R. Bernard, 109 Packer Road, Oak Ridge, Tennessee 37830. 12/7, 14

Nutritionist/Physiologist. Ph.D. Major interests are in diet-endocrine interactions in carbohydrate, lipid, and energy metabolism during postnatal development of animal models of obesity and diabetes. Publications. Grants. Seeks industrial research position in the New Jersey region. Box 325, SCIENCE. X

Physician-Pharmacologist/Toxicologist (M.D., Ph.D.), research background, industrial and regulatory experience. Desires significant responsibility in toxicology/health impact assessment with major corporate organization. Reply to: Box 333, SCIENCE. X

Physiologist/Biochemist. Ph.D. Experienced endocrinologist-embryologist; developed highly sensitive tissue-culture techniques for studies on differentiation and abnormal development with teratogens and carcinogens; obtained research funding from NIH; numerous publications on hormones, oogenesis, tissue culture, and on early embryonic development. Seeks research/teaching position. Available immediately. Box 331, SCIENCE. X

POSITIONS OPEN

ANALYTICAL CHEMISTRY LABORATORY MANAGER. Operate, maintain, upgrade, and instruct others in a variety of analytical instruments, computer hardware, and software. Experience in PFT, NMR, GC/MS. Background in electronics and computers. Appropriate combination of education and experience with a B.S. in chemical or physical sciences preferable. Salary: \$1,656 to \$1,996 per month. Apply to: **Personnel Office, University of California, Santa Cruz, Calif. 95064** by 21 December 1979. *Equal Opportunity Employer.*

ANATOMIST- MUSCLE BIOLOGIST

The Department of Anatomy, Medical College of Pennsylvania, invites applications from highly qualified individuals for appointment as assistant professor. Teaching duties initially in histology-cell biology; teaching experience in histology and gross anatomy preferred. The applicant should have 3 years of postdoctoral training in invertebrate and vertebrate muscle and neuromuscular ultrastructure, contractile protein isolation, and enzyme assays. Additional experience in optical diffraction and immunoelectrophoresis desired. Submit curriculum vitae, research plans, and names of three references by 1 January 1980, to:

**CHAIRMAN
DEPARTMENT OF ANATOMY
MEDICAL COLLEGE
OF PENNSYLVANIA**

**3300 Henry Avenue
Philadelphia, Pa. 19129**

Equal Opportunity Employer, M/F

ASSISTANT PROFESSOR OF EARTH SCIENCES to begin September 1980. A tenure-track position in low-temperature geochemistry. To teach at the introductory and advanced levels and to develop a strong research program involving graduate and undergraduate students. Qualifications: completed Ph.D. Special consideration will be given to candidates who have had postdoctoral experience and whose research interests are in the area of trace metal geochemistry of recent clastic, carbonate, and evaporitic sediments and pore water. To apply, submit by 31 January 1980, a résumé and three letters of reference to: **Herbert Tischler, Department of Earth Sciences, James Hall, University of New Hampshire, Durham, N.H. 03824.** *The University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITIONS AVAILABLE ANATOMISTS

Positions will be available 1 July 1980 at the assistant professor level. Applicants must have Ph.D. degree in anatomy, or equivalent, as well as demonstrated ability to teach gross anatomy. Preference will be given to candidates with postdoctoral experience and a record of research accomplishment in cell biology, developmental biology, immunology, or neuroscience. Applicants should submit curriculum vitae, brief description of future research plans, and names and addresses of three references to:

Dr. Ronald L. St. Pierre, Chairman
Department of Anatomy
The Ohio State University
4072 Graves Hall
333 West 10 Avenue
Columbus, Ohio 43210

The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women and minority and handicapped persons, as well as others, are encouraged to apply.

ANATOMIST. West Virginia School of Osteopathic Medicine. Effective date: 1 July 1980. Position description: teaching of gross anatomy. Qualifications: Ph.D. with 3 to 6 years of experience teaching in medical or dental school preferred. Pay schedule: rank and salary negotiable. Apply to: Personnel Office, West Virginia School of Osteopathic Medicine, 400 North Lee Street, Lewisburg, West Virginia 24901.

INSTITUT NATIONAL DE LA RECHERCHE SCIENTIFIQUE (INRS) UNIVERSITE DU QUEBEC AQUATIC BIOLOGIST

INRS, a constituent of the Université du Québec, is a research institute which offers academic programmes at the graduate level only; the official language of communication is French. Applications are invited for a tenure-track position in aquatic biology at INRS-Eau, a multidisciplinary water research centre located in Québec city.

The successful candidate will be expected to participate in ongoing research projects within the Centre, develop a strong research programme in hydrobiology, and teach graduate courses; the approximate commitment is 80 percent research and 20 percent teaching. Doctorate in aquatic biology, or equivalent in published research, required. Experience in multidisciplinary research highly desirable, particularly concerning zooplankton, zoobenthos, freshwater fisheries, or biological systems analysis. Demonstration should be made by the candidate of a potential to attract grant funds and research contracts. Appointment will be made at the rank of professor, associate professor, or assistant professor, depending on background and experience. **Deadline: 15 January 1980.**

Refer to competition number SP 79-31. Send curriculum vitae and names of three references to:

Directeur du personnel
Institut National de la Recherche Scientifique
2700 rue Einstein
C.P. 7500
Sainte-Foy, Québec, Canada G1V 4C7

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Law Engineering is an established geoenvironmental consulting firm with more than 30 years of experience in the areas of ecology, geology, water resources, seismology, waste management, environment assessment, special failure investigations, and product development related to construction.

We now have a position available for an outstanding individual in the area of environmental sciences and assessment. Minimum qualifications include: a Ph.D., ecological science, soil science, or socioeconomics/planning; and 7 to 10 years in environmental consulting or relevant governmental positions, environmental impact assessment, baseline analyses, permit preparation, business development success, and management experience. Responsibilities include client development, management, and technical execution. Salary open. *Affirmative Action/Equal Opportunity Employer.* Send résumé to:

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POSITIONS OPEN

The American Museum of Natural History

The Department of Invertebrates invites applications for a position of **ASSISTANT CURATOR IN INVERTEBRATE ZOOLOGY**. Prime requisite is a strong research orientation in systematics, with demonstrated interest and competence in a particular group of marine Metazoa (except Mollusca), and a broad, general knowledge of invertebrates. In addition, the candidate should be actively involved in applying the results of systematic investigations to problems in phylogenetic reconstruction, evolutionary theory, functional morphology, or ecology. Furthermore, the person is expected to be active and competent in field investigations and in collecting original materials for research purposes. Other duties include full participation in the department's curatorial program, as well as participation in other normal duties (including the exhibition program) of the curatorial staff of the American Museum of Natural History.

The position will be filled on 1 July 1980. The successful candidate must have the Ph.D. in hand by time of appointment. Applications should include: (i) a brief statement of research interests, (ii) curriculum vitae, (iii) complete bibliography, and (iv) three letters of recommendation from persons familiar with the applicant's qualifications. Applications must be submitted by 1 February 1980 to: **Dr. Ernst Kirsteuer, Chairman, Department of Invertebrates, American Museum of Natural History, Central Park West at 79th Street, New York, N.Y. 10024.**

An Equal Opportunity/Affirmative Action Employer, M/F

ASSISTANT PROFESSOR

Applications are invited for a tenure-stream position in the Department of Psychology, University of Pittsburgh. This position begins September 1980. Candidates should have research experience related to the development of the nervous system with particular emphasis on the development of sensory systems. Send curriculum vitae, names of three references, sample papers, and a brief description of proposed research program to: **Dr. David C. Wood, Department of Psychology, University of Pittsburgh, Pittsburgh, Pennsylvania 15260.**

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

Cancer Research Unit

University of Western Ontario, London, Ontario

Positions are available for staff at the **ASSISTANT OR ASSOCIATE PROFESSOR** level (nontenure-track) and for **POSTDOCTORAL FELLOWS AND GRADUATE STUDENTS**. Research is focussed on the areas of cellular and viral DNA replication, nucleic acid metabolism in eukaryotic cells, mRNA cloning, and mechanisms of cell transformation. The unit is well funded by the National Cancer Institute of Canada and is affiliated with the Department of Biochemistry and the Department of Microbiology and Immunology in the Medical School of the University. Candidates for a staff position should submit curriculum vitae, statement of research interests, and the names of three referees to: **Dr. David T. Denhardt, c/o The Administrative Secretary, Cancer Research Unit, University of Western Ontario, London, Ontario, Canada N6A 5B7.** Students should apply for admission through the above-mentioned departments.

ASSISTANT PROFESSOR OF ANATOMY. Teaching and research areas open, but postdoctoral experience and evidence of research capability/fundability highly desirable. Send curriculum vitae to: **Dr. W. K. Metcalf, Department of Anatomy, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Neb. 68105.** *The University of Nebraska is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR—MICROBIOLOGY

Tenure-track position available August 1980 to develop courses in medical microbiology and area of specialization. Research interests should be in immunology, pathogenic mechanisms, or virology. Must have demonstrated research productivity in area of specialization. Postdoctoral experience is required. Salary: \$16,000; application deadline: 15 February 1980. Send résumé and three letters of recommendation to: **William T. Northey, Ph.D., Chairman, Search Committee, Department of Botany and Microbiology, 368 Life Science Building, Arizona State University, Tempe, Arizona 85281.** *Arizona State University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR: BIOCHEMISTRY

A faculty position at the rank of **assistant professor** will become available 1 July 1980. The primary requirement is promise in teaching and research. Applications will be accepted irrespective of the specific area of biochemical research.

Applicants should submit curriculum vitae with a list of publications, a brief description of their proposed research program, and the names of three references to: **Dr. Robert L. Hill, Chairman, Department of Biochemistry, Duke University Medical Center, Durham, North Carolina 27710.**

Duke University is an Equal Opportunity/Affirmative Action Employer.

ACADEMIC POSITION OPENING

ASSISTANT PROFESSOR—BIOCHEMISTRY. The Department of Chemistry, University of Wisconsin-Milwaukee, will fill a tenure-track faculty position in the area of biochemistry in fall 1980. Potential for developing distinction in both research and teaching will be the primary criterion for appointment. Qualifications and interests to coordinate and further develop a unique, accelerated premedical curriculum within the department, including the developing of bioorganic and biochemistry courses, are necessary. Applicants should have three letters of recommendation, a résumé, undergraduate and graduate academic transcripts, and a summary of planned research sent to: **Dr. Ralf Vanselow, Chairman, Department of Chemistry, University of Wisconsin-Milwaukee, Milwaukee, Wis. 53201.** *The University of Wisconsin-Milwaukee is an Equal Opportunity/Affirmative Action Employer.*

University of Wisconsin-Madison

The Department of Biochemistry invites applications for the position of **ASSISTANT PROFESSOR**; exceptionally well-qualified applicants would be considered at the level of **ASSOCIATE OR FULL PROFESSOR**. Candidates must have a research interest in the field of enzymology. Responsibilities will include teaching, supervision of graduate students, and development of an independent research program. Salary will be on a 12-month basis; it will be commensurate with the experience of the candidate and compatible with the salary structure of the University of Wisconsin System. *Women and minority candidates are especially encouraged to apply.* Send detailed curriculum vitae and statement of research interests to: **H. F. DeLuca, Department of Biochemistry, University of Wisconsin, Madison, Wis. 53706,** before 15 February 1980. Applicants should have three letters of recommendation submitted to the same address. *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF GEOLOGY— MINERALOGIST/PETROLOGIST

The Department of Earth Sciences, Physics and Engineering of the University of Southern Maine seeks applicants for a tenure-track position as assistant professor of geology with duties beginning in September 1980. Major responsibilities are teaching undergraduate courses in mineralogy, optical mineralogy, and petrology. Other responsibilities include advising and involving undergraduates in research activities. Requirements: Ph.D. in geology, demonstrated scholarship, and a genuine desire to teach. Beginning salary will range between \$15,000 and \$18,000 per year, commensurate with academic background and experience.

Closing date for applications: 15 February 1980.

Please send résumé, transcripts, and three letters of recommendation to:

Parnell Hare, Chairman
Department of Earth Sciences,
Physics and Engineering
University of Southern Maine
Gorham, Maine 04038

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

Assistant Professor: Pharmacology. Neuropharmacologist with interest and experience in basic and clinical research particularly with relation to development and mental retardation. Candidate should have strong background in cholinergic and adrenergic transmitter mechanisms. Reply by 15 January 1980 to: **Chair, Search Committee, Department of Pharmacology, University of California, Los Angeles, Center for the Health Sciences, Los Angeles, Calif. 90024.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR—MICROBIOLOGY

The University of Georgia, Department of Microbiology, invites applications for a tenure-track appointment beginning in academic year 1980-1981 as assistant professor. A minimum of 1 or 2 years of postdoctoral experience is required. The appointee will be expected to establish a strong program of research and scholarship in microbiology and to participate in graduate and undergraduate teaching. *We welcome women and minority applicants.* Send curriculum vitae, résumé of past and present research, and the names of three referees by 15 February 1980 to:

Chairperson,
Search Committee
Department of Microbiology
University of Georgia
Athens, Georgia 30602

The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

The Department of Animal Science, UNIVERSITY OF CALIFORNIA, DAVIS, is seeking an ASSISTANT PROFESSOR IN NUTRITION of simple stomach animals. The position will be teaching 60 percent and research 40 percent (in the Agricultural Experiment Station).

Qualifications: A Ph.D. in nutrition, or equivalent qualification, with emphasis in biochemistry and physiology. A background knowledge of swine and/or horse production practices is highly desirable.

The appointee would be expected to teach courses in undergraduate and graduate programs in nutrition and develop a strong nutritional research program, including graduate student training in swine and/or horse nutrition.

Applications: Applicants should submit curriculum vitae, transcripts, bibliography, and the names and addresses of at least three persons familiar with your work to: W. N. Garrett, Chairman, Search Committee, Department of Animal Science, University of California, Davis, California 95616.

Applications should be submitted by 1 March 1980. The position is available 1 July 1980.

The University of California is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.

ASSISTANT PROFESSOR OF PHYSIOLOGY (NEUROSCIENCE)

The Department of Physiology of the Johns Hopkins University School of Medicine invites applications from neuroscientists for a position as assistant professor, open 1 July 1980. Applicants must have the Ph.D. or the M.D. degree, and a record of productivity in original research. Duties include teaching neuroscience to students of medicine, and the instruction and supervision of graduate students. Please send curriculum vitae, a narrative account of past research accomplishments and present research interests, and two letters of recommendation to: The Director, Department of Physiology, The Johns Hopkins University School of Medicine, 725 North Wolfe Street, Baltimore, Maryland 21205. *The Johns Hopkins University is an Equal Opportunity Employer.*

BIOLOGY instructor or assistant professor, College of Sciences. Temporary 1-year appointment. Teaching responsibilities include human anatomy and physiology for nurses. M.S., A.B.D., or Ph.D. in human anatomy and physiology required. Previous experience in teaching large (120 students) lecture section with multiple laboratory sections desired. Position begins 9 June 1980 or 25 August 1980; application deadline: 1 February 1980. Send complete résumé, three letters of recommendation, and complete transcripts to Dr. R. G. Johnson, Chairperson, Department of Biology, Southeast Missouri State University, Cape Girardeau, Mo. 63701. *An Equal Opportunity/Affirmative Action Employer, M/F.*

GENETICS instructor or assistant professor. College of Sciences. Teaching responsibilities include genetics, upper-division specialty course(s), and general biology. Successful candidate will be expected to develop an active research program in genetics. Ph.D. in genetics required; previous teaching experience desirable. Position begins fall 1980; application deadline: 7 January 1980. Send complete résumé, three letters of recommendation, and complete transcripts to: Dr. Robert G. Johnson, Chairperson, Department of Biology, Southeast Missouri State University, Cape Girardeau, Mo. 63701. *An Equal Opportunity/Affirmative Action Employer, M/F.*

POSITIONS OPEN

ASSOCIATE DEAN—Applications and nominations are invited for the position of Associate Dean for Educational Affairs. Responsibilities include the coordination and evaluation of the undergraduate curriculum, the provision of student services, and the Continuing Medical Education Program. Minimum qualifications: M.D. degree. Must be qualified to hold rank of associate professor or professor in a clinical department. Experience required with substantive educational programs, committees, grants, or administrative units related to undergraduate, graduate, or continuing medical education. Deadline to apply: 20 January 1980. Send curriculum vitae and names of three references to: Walter L. Myers, Ph.D., Search Committee, Southern Illinois University School of Medicine, P.O. Box 3926, Springfield, Illinois 62708.

An Equal Opportunity/Affirmative Action Employer

Medical University of South Carolina, **DEPARTMENT OF BIOCHEMISTRY**. Three positions are available from 1 January 1980.

- 1) **Assistant professor** with strong research background in biochemistry of lymphocyte recognition and function. The individual should be an effective lecturer in this area and be capable of generating research support. Several years of postdoctoral experience are required.
- 2) **Assistant professor** with proven research and teaching ability in the area of demonstration and characterization of cell surface receptors. Several years of postdoctoral experience are required and the individual should be capable of developing a fundable research program in this area.
- 3) **Associate professor** with established research program in molecular immunology. Research interests should center around the evolution of antibodies and cell receptors. The individual should be an effective teacher in these areas.

Closing date for applications is 21 December 1979. Send curriculum vitae to: Dr. J. J. Marchalonis, c/o Office of the Dean, College of Medicine, Medical University of South Carolina, 171 Ashley Avenue, Charleston, South Carolina 29403.

DIVISION OF BIOLOGICAL SCIENCES CORNELL UNIVERSITY

Assistant professor to teach introductory genetics, participate in advanced instruction, and carry on a vigorous research program in modern genetics. Position available beginning 1 July 1980. Applicants with postdoctoral experience preferred. Candidates should send curriculum vitae, a statement of research interests, and the names of three references. Please arrange to have letters of reference sent directly to the Search Committee along with the other material, by 14 January 1980. Send applications to:

S. A. Zahler, Chairman
Search Committee
Section of Botany, Genetics, and Development
Bradfield Hall
Cornell University
Ithaca, New York 14853

Cornell University is an Equal Opportunity/Affirmative Action Employer.

BIOLOGIST WANTED. A field-oriented ecologist, capable of teaching general biology, parasitology, and either vertebrate anatomy or vertebrate physiology. Other duties could include marine biology, limnology, or histology. Staff member should also be willing to advise students, supervise student research, and serve on faculty committees. Ph.D. preferred. Position is currently untenured, but may be tenured in the near future. If interested, please send curriculum vitae and three letters of recommendation to: Dr. Nancy E. Walker, Department of Biology, Rockhurst College, 5225 Troost Avenue, Kansas City, Mo. 64110. *An Equal Opportunity/Affirmative Action Employer.*

BIOLOGIST—University of North Carolina at Charlotte (UNCC) has tenure-track position opening in fall 1980 for faculty member who will teach and continue to develop large nonmajor, introductory course currently taught in A-T mode. It is expected that individual will develop additional nonmajor courses and be active in either science education or research. Opportunity to teach in biology specialty. Earned doctorate required. Experience in A-T or individualized education required. Letters and résumé are to be sent to: Dr. Roger H. Trumbore, Chairman, Biology, UNCC, Charlotte, N.C. 28223. Deadline for application is 18 January 1980. *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

THE UNIVERSITY OF VICTORIA DEPARTMENT OF BIOLOGY

Applications are invited for a continuing faculty position in the Department of Biology effective 1 July 1980. The primary teaching area will be in plant taxonomy and the appointee will be expected to contribute significantly to teaching introductory biology and Metaphyta courses. Qualifications are a Ph.D. with research experience in vascular plant taxonomy. The appointment will be made at the assistant professor level, at a starting salary of not less than \$19,350, dependent upon teaching and research experience. The university has a herbarium of 20,000 specimens, primarily representing the flora of Vancouver Island. The nearby Provincial Museum Herbarium contains 80,000 specimens. The location of the university offers considerable potential for research in plant taxonomy.

Applications should include complete, up-to-date curriculum vitae with transcripts, descriptions of teaching and research interests and experience, a list of publications, samples of published papers, and the names of three persons from whom letters of reference can be obtained. Submit applications to: Dr. J. N. Owens, Chairman Selection Committee, Department of Biology, University of Victoria, Victoria, British Columbia, Canada V8W 2Y2. Applications should be received by 31 January 1980.

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

Reopening of the search for candidates for a tenure-track position available 31 January 1980. Candidates with a major research interest in community ecology should submit up-to-date, complete curriculum vitae and list of three references (do not request letters to be sent at this time) 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; women and minority candidates are especially welcome as applicants for this position.

BIOLOGISTS CENTENARY COLLEGE OF LOUISIANA

The Biology Department plans to fill two tenure-track positions at the assistant or associate professor level. Applicants with expertise in some combination of the following courses will be considered: botany, microbiology, invertebrate zoology, and microtechnique. Send curriculum vitae, publications, and references to: Dr. A. B. McPherson, Chairman, Department of Biology, Centenary College, Shreveport, La. 71104.

Centenary College is an Equal Opportunity/Affirmative Action Employer.

BIOORGANIC CHEMIST

The Oak Ridge National Laboratory invites applications from experienced candidates with doctorate and postdoctoral training in synthetic organic chemistry, medicinal or pharmaceutical chemistry, biochemistry, radiopharmaceutical research, or related areas. The duties involve the design, synthesis, and preclinical testing of new radiolabeling and testing of organic compounds that represent human health hazards. The position is with the Nuclear Medicine Technology Group in the Health and Safety Research Division. United States citizenship required. Relocation expenses paid. Send résumé to: Oak Ridge National Laboratory, Union Carbide Corporation, Nuclear Division, Attention: M. D. Fore, Ph.D. Employment, P.O. Box X, Oak Ridge, Tennessee 37830. *An Equal Opportunity Employer.*

CLINICAL GENETICIST, M.D. or M.D./Ph.D.

Applications are invited from geneticists for an assistant professorship in medical genetics. Specialty training as well as clinical and research training in genetics is required. Opportunity for clinical, research, and teaching activities.

Send curriculum vitae and the names of three references to:

Joe C. Christian, Ph.D., M.D.
Chairman, Department of Medical Genetics
Indiana University School of Medicine
1100 West Michigan Street
Indianapolis, Indiana 46223

Indiana University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

BIOMEDICAL ENGINEERING

Associate/full professor wanted to chair Department of Biomedical Engineering. Candidate must have a doctorate, and an outstanding record in research and teaching. May collaborate with Boston University School of Medicine or other departments under a joint faculty appointment.

Send résumé, including detailed teaching, research, and administrative experience, to: **Dr. Robert J. McLaughlin, Chairman, Search Committee, Department of Biomedical Engineering, Boston University, Boston, Mass. 02215.**

Boston University is an Affirmative Action/Equal Opportunity Employer.

BLOOD BANK TECHNOLOGIST for American Red Cross Reference Laboratory, ASCP or SBB or eligible; experienced in antibody identification problems. Position relocates to Bethesda 1 January 1980. *Equal Opportunity Employer, M/F.* Send résumé to: **Ruth Straub, Office of Personnel, American Red Cross, 18th and E Streets, Washington, D.C. 20006.**

CELL PHYSIOLOGIST. One-year leave replacement. Duties include participation in a required course in basic biochemistry/cell physiology/ecosystem energetics and advanced specialty courses. We are particularly interested in people with training in membrane biology or microbial ecology. Submit curriculum vitae, transcripts, and names and addresses of references by 1 February to: **Dr. A. E. Balber, Department of Biology, Bates College, Lewiston, Maine 04240.** *An Equal Opportunity/Affirmative Action Employer.*

CHAIRPERSON DEPARTMENT OF ANATOMY UNIVERSITY OF NORTH DAKOTA

The University of North Dakota School of Medicine is conducting an active search for a chairperson of its Department of Anatomy. Applications are sought from individuals who possess a Ph.D. and/or M.D. and who have both a demonstrated scholarly productivity in an active research program and an acknowledged history of providing quality education to medical, graduate, and undergraduate students. Candidates must possess a background which demonstrates grantsmanship experience, leadership, and administrative abilities and communication skills with faculty and students. Interested persons should submit their curriculum vitae to:

**Dr. William Olson, M.D.
Chairperson, Anatomy Search Committee
Department of Anatomy
University of North Dakota School of Medicine
Grand Forks, North Dakota 58202**

Deadline for receipt of applications is 15 January 1980.

University of North Dakota is an Equal Opportunity/Affirmative Action Employer.

DEAN, COLLEGE OF MEDICINE. The East Tennessee State University (ETSU) College of Medicine is seeking applications and nominations for the position of Dean of the College of Medicine. To qualify for consideration the candidate should possess a doctorate in medicine and/or philosophy in an appropriate science basic to medicine (or its equivalent), and other professional recognition and experience related to medical education. Salary will depend on qualifications and experience and will be competitive with other colleges of medicine in the region and nation. The vacancy should be filled not later than 1 July 1980. Applications should include complete curriculum vitae, three references, and a short essay (no longer than four typed double-spaced pages) on your academic philosophy and the place of a strong college of medicine in the large university community. Review of applications will begin immediately and will continue until the position is filled. The ETSU College of Medicine is a developing community-based, primary care-oriented medical school associated with the Veterans Administration under the Teague-Cranston Health Manpower Act of 1972. A second class of 32 students is currently enrolled, and the school is planned for classes of 72 medical students plus graduate students in sciences basic to medicine. Applications and requests for further information should be directed to:

**Dr. Arthur H. DeRosier, Jr., President
East Tennessee State University
Johnson City, Tenn. 37601**

Applications of women and minority candidates are encouraged. East Tennessee State University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS AVAILABLE STANFORD SYNCHROTRON RADIATION LABORATORY

The Stanford Synchrotron Radiation Laboratory (SSRL) is seeking qualified Ph.D. applicants for positions related to **biological research using synchrotron radiation.** Funding is anticipated in early 1980 for two positions: a postdoctoral research affiliate and a scientific staff research associate.

The postdoctoral research affiliate will be involved in an active research program of x-ray structural analysis using anomalous scattering methods. Specific scientific problems include measurement of large anomalous scattering effects near elemental absorption edges for a variety of materials and the application of these effects to structural studies of protein molecules. The research associate will also be involved in the development of new facility research resources such as x-ray detectors and monochromators.

The scientific staff research associate will devote 50 percent time to facility development in an area of research related to the biological and biomedical applications of synchrotron radiation. It is anticipated that the other 50 percent time will be spent on the individual's own research program involving synchrotron radiation. Preference will be given to those with experience in EXAFS, small-angle scattering, or time-resolved fluorescence.

The salaries for the two positions depend upon level of experience. Applicants for either of these positions should write to: **Professor Keith O. Hodgson, SSRL, Bin 69, P.O. Box 4349, Stanford, Calif. 94305,** and enclose relevant biological data and list of publications. Three letters of reference will also be required. *Stanford University is an Equal Opportunity/Affirmative Action Employer.*

SCIENCE, ENGINEERING, AND DIPLOMACY FELLOWSHIP

Applications invited

The American Association for the Advancement of Science (AAAS), in cooperation with the State Department, is seeking applicants for two recently established Science, Engineering, and Diplomacy Fellowships. Fellows will spend 1 year, beginning 1 September 1980, working as staff officers in the State Department's Bureau of Oceans and International and Environmental and Scientific Affairs.

Potential assignments may include assisting in developing and negotiating procedures with coastal nations for the conduct of marine scientific research, working on various international aspects of energy, assisting in monitoring and examining bilateral scientific and technical agreements between the U.S. and the People's Republic of China, or helping to carry out new State Department responsibilities for coordinating the international science and technology activities of more than 29 federal agencies.

Prospective fellows must demonstrate exceptional competence in some area of science or engineering; be flexible; and have a strong interest or some experience in applying knowledge toward the solution of problems in the area of foreign affairs.

Salary is \$23,000 annually. A secret security clearance must be obtained after selection.

Deadline for receipt of applications is 15 February 1980. For application materials write: **Science, Engineering, and Diplomacy Fellows Program, AAAS, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036.**

RESEARCH SCIENTIST

An opportunity to gain valuable experience in the design and synthesis of fluorinated bioactive agents.

... with one of the world's most highly regarded pharmaceutical companies. This two-year postdoctoral appointment at our Rahway, New Jersey laboratories requires a highly motivated person with a PhD in chemistry to participate in research in the design and synthesis of fluorinated bioactive molecules including agents to interfere with the biosynthesis, release, degradation, or action of neurotransmitters. The appointment carries a first year stipend of \$18,000.

To explore, this opportunity, please send resume to Mrs. S.R. Jenkins,



MERCK & CO., INC.
P.O. Box 2000, Rahway, NJ 07065

An equal opportunity employer m/f

POSITIONS OPEN

CHEMICAL OCEANOGRAPHER

The Department of Oceanography, University of Hawaii, is now accepting applications for a tenure-track, full-time faculty position for a chemical oceanographer, at the rank of full professor. The position will be split between the Department of Oceanography which is responsible for teaching and the Hawaii Institute of Geophysics, where research is emphasized. The appointee will be expected to explore his/her own field of specialization, to interact extensively with other faculty, and to teach graduate and/or undergraduate oceanography courses. Current areas of specialization within the department include stable isotope geochemistry, paleoenvironmental studies, coral reef ecosystem analyses, marine microbiology, phytoplankton ecology, sediment-seawater trace-element geochemistry, and large-scale ocean circulation dynamics. Send statement of future research plans, curriculum vitae, and three letters of recommendation to: **P. Kroppnick, Department of Oceanography, University of Hawaii, Honolulu, Hawaii 96822.** All materials must be received by 31 January 1980.

SEARCH FOR DEAN SCHOOL OF HEALTH SCIENCES HUNTER COLLEGE

Hunter College of City University of New York invites nominations and applications for expanding school located on east side of Manhattan in heart of large medical complex, serving approximately 500 students in six programs at baccalaureate and master's degree levels. The dean has both academic and administrative responsibility for the school. Candidates must possess administrative and teaching experience; substantive knowledge and reputation and allied health area desirable. Rank and salary open. Send applications and nominations by 31 January 1980 to: **Professor Herbert Hyman, Hunter College, Room 304, 790 Madison Avenue, New York, N.Y. 10021.** An Affirmative Action/Equal Opportunity Employer.

DIRECTOR, MUSEUM STUDIES GRADUATE PROGRAM THE GEORGE WASHINGTON UNIVERSITY

George Washington University is seeking an individual qualified at the rank of assistant professor in one of the social or natural sciences who can provide leadership for a growing, interdisciplinary Master of Arts Program in Museum Studies. The program is designed primarily for students oriented toward museums with scientific, anthropological, and historical collections and regional museums with widely variable collections.

Duties of the director are commensurate with those of department chairperson and include program development, advising, administration, and teaching in Museum Studies and/or the applicant's academic discipline.

The applicant should have museum experience and demonstrated ability to serve in an administrative capacity, as well as being qualified at the assistant professor level in an academic department of the Graduate School of Arts and Sciences.

Applicants should send their curriculum vitae and arrange to have three letters of reference sent to:

**Chairman, Search Committee
Museum Studies Program
Graduate School of Arts and Sciences
George Washington University
Washington, D.C. 20052**

Applications must be complete at the Graduate School by 1 February 1980.

DIRECTOR, DIAGNOSTIC RADIOLOGY RESEARCH LABORATORY

Title: **assistant professor of radiology.**

Qualifications: Board-certified radiologist or a doctoral degree in a basic biological science (for example, pathology, physiology, anatomy) with experience and/or interest in radiological research. The M.D. position would include clinical and teaching responsibilities, and the Ph.D. position would include some teaching responsibility.

Interested candidates should write to: **Edward V. Staab, M.D., Department of Radiology, University of North Carolina School of Medicine, Chapel Hill, N.C. 27514,** enclosing up-to-date curriculum vitae and listing the names and addresses of three references.

The University of North Carolina School of Medicine is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

CHEMISTRY TEACHING OVERSEAS

The Department of Chemistry at the American University of Beirut (AUB) invites applications for faculty positions, available 1 October 1980, in the following fields: analytical (instrumentation); inorganic-analytical; organic (natural products); and physical (spectroscopy). Appointments are normally made in the rank of assistant professor and for a 3-year period. Postdoctoral research experience is preferred. Interested persons may send their curriculum vitae and inquiries to: **Chairman, Department of Chemistry, American University of Beirut, Beirut, Lebanon.** The department has a faculty of 12, an undergraduate B.S. program, and an M.S. program with research and thesis required. *AUB is an Equal Opportunity/Affirmative Action Employer.*

DIRECTOR—MONOCLONAL ANTIBODY CENTER. Responsibilities will include setting up and supervising an interdepartmental service laboratory to provide antibody-producing hybridoma lines for individual investigators, production of hybridoma cultures suitable for antibody screening, and maintenance of and propagation of antibody-producing clones. Requires a Ph.D. plus experience in the above techniques. Send detailed résumé, including salary requirements, to: **Stuart Wilson, Assistant Vice President, University of Connecticut Health Center, Farmington, Conn. 06032.** An Equal Opportunity Employer.

The **DEPARTMENT OF ELECTRICAL ENGINEERING** at Drexel University invites applications for several tenure-track and visiting-professor positions. We are particularly interested in individuals with a background in computer engineering. However, applicants in other areas are also invited. Drexel is a teaching institution with a research-oriented engineering faculty. Current research interests include biomedical engineering, energy and power systems, electrophysics and physical electronics, image processing, and pattern recognition. Applicants should send curriculum vitae and references to: **Professor F. N. DiMeo, Faculty Search Committee Chairman, Department of Electrical Engineering, Drexel University, Philadelphia, Pa. 19104.** *Drexel University is an Equal Opportunity/Affirmative Action Employer.*

ENTOMOLOGIST/TAXONOMIST. Tenure-track assistant or associate professor position open 1 July 1980. Curator of department's insect collection; teach graduate courses in taxonomy, morphology, principles of zoological systematics; research in insect order of choice. Submit résumé, transcripts, thesis summary, one set of reprints, and names of three references before 1 March 1980 to: **Dr. Kenneth L. Knight, Head, Department of Entomology, North Carolina State University, Raleigh, N.C. 27650.**

Equal Opportunity/Affirmative Action Employer

FACULTY POSITION IN BIOLOGICAL SCIENCES at the Hopkins Marine Station of Stanford University

Applications are invited for an appointment in the Department of Biological Sciences of Stanford University, to be resident at the Hopkins Marine Station in Pacific Grove, California. The position is without restriction as to rank, although some preference will be given to younger candidates. The position involves both teaching and research. The areas in which the Station wishes to expand its faculty include cellular, neuro-, and developmental biology. All applications must include curriculum vitae, statement of research interests, and a list of three people from whom letters of reference will be sought. Applications should reach: **C. S. Pittendrigh, Hopkins Marine Station, Pacific Grove, Calif. 93950** by 15 January 1980. *Stanford University is an Equal Opportunity Employer.*

FACULTY POSITION in physical chemistry, assistant professor, tenure-track position, fall 1980. Ph.D. required and postdoctoral experience desirable. The successful candidate is expected to establish a strong research program in experimental physical chemistry. Candidates with expertise in the NMR area will be given preference. Teaching duties include graduate and undergraduate physical chemistry with some assignment in the general chemistry program likely. Candidates should supply a graduate transcript, curriculum vitae, résumé of future research plans, and have three letters of recommendation sent to: **Dr. Pierre Crabbe, Chairman, Department of Chemistry, University of Missouri, Columbia, Missouri 65221,** before 31 January 1980. *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ENVIRONMENTAL SCIENTIST—Tenure-track assistant professor position available August 1980. Higher rank possible. Salary: \$16,000 to \$19,000. Ph.D. required for 3-year appointment. Qualifications: teaching and research commitments in the environmental sciences and advanced training in a relevant role in graduate and undergraduate environmental curricula within the Geography Department and the university. Send curriculum vitae and names of three references to: **Professor David R. Reynolds, Department of Geography, The University of Iowa, Iowa City, Iowa 52242.** An Equal Opportunity/Affirmative Action Employer.

ENVIRONMENTAL STUDIES POSITION

To teach freshwater ecology and related subjects in environmental studies, beginning fall 1980. Ph.D. required; interdisciplinary interests and postdoctoral experience preferred. One-year appointment, assistant or associate professor, renewable; nontenure track. Send résumé and description of teaching and research interests by 11 January 1980 to: **Search Committee, Huxley College of Environmental Studies, Western Washington University, Bellingham, Wash. 98225.** An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS CORNELL UNIVERSITY DEPARTMENT OF AGRONOMY

Applications are invited for the positions of **ASSISTANT PROFESSOR OF CROP SCIENCE, ASSISTANT PROFESSOR OF SOIL SCIENCE, and ASSISTANT PROFESSOR OF FOREST SOILS.** All positions are tenure-track with 70 percent research and 30 percent teaching time commitments. Research emphasis for the crop science position will be on physiology and production of grain crops. The assistant professor of soil science will specialize in soil management and conservation and will address the management and use of soils with physical limitations. The Charles Lathrop Pack Assistant Professor of Forest Soils will work within a broad listing of activities as stated in the terms of the Pack endowment. Appointments can be made immediately for the forest soils position and 1 January 1980 for the other positions.

Send curriculum vitae, transcripts, and names of three references to: **R. F. Lucey, Chairman, Department of Agronomy, Cornell University, Ithaca, N.Y. 14853.**

An Equal Opportunity/Affirmative Action Employer

FACULTY POSITION—Department of Biological Chemistry, University of California, Davis, School of Medicine. Applications are invited for a faculty position at the rank of assistant or associate professor, to begin spring or summer 1980. Candidate should be active in research and capable of contributing significantly to medical school and graduate teaching in the areas of biochemistry, physiological chemistry, cellular, and molecular biology. Quality and originality of research will receive greater emphasis than field of specialization, although potential to enter into interdisciplinary research within the department, encompassing the areas mentioned above, will be given favorable consideration. Applicants should send curriculum vitae, list of publications, future research plans, and the names of at least three individuals from whom letters of recommendation may be solicited by the Search Committee to: **Dr. Robert R. Traut, Chairperson, Search Committee, Department of Biological Chemistry, School of Medicine, University of California, Davis, Calif. 95616.** Completed applications should be received not later than 5 January 1980. *The University of California is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.*

FACULTY POSITIONS. During the next few years the Department of Chemistry plans to recruit several faculty members primarily at the assistant professor level to expand its research and teaching activities. Candidates with truly outstanding credentials will be considered in any field although the emphasis this year (for appointment in September 1980) is in the areas of **experimental biophysical or surface chemistry.** A successful candidate must show evidence that a vigorous developing research program will be initiated. Applications must include a résumé, a list of publications, a two-page summary of research plans, and three letters of reference. These must be mailed by 7 January 1980 to: **Dr. Martin Gouterman, Search Committee, Department of Chemistry, BG-10, University of Washington, Seattle, Wash. 98195.** An Equal Opportunity/Affirmative Action Employer.

CHIEF PREVENTION, EDUCATION, AND MANPOWER BRANCH Division of Lung Diseases

The National Heart, Lung, and Blood Institute is seeking applicants for the position of Chief, Prevention, Education, and Manpower Branch of the Institute's Division of Lung Diseases. The Prevention, Education, and Manpower Branch is responsible for design and management of programs which facilitate or implement the transfer of knowledge gained through research and development in the program area into clinical practice through educational measures, demonstrations, control programs, and planning and directing a program for the development of manpower trained in research pursuits.

Applicants must have a broad knowledge in one of the following fields: education, epidemiology, public health or preventive medicine, and have experience in administering, supervising, and performing scientific work in programs supported by grants-in-aid and by contract research. Applicants must have as a minimum, an M.D., or formal training through the Ph.D or its equivalent. Additionally, the applicant must show evidence of having ability in program planning.

Salary range GS-14 to GS-15, dependent upon qualifications. Interested persons should submit curriculum vitae, bibliography, and a completed form SF-171 (Personal Qualifications Statement) by February 1, 1980 to Mr. Herb Jones, NHLBI Personnel Office, NATIONAL INSTITUTES OF HEALTH, Public Health Service, 9000 Rockville Pike, Building 31, Room 5A-32, Bethesda, Maryland 20205. For additional information please call, (301) 496-6477. Equal Opportunity Employer.

NATIONAL INSTITUTES OF HEALTH

SUPERVISORY RESEARCH PHYSICIST

\$34,713 to \$45,216 commensurate with qualifications

The Naval Research Laboratory is seeking qualified applicants to serve as Head, Optical Information Processing Section. Responsibilities include direction of a small staff of professionals and formulation of new programs to address the Navy's need in this area. The position involves development of new techniques to handle and manipulate high bandwidth and/or multi-sensor data and development of new data processing algorithms. A B.S. degree in Physics and experience in optical information is required. Advanced degrees are highly desirable.

This position is in the Federal Career Service with all Civil Service benefits. Interested applicants should submit a Personal Qualifications Statement (SF-171) or detailed resume, prior to January 2, 1980 to:

**NAVAL RESEARCH LABORATORY
CIVILIAN PERSONNEL OFFICE
CODE 55-092-13
4555 Overlook Avenue, S.W.
Washington, D.C. 20375**



U.S. Citizenship Required

An Equal Opportunity Employer

Director General * * * International Service for National Agricultural Research (ISNAR)

The Consultative Group on International Agricultural Research (CGIAR) is an association of official and private aid donors, co-sponsored by FAO, the UNDP and the World Bank. It currently supports 12 major international agricultural research and technical assistance organizations, requiring an annual budget of some US\$120 million.

The CGIAR is establishing a new organization, the International Service for National Agricultural Research (ISNAR) with its headquarters in the Netherlands. Its working language will be English. ISNAR will provide assistance to developing countries in strengthening their national agricultural research capacities. It will be concerned with research policy, research planning, research organization and research management.

Those interested in being considered for the post of Director General ISNAR, should apply to the German Agency for Technical Cooperation (GTZ) enclosing a current curriculum vitae, by not later than *December 21, 1979*. The successful candidate is likely to have:

- relevant experience in organization and management, preferably in the field of agricultural research;
- understanding of conditions in developing countries;
- knowledge of and contacts with development assistance organizations and development assistance programs.

GTZ will be able to provide additional information.

ISNAR—Secretariat
c/o German Agency for
Technical
Cooperation (GTZ)
Postfach 5180
6236 Eschborn 1
Federal Republic of Ger-
many.

POSITIONS OPEN

FACULTY POSITION. Position available September 1980 to teach comparative anatomy, physiology, general biology, zoology, and related laboratory courses at the undergraduate level. Ph.D. required. Applicants should be broadly trained in biology. Study and/or teaching experience at a liberal arts college preferred. Send application, curriculum vitae, transcripts, and three letters of recommendation to: **Dr. Sandra T. Bowden, Chairman, Department of Biology, Agnes Scott College, Decatur, Georgia 30030.** Applications should be received by 15 January 1980.

FACULTY POSITIONS

The Department of Electrical Engineering and Computer Science of the Massachusetts Institute of Technology (MIT) is considering the appointment of one or more new faculty, effective 1 September 1980. Positions may also be available for adjunct faculty or research associates. We are primarily interested in superior candidates who have recently completed their doctorate or who expect to complete it this year, but more experienced candidates will also be considered. All areas of specialization within the department's programs in electrical engineering and computer science will be considered. These areas include: systems and control; computer science and artificial intelligence; electronics and digital systems; energy conversion devices and energy systems; electromagnetics and dynamics; electronic materials and devices; communication and probabilistic systems; and bioelectrical engineering. Duties of a faculty member include graduate and undergraduate teaching, research, and thesis supervision. Candidates should supply a résumé, a description of their professional interests and goals, copies of published papers, if any, and the names and addresses of three or more individuals who will provide letters of recommendation. Applications should be sent to: **Professor F. C. Hennie, Room 38-435, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139,** and candidates should arrange to have their letters of recommendation sent directly to the same address. Indicate citizenship and, if not a U.S. citizen, explain your visa status. *MIT is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION PESTICIDES/FISHERIES AND WILDLIFE

The Pesticide Research Center and the Department of Fisheries and Wildlife, Michigan State University, invite applicants for a full time faculty position at the professor or associate professor level.

The individual filling this position is expected to develop a strong research program, coordinate research activities relating the environmental effects of pesticides, and teach courses in the area of environmental effects of chemicals. The candidate must hold a Ph.D. and have demonstrated competence in research.

Salary and rank dependent upon qualifications. Please submit résumé to: **Dr. Matthew J. Zabik, Pesticide Research Center, Michigan State University, East Lansing, Mich. 48824,** by 31 December 1979.

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

FACULTY POSITIONS

Ph.D.'s invited to apply for two tenure-track faculty positions in the Biology Department. (i) **IN-VERTEBRATE** biology with ability to offer ecology/environmental studies; some competence in introductory geology is desirable. (ii) **BOTANIST:** broad background to teach vascular/nonvascular, and with an interest in horticulture. Additional requisites: understanding of and long-term commitment to quality teaching within a liberal arts format; willingness to initiate/direct undergraduate research. Send curriculum vitae and three letters of reference to: **William Laughner, Biology Department, Hiram College, Hiram, Ohio 44234,** by 15 January 1980. *Hiram College is an Affirmative Action/Equal Opportunity Employer.*

MACROMOLECULE CRYSTALLOGRAPHER

Resource director for GRIP Molecular Graphics Research Resource. Must have Ph.D.; experience in crystallographic computations and/or computer graphics. Will be responsible for liaison with using biochemists and coordination of development of our next-generation molecular graphics system. Full-time research faculty appointment. **Professor F. P. Brooks, Jr., Department of Computer Science, New West Hall 035A, University of North Carolina, Chapel Hill, N.C. 27514.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

Full-time **FACULTY POSITION** in Urology Department for **BASIC SCIENTIST.** We seek a person able to initiate and conduct his/her own research programs, supervise research residents and fellows, and participate in teaching of undergraduate, graduate, and medical students in selected areas of immunology. Minimum criteria are Ph.D. and/or M.D. degree with demonstrated competence in conducting independent research in immunology. The University of California, Davis campus, offers unusual opportunities in basic immunologic research because of immediate proximity to the Medical School, Veterinary School, and Primate Center. A joint appointment with the appropriate Basic Science Department will be considered. Send curriculum vitae to: **John M. Palmer, M.D., Chair, Department of Urology, University of California, Davis, School of Medicine, 4301 X Street, Suite 249, Sacramento, Calif. 95817.** *In compliance with federal and state laws and university policy, the University of California does not discriminate on the basis of race, color, national origin, religion, sex, handicap, age, or against disabled veterans or veterans of the Vietnam era. The University is an Affirmative Action/Equal Opportunity Employer.* Position open until filled.

DEPARTMENT OF ENVIRONMENTAL HEALTH University of Washington FACULTY POSITION AVAILABLE

Faculty Position in Occupational Medicine

Full-time, to assist in the development of a program in occupational and environmental medicine, conduct research and develop and participate in teaching programs in these areas for medical students, occupational medicine residents, and practicing physicians. Field studies and occupational medicine clinic service are major program components.

Graduate training in occupational or environmental medicine (M.P.H.) required. Experience in clinical occupational medicine and Board-certification in occupational medicine or eligibility therefor preferred. Position available immediately. *Women and minorities are encouraged to reply.* Send résumé and references to: **Chairman, Department of Environmental Health SC-34, University of Washington, Seattle, Washington 98195.**

FISHERIES SCIENTIST

Texas Instruments Incorporated in Buchanan, New York, is currently seeking a **fisheries management biologist** to participate in a study being conducted on the effects of power plant operation on fish in the Hudson River estuary. Applicants should have a Ph.D. and several years of experience in theoretical and applied population ecology and fisheries management. A strong statistical background required. The incumbent's responsibilities will include analysis and interpretation of data and the writing of research reports for submission to client. Salary is competitive and commensurate with experience and training. Applicants should direct résumés to:

**Ruth Johnson, Personnel Officer
Texas Instruments Incorporated
P.O. Box 237
Buchanan, New York 10511**

An Equal Opportunity Employer, M/F

FISH POPULATION BIOLOGIST

Assistant professor. Tenure-track position (50 percent teaching, 50 percent research) to teach an introductory ecology course to nonmajors and courses in population biology and fishery management to seniors and graduate students, and to conduct research on the population biology and management of freshwater fishes. Send curriculum vitae, reprints, a statement of research and teaching interests, and three letters of reference by 30 January 1980 to: **Erik K. Fritzell, School of Forestry, Fisheries and Wildlife, University of Missouri, Columbia, Mo. 65211.** *Affirmative Action/Equal Opportunity Employer.*

GENETICIST. Department of Genetics, University of Stockholm, Sweden, invites applications for a temporary full-time research position. The appointment is for 6 to 12 months, beginning around January 1980. Salary: approximately 6000 Swedish crowns per month. Ph.D. with strong background in genetics, evolutionary and population biology, statistics, and good experience in electrophoretic techniques to participate in a research program on genetic variation in different fish and game species. Send curriculum vitae and references by air mail to: **Dr. Nils Ryman, Department of Genetics, University of Stockholm, Box 6801, S113 86 Stockholm, Sweden.**

POSITIONS OPEN

HEAD, Department of Forestry. Primary responsibility is to administer the programs of the Department of Forestry. Three programs are included—forestry, land surveying, and wood and fiber utilization. More than 600 undergraduate and graduate students are involved as are associations with intra-university and inter-institutional programs. The department head recommends, implements, and coordinates administrative practices with authority from the dean of the School of Forestry and Wood Products. The department is widely known for its practical approach to forestry and plans to continue in that tradition. This individual is expected to maintain a continuing program of personal professional development and thereby provide the necessary professional and scholarly leadership that will warrant respect of colleagues. Closing date for receiving applications is 1 April 1980. Direct inquiries to: **Sara Jane Poli, Employee Relations Office, Michigan Technological University, Houghton, Michigan 49931.** *Michigan Technological University is an Equal Opportunity Educational Institution/Equal Opportunity Employer.*

HEAD, OCEANS AND ICE BRANCH

The Laboratory for Atmospheric Sciences of the NASA/Goddard Space Flight Center is currently organizing a new branch to be designated the "Oceans and Ice Branch." The initial staff of the branch will consist of 15 scientists, divided approximately equally between oceanographic and cryospheric research. While a branch head has a significant administrative load, his or her prime responsibilities should be in the establishment and leadership of the scientific programs of the branch. The normal grade level for this position would be GS-15. Unusually distinguished scientists may also be hired in the "excepted" category pending approval of NASA management. Interested candidates should send résumés no later than 1 January 1980 to: **Dr. David Atlas, Chief, Laboratory for Atmospheric Sciences, NASA/Goddard Space Flight Center, Greenbelt, Maryland 20771.** *An Equal Opportunity Employer.*

IMMUNOLOGIST—ASSISTANT PROFESSOR

Applications are invited for a tenure-track position beginning in September 1980, with research interests in cellular immunology and teaching responsibilities in immunology and pathogenic bacteriology. Ph.D. degree with a strong background in microbiology is required and postdoctoral experience preferred. Send curriculum vitae and names of three references to: **Dr. Dale Jackson, Chairman, Department of Biology, The University of Akron, Akron, Ohio 44325.** The University of Akron is a consortium member of the Northeastern Ohio Universities College of Medicine. Deadline for receipt of applications is 1 February 1980.

IMMUNOLOGY TRAINED TECHNICIAN. Position available for technician trained in the following areas:

- 1) Passive hemagglutination,
- 2) Granulocyte and monocyte function test,
- 3) Immunoglobulin allotyping,
- 4) Lymphocyte subpopulation enumeration, and
- 5) Immunofluorescence.

Please send curriculum vitae, bibliography, and three letters of recommendation to: **H. Hugh Fudenberg, M.D., Professor and Chairman, Basic and Clinical Immunology and Microbiology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, S.C. 29403.** *An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

INSTRUCTOR IN PHYSIOLOGY. Position available for a **BIOMEDICAL ENGINEER** to provide technical support for a large physiology department. Successful applicant will teach a course in bioinstrumentation as well as assisting in departmental research and teaching programs. Address all inquiries to: **Dr. Michael Levitzky, Department of Physiology, Louisiana State University Medical Center, 1542 Tulane Avenue, New Orleans, La. 70112.** *An Equal Opportunity/Affirmative Action Employer.*

JUNIOR STAFF POSITION—Available 1 January 1980. Neurophysiological studies on mouse cerebellum, cerebellar slices and tissue cultures, in association with stereological analyses of cell shapes and synaptic inputs. Prior experience necessary. Send curriculum vitae to: **Dr. R. L. Sidman, Department of Neuroscience, Children's Hospital Medical Center, Boston, Mass. 02115.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH AWARDS
Sponsored by the
BALLISTIC RESEARCH LABORATORY
in association with
THE NATIONAL RESEARCH COUNCIL

The National Research Council will make awards in 1980 for research under the Resident Associateship Program which provides awardees with opportunities to conduct experimental and theoretical research as visiting scientists and engineers in fields of:

Applied Computer Sciences
Applied Mathematics
Combustion Research
Continuum Mechanics
Fluid Mechanics
Materials Sciences
Nuclear and Radiation Physics
Physical Chemistry
Probability Theory and Stochastic Processes
Quantum Chemistry

in the laboratory complex located at the head of the beautiful Chesapeake Bay country of Maryland, within easy driving distance of the metropolitan centers of Philadelphia, Baltimore, and Washington, D.C.

Some programs are open to senior investigators as well as recent doctorates. Further details on research programs can be obtained from: Dr. L. J. Puckett, Ballistic Research Laboratory, Aberdeen Proving Ground, Md. 21005; telephone: 301-278-2236.

For application materials and details on specific research opportunities, write promptly, giving research areas of interest, to:

Associateship Office (JH 608-H2)
NATIONAL RESEARCH COUNCIL
2101 Constitution Avenue, NW
Washington, D.C. 20418

Postmark deadline for application is 15 January.

PhD

Laboratory Automation

Play a key role in Merck's Laboratory Automation Group collaborating with our research scientists to develop and install laboratory computer systems in a variety of the experimental sciences.

PhD in a physical or biological science (or equivalent) plus experience in realtime data acquisition and control of laboratory instruments are required. On-going interaction with research management and laboratory personnel requires effective written and oral communication skills.

Merck is noted for its professional environment, excellent salaries and outstanding benefits program. To explore this opportunity, forward credentials with earnings history in confidence to: Mr. F. Mieso,



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An equal opportunity employer, m/f

RESEARCH ASSISTANTS

The Upjohn Company has openings available in its Kalamazoo, Michigan facilities for individuals in the following areas:

DIABETES and ATHEROSCLEROSIS RESEARCH

Biology/Biochemistry Assistant

You will, with minimal supervision, assist a research scientist studying the genetics of spontaneously diabetic Chinese hamsters. This work will involve immunology, biochemistry, transplantation and experimental surgery, and interpreting, evaluating, and presenting data in both oral and written form.

An M.S. in Biology and a minimum of 3 years' directly related laboratory experience are required along with advanced courses in animal genetics, immunology, biochemistry, physiology, and statistics. Experience in small animal surgery and computer science is highly desired.

CANCER RESEARCH

Chemistry/Biology Assistant

You will assist a research scientist in the design and performance of studies concerning the disposition, metabolism, and pharmacokinetics of antitumor agents in experimental animals, plus assay development and quantitative analysis of drugs in biofluids.

An M.S. in Analytical Chemistry of Biomedical Science, or a B.S. in one of these fields plus a minimum of 2 years directly related experience in animal experimentation or analytical chemistry are required.

ASTHMA RESEARCH

Biology Assistant

You will assist a research scientist in the Department of Hypersensitivity Diseases Research in the planning and execution of pharmacologic and immunologic studies in whole animals and isolated organ systems.

An M.S. in Biomedical Sciences or a B.S. in Biomedical Sciences with a minimum of 2 years directly related experience are necessary; previous experience in pulmonary pharmacology, immunology, or physiology is highly desired. Additionally you must be able to handle small animals without allergies.

CENTRAL NERVOUS SYSTEM DISEASES RESEARCH

Biochemistry Assistant

You will assist a research scientist as part of a multi-disciplinary team performing neuropharmacological or neurochemical studies designed to identify and clarify the mechanisms of action of psychotherapeutic drugs. Additionally, you'll perform neurochemical assays, particularly those involving biogenic amines, amine metabolites, and cyclic nucleotides, using HPLC and GC-MS techniques.

An M.S. in Biochemistry of Pharmacology, or a B.S. with a minimum of 2 years directly related experience is required; demonstrated ability in neurochemical assays, including HPLC and GC-MS techniques, is essential.

The Upjohn Company offers excellent salary, benefits and relocation plans. Kalamazoo is a mid-sized southwestern Michigan community which offers an excellent mix of cultural and recreational opportunities including lakes, nearby colleges and a four-season climate.

For confidential consideration, please send a resume which MUST include indication of specific area you are interested in to: Mr. William J. Hall

Upjohn

The Upjohn Company
7000 Portage Road, Kalamazoo, Michigan 49001
An Equal Opportunity Employer, M/F

POSITIONS OPEN

MARINE ECOLOGIST for established public interest group. Ph.D. degree in marine ecology, environmental science, or related field with experience in coastal or estuarine environmental problems. To design projects, do research, and communicate results in technical and nontechnical form. Salary: mid to high teens. Curriculum vitae, bibliography, names of three references, and reprints to: **Dr. Ian C. T. Nisbet, Director, Scientific Staff, Massachusetts Audubon Society, Lincoln, Massachusetts 01773.**

MARINE RESEARCH ASSOCIATE II OR III

Responsible for studies in phytoplankton and zooplankton production, species composition and abundance, and other aspects of plankton ecology in enclosed ecosystems affected by low-level chronic pollutants or other perturbations; supervise technical personnel, sampling program, data acquisition and analysis, scholarly writing, and independent research. Ph.D. and experience in plankton required. Submit résumé and the names of three references by 31 December 1979 to: **Dr. Candace Oviatt, MERL Graduate School of Oceanography, UNIVERSITY OF RHODE ISLAND, Narragansett, Rhode Island 02882**
An Affirmative Action/Equal Opportunity Employer

MATHEMATICS

Assistant professor responsible for teaching calculus, statistics, and other areas of mathematics to juniors and seniors with applied mathematics interests. Position available January or September 1980. Salary commensurate with experience. Apply to:

**Director of Personnel
State University of New York
College of Technology, Box 9922
811 Court Street
Utica, N.Y. 13502**

An Equal Opportunity/Affirmative Action Employer

Medical Geneticist. (M.D.) for state-funded faculty position. Growing department has comprehensive teaching program; clinical activities extend to 31 counties in Alabama and adjoining Florida and Mississippi areas under state and federal sponsorship. Position offered is compatible with various clinical and research interests. Apply to: **W. Wertsch, M.D., Department of Medical Genetics, University of South Alabama Medical Center, Mobile, Ala. 36617. Telephone: 205-476-6305. Equal Opportunity Employer.**

UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

Applicants are solicited for faculty positions in the following departments:

MEDICINE (#202) Assistant professor of research (cardiology section): research in cardiac electrophysiology techniques. Will be required to apply computer technology in the various phases of the program. Ph.D. in electrical engineering and training in cardiac electrophysiology including experience with microelectrode tissues. **MICROBIOLOGY (#199) Associate professor** (clinical microbiologist): Ph.D. clinical laboratory experience in medical microbiology. Instruction of graduate and professional students. Success in research program development and grants management. **PHYSIOLOGY (#182) Research associate:** position available immediately for the studies related to phosphorylation of myocardial muscle proteins, in a well-equipped laboratory. Experience in the field of isolation and purification of muscle proteins and well acquainted with chromatographic techniques. (#197) **Research associate:** research on cardiac afferent inputs to central ascending pathways and will be responsible for studying ascending pathways using electrophysiological techniques to examine the mechanisms of the nervous system that control pain.

Applicants should send curriculum vitae, identifying vacancy number for which they are applying, to: **Dr. Thomas N. Lynn, Dean, College of Medicine, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, Okla. 73190. We are an Equal Opportunity Employer.**

PHYSICAL OCEANOGRAPHER (Ph.D. or equivalent). West Coast oceanographic consulting firm. Senior applied physical oceanographic position, project management. Experience in field, instrumentation, data reduction, and theoretical aspects desirable. Interdisciplinary marine science group with reputation for quality. Send inquiries, résumé, and references to: **Dr. Patrick J. Kinney, Kinnetic Laboratories, Inc., Box 1252, Santa Cruz, Calif. 95061. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

MATHEMATICIANS with active research interests in either **numerical analysis** (especially p.d.e.'s or finite element methods) or **applied modeling** (especially interdisciplinary interest in natural/biological sciences) are invited to apply for tenure-track positions, assistant professor level, to start September 1980. Ph.D. with undergraduate/graduate teaching/thesis direction competence required. Send curriculum vitae and names of three references by 1 February 1980, to: **Professor Sherman C. Lowell, Department of Pure and Applied Mathematics, Washington State University, Pullman, Wash. 99164. An Equal Opportunity/Affirmative Action Employer.**

MICROBIOLOGIST: ASSISTANT PROFESSOR

Available September 1980. Ph.D. required. Applicants should demonstrate a broad background in microbiology.

Teaching responsibilities include undergraduate courses in microbiology, a senior seminar in area of specialization, and participation in introductory biology course. Active involvement in research expected. Application deadline: 1 February 1980. Send curriculum vitae and three letters of recommendation to: **Dr. William S. Johnson, Chairman, Department of Biological Sciences, Goucher College, Towson, Maryland 21204. An Equal Opportunity/Affirmative Action Employer.**

MICROBIOLOGIST Ph.D.

Merck Sharp & Dohme, a leader in the areas of biological research and manufacturing, is presently offering a career opportunity for a microbiologist with a Ph.D. (or the equivalent) to join our Manufacturing Technical Service Staff.

This position involves providing technical assistance to biological production departments and assisting in the efficient transfer of new products from laboratory to production scale. Experience in developing bacterial and viral vaccines or biological production is required for this position.

An excellent salary and benefits program as well as a working environment of scientific challenge and career enrichment accompany this position.

If interested, please send résumé and salary requirements to:

Jacques P. Kueny

Merck Sharp & Dohme

**Division of Merck & Co., Inc.,
West Point, Pennsylvania 19486
An Equal Opportunity Employer, M/F**

MOLECULAR BIOLOGIST—One-year sabbatical replacement to teach genetics and microbiology in the fall semester and evolution (part of a general studies program) and molecular biology in the spring semester. Microbiology and molecular biology have laboratory responsibilities. Ph.D. required. Teaching experience desirable. Send letter of application, copies of all transcripts, curriculum vitae, and three letters of recommendation to: **Dr. Charles M. Drabek, Biology Department, Whitman College, Walla Walla, Washington 99362.**

BERKELEY PHYSICS

The Physics Department of the University of California, Berkeley, expects during the next 2 years to be making one or two appointments at the assistant professor level. Preferred areas of experimental and theoretical research are astrophysics, atomic and plasma physics, condensed matter physics, nuclear physics, and particle physics.

Applicants should write, as soon as possible, and definitely before 1 January 1980, to: **Chairman of the Physics Department, University of California, Berkeley, Calif. 94720**, giving curriculum vitae, publication list, and references. *The University of California is an Affirmative Action Employer.*

POSITIONS OPEN

A faculty position for a **NUTRITIONAL BIOCHEMIST** at the associate or full professor level is available in the Division of Nutritional Sciences at Cornell University effective 1 September 1980. The position involves teaching at the undergraduate or graduate level and establishment of a vigorous research program. The successful applicant will have a dual appointment in the Section of Biochemistry, Molecular and Cell Biology in the Division of Biological Sciences. Candidates should possess a doctoral degree in biochemistry or nutrition and an outstanding record of accomplishments in research and teaching. Preference will be given to research interests potentially relevant to the nutritional sciences. Inquiries and résumés with three letters of recommendation should be sent to: **Andre Bensadoun, Division of Nutrition Sciences, Cornell University, 242 Savage Hall, Ithaca, New York 14853. Cornell University is an Equal Opportunity/Affirmative Action Employer.**

OCEANOGRAPHY

Opening in undergraduate program, **Sea Semester**, for Ph.D. to teach introduction to marine science. Each semester entails 6 weeks of intensive classroom instruction followed by 6 weeks of research and teaching at sea onboard R/V *Westward*. Initial 1-year contract. Nine months of duty includes two of the above cycles and administrative/research ashore. Total sea time: 15 weeks per year in waters (Caribbean to Newfoundland). Position to be filled by late spring/early summer 1980. Salary appropriate to qualifications and experience. Résumé and three references by 15 January 1980 to: **Dean of Sea Semester, Sea Education Association, Box 6, Woods Hole, Mass. 02543.**

An Equal Opportunity Employer

PHARMACOLOGY

Three faculty positions at the level of assistant or associate professor are available in the Department of Biochemistry and Pharmacology, Tufts University, for fall 1980. Candidates should have several years of postdoctoral research experience in areas relevant to pharmacology. Duties will include the teaching of pharmacology in the new School of Veterinary Medicine and the Schools of Medicine and Dental Medicine as well as participation in our Ph.D. program. A background in veterinary pharmacology is desirable for at least one of these positions. Current interests of the department include biochemical pharmacology and a wide range of biochemical research. Send résumé, including names and addresses of three references, to:

**Professor Roy L. Kisliuk
Chairman, Search Committee for Pharmacology
Department of Biochemistry and Pharmacology
Tufts University
136 Harrison Avenue
Boston, Massachusetts 02111**

Tufts University is an Equal Opportunity/Affirmative Action Employer.

The Institute for Physical Science and Technology of the University of Maryland, College Park, invites applications for a tenure-track appointment in **experimental aspects of either statistical physics or plasma physics**. Preference will be given to those applicants who offer greatest promise of close interaction with the institute's strong theoretical groups in these areas. Within statistical physics our principal interests focus on nonequilibrium process-fluids, such as nonlinear phenomena, hydrodynamic instabilities, fluctuations, and so forth. Within plasma physics, our principal interests focus on the physics of waves and instabilities in space plasma, Q-machine studies of waves and instabilities, or optical plasma diagnostics in the ultraviolet. A detailed résumé and list of references should be sent to: **Professor Joseph Silverman, Institute for Physical Science and Technology, Space Science Building, University of Maryland, College Park, Maryland 20742. The University of Maryland is an Affirmative Action/Equal Opportunity Employer.**

The **DEPARTMENT OF PHYSIOLOGY** is seeking an outstanding individual for a full-time **FACULTY POSITION**. Area of research expertise is open. Position requires broad-based teaching responsibility. Starting date is 1 January 1980 or as soon as possible thereafter. Salary appropriate to experience and qualifications. Contact: **Donald V. Priola, Chairman, Physiology Department, University of New Mexico School of Medicine, Albuquerque, N.M. 87131. Affirmative Action/Equal Opportunity Employer.**

FUNGAL GENETICIST

The Campbell Institute for Agricultural Research invites applications for the position of Research Associate. Candidates must have a PhD degree in molecular or microbial genetics with evidence of expertise in fungal genetics. Preference will be given to those with postdoctoral training or comparable research experience and publications in refereed journals. Applications should include a Curriculum Vitae copies of publications, transcripts, statement of research orientation, and 3 references sent to:

Dr. William R. Sharp
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Unique Opportunity for Fermentation Engineer

We have an excellent career opportunity for a Ph.D. Biochemical Engineer with a minimum two year experience in the fermentation field. The candidate selected will be involved in process development and scale-up of antibiotic and steroid fermentations.

We offer salary based on background and qualifications including a comprehensive benefits program. Will be based in our Northern New Jersey facilities adjacent to the Garden State Parkway.

For immediate and confidential consideration, please send detailed resume specifying present and desired salary information to: Mr. Richard L. Partl, Schering-Plough Corporation, 1011 Morris Avenue, Union, New Jersey 07083.



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Director, Institute of Biological Sciences

SYNTEX, a unique Multinational Pharmaceutical Corporation, is located in the hills of Palo Alto, California, adjacent to Stanford University.

Applications are now being accepted for the position of Director of our Institute of Biological Science from individuals with broad research experience in biological science and drug development. This position reports to the Sr. Vice President of Syntex Research.

The individual selected will help ensure the highest quality of research in the Institute and will contribute directly to the long range success of the Company.

Responsibilities include directing the efforts of a number of groups of Biological and Biochemical Scientists working in the areas of inflammation, immunology, thrombosis and atherosclerosis, dermatology and reproductive physiology. Projects involve drug testing, study of mechanism of action of therapeutic agents and basic biology of diseases.

Your broad overview of Biology and Medicine and your interdisciplinary approach to problem solving are key qualifications for this position. You will function in close collaboration with other Syntex Institutes (e.g., Clinical Medicine and Pharmacology) and will exercise your strong managerial and motivational skills. Experience in the Pharmaceutical Industry highly desirable.

This Senior-level position offers a most attractive salary and compensation package along with continued professional recognition and challenge.

Please address your resume, in confidence, to John Hudson, Director of Personnel, SYNTEX, 3401 Hillview Avenue, Palo Alto, CA 94304. We are an equal opportunity employer.

SYNTEX

POSITIONS OPEN

PHARMACIST Ph.D.

Merck Sharp & Dohme is presently offering an excellent career opportunity for an individual to join our Pharmaceutical Manufacturing Technical Services Staff. We require a creative innovator familiar with the latest manufacturing equipment. Duties include developing new processes and techniques to improve present methods, preparing and revising production formulas, troubleshooting production problems, and assisting in the transition of new products from research laboratories to production operations.

A Ph.D. in pharmacy with 3 to 5 years of experience in the pharmaceutical industry is required.

An excellent salary and benefits program accompany this position at our modern suburban Philadelphia location.

If interested, please send complete résumé with salary requirements to:

Gordon L. Gerhard

Merck Sharp & Dohme

Division of Merck & Co., Inc.
West Point, Pennsylvania 19486

An Equal Opportunity Employer, M/F

PHYSIOLOGIST. Research associate (Ph.D. or equivalent) to join group studying control of blood pressure by arterial baroreceptors. Experience in physiological recording procedures necessary. Knowledge of mathematics and computer techniques desirable. Position available early 1980. Salary dependent on qualifications. Grant support guaranteed for 2 years with possibility of extension. Send curriculum vitae and names of three references before 1 January 1980 to: **Dr. Allen M. Scher, Department of Physiology and Biophysics, SJ-40, University of Washington, Seattle, Wash. 98195.** *University of Washington is an Equal Opportunity/Affirmative Action Employer.*

PHYSIOLOGIST

Position available in the Department of Basic Sciences, Peoria School of Medicine, one of the four clinical schools within the University of Illinois College of Medicine. Applicants must have a Ph.D. in physiology and at least 2 years of experience beyond the doctor's degree, with subspecialty closely related to clinical practice. Duties will include instructing medical and associated health sciences students and conducting an independent research program. Demonstrated ability for teaching and research is desired. Salary to be commensurate with experience and qualifications with academic rank of assistant professor. Starting date as soon as possible. Send application and names of three individuals for references no later than 15 January 1980, to: **Dr. F. J. Grundbacher, Acting Chairman, Department of Basic Sciences, Peoria School of Medicine, 123 S.W. Glendale Avenue, P.O. Box 1649, Peoria, Illinois 61656.** *The University of Illinois is an Affirmative Action/Equal Opportunity Employer and encourages applications from members of minority groups and women.*

PLANT GENETICIST UNIVERSITY OF FLORIDA

The Department of Botany invites applications for a tenure-track assistant/associate professor position in plant genetics. Applicants with experience in biochemical/molecular/somatic cell genetics are especially encouraged to apply. The appointee will be expected to establish an active research program, develop and teach a plant genetics course at the advanced undergraduate/graduate level, and participate in the general education biology courses. Rank and salary will be determined by the experience and qualifications of the appointee. Send application, a statement of research interests, and three letters of recommendation, before 31 January 1980, to: **Dr. Indra K. Vasil, Department of Botany, University of Florida, Gainesville, Fla. 32611.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

PLANT MORPHOGENESIS

We are seeking applications for a position in our biology research group located in Richmond, California. The principal responsibility will be to investigate morphogenesis in cell cultures of major crop species. Cooperation and collaboration with our ongoing plant cell and tissue culture program will be expected. Applicants should have a Ph.D. in developmental botany, plant physiology, or related fields and should have research experience in in vitro morphogenesis. We offer a competitive salary and fringe benefits package, including relocation expenses. Applicants should send curriculum vitae, statement of research interests and experience, reprints, and the names of three references by 15 January 1980 to: **James P. Baker, Personnel Manager, Stauffer Chemical Company, DeGuigne Technical Center, 1200 South 47 Street, Richmond, Calif. 94804.** *Stauffer Chemical Company is an Affirmative Action/Equal Opportunity Employer.*

PLANT PHYSIOLOGICAL ECOLOGIST

The Division of Biological Sciences at the University of Kansas anticipates a tenure-track position of assistant professor for 15 August 1980. Salary range: \$16,000 to \$18,000 for 9 months, commensurate with professional experience. Candidates with a Ph.D. in appropriate fields (postdoctoral experience desirable) should provide evidence of their capability to carry out independent research in areas of plant physiological ecology. We seek a broadly trained individual who can develop an active research program combining field and laboratory work in physiological ecology, interact with our current faculty, participate in the teaching of appropriate undergraduate and graduate courses, and direct graduate student research. Applications must include a statement concerning current research and professional goals, curriculum vitae, reprints, and three letters of recommendation sent independently before the closing date, 15 February 1980. Address correspondence to:

**Dr. Rolf Borchert, Chairman
Physiological Ecologist Search Committee
Division of Biological Sciences
University of Kansas
Lawrence, Kansas 66045**

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

POLYMER SCIENCE/ BIOMEDICAL ENGINEERING UNIVERSITY OF FLORIDA

Tenure-track faculty appointment in Biomedical Polymer Research Program of leading Materials Science Department. Polymer and biopolymer emphasis is increasing to complement highly regarded metal and ceramic materials programs. Rank and salary commensurate with experience. Key role for further development of curriculum and for research on polymer and biomaterial surfaces. Seek person from university or industrial research with outstanding promise for surface science studies; involving chemical and physical properties of polymer, tissue, and cell membrane interfaces with strong interests in fundamental property-structure relationships. Current studies deal with drug targeting, surgical materials, and tissue properties, and new implant and medical device materials. *The University of Florida is an Equal Opportunity/Affirmative Action Employer.*

Please send résumé, including publications, references, and summary of future research goals, by 1 February 1980 to: **Dr. E. P. Goldberg, Department of Materials Science and Engineering, University of Florida, College of Engineering, Gainesville, Florida 32611.**

POSTDOCTORAL POSITIONS available immediately to study biochemical pharmacology, drug metabolism, and chemical mutagenesis. Send curriculum vitae and names of three references to: **Personnel Manpower Division, Department of Pharmacology, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Maryland 20814.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION. Enzyme purification and characterization studies relating to pyridoxal phosphate catalysis and the regulation of amino acid metabolism. Salary: \$13,000 per year, with support recommended through September 1982. Available immediately. Send résumé and three letters of reference to: **Professor Merle Mason, Department of Biological Chemistry, Medical Science Building I, University of Michigan, Ann Arbor, Michigan 48109.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL FELLOW to study control of gene expression and steroid hormone/chromatin interactions in cultured human and mouse mammary tumor cells. Applicant must have strong biochemical background. Experience with fractionation techniques, nucleic acid hybridization, steroid hormones, antibody production and/or tissue culture desirable. Salary: \$13,000. Send résumé, three letters of recommendation, and college transcript to: **Dr. Fred R. Frankel, 249 Johnson Pavilion G2, University of Pennsylvania, Philadelphia, Pa. 19104.**

POSTDOCTORAL NIH FELLOWSHIP (immediate opening) to study nutrition and behavior with emphasis on basic research in metabolic controls of food intake in laboratory animals. Candidates should have prior training in nutrition and/or psychology. Please send résumé and three names of references to: **Dr. Judith S. Stern, Department of Nutrition, University of California, Davis, Calif. 95616.** Telephone: 916-752-6575/6650. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY. Position is available immediately to work on the isolation and analysis of sequences coding for a specific protein in *Drosophila*. Previous experience with DNA sequencing, restriction mapping, or recombinant DNA technology is desirable. Starting date is flexible. Send résumé and names of three references by 1 January to: **David Sullivan, Department of Biology, Syracuse University, Syracuse, N.Y. 13210.**

Syracuse University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately. Research position to study the growth regulation of mammalian cells and the mechanisms of action of growth factors. Experience in cellular and molecular biology helpful. Applicants must be U.S. citizens or permanent residents. Please send curriculum vitae and three letters of recommendation to: **Dr. W. J. Pledger, Cancer Research Center, The University of North Carolina School of Medicine, Box 30, MacNider Building, Chapel Hill, N.C. 27514.** Telephone: 919-966-5762.

POSTDOCTORAL POSITION in molecular endocrinology. Available March 1980 or thereafter. Biochemistry Ph.D. with strong background in membrane protein isolation and studies of interaction between peptide hormones and adenylate cyclase will be helpful, but not required. Send résumé and letters of reference to: **Dr. S. N. Nayfeh, Department of Biochemistry, University of North Carolina School of Medicine, Chapel Hill, N.C. 27514.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION—Physiology of circadian rhythms. Experience in biochemistry preferred. Send curriculum vitae and request three letters of reference to be sent to: **Dr. R. Konopka, Division of Biology, California Institute of Technology, Pasadena, California 91125.**

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION available immediately in protein chemistry enzyme mechanisms and affinity labeling of purine nucleotide sites. Recent Ph.D. in biochemistry. Apply with curriculum vitae and three references to: **Dr. Roberta F. Colman, Chemistry Department, University of Delaware, Newark, Del. 19711.** *The University of Delaware is an Equal Opportunity Employer which encourages applications from qualified minority groups and women.*

POSTDOCTORAL POSITION

Postdoctoral position for individual trained in biochemistry or biochemical genetics. Participate in a collaborative project of enzyme replacement in arginase deficiency. Work involves enzyme purification, binding of enzyme to solid support, work with liposomes in tissue culture systems and animal studies. Available immediately. Salary competitive.

If interested, please send curriculum vitae or telephone:

Elaine Spector, Ph.D.

or

Stephen Cederbaum, M.D.
Mental Retardation Research Center
University of California, Los Angeles
760 Westwood Plaza
Los Angeles, California 90024
Telephone: 213-825-0402

MECHANICAL ENGINEER

The National Institutes of Health has a career Civil Service position for a Bio-Mechanical Engineer GS-12 (\$24,704-\$32,110) or GS-13 (\$29,375-\$38,188) in the Biomedical Engineering and Instrumentation Branch. The position involves both theoretical studies performed in collaboration with NIH intramural investigators, as well as the conception, design, and development of novel systems and instrumentation for use by clinicians and biomedical researchers. Broad knowledge of the basic disciplines of mechanical engineering, in-depth mastery of either solid mechanics or heat transfer, and a strong design capability are all required. Biomedical orientation or experience is desirable but not mandatory. A blend of strong analytical skills consistent with either a doctoral degree or equivalent experience combined with proven design ability is being sought. Applicant will be expected to pursue his professional development and exercise his creativity and initiative in a wide variety of situations.

For further information contact Richard Scharf (301) 496-5621 or submit application (Standard Form 171 and/or resume) by January 7, 1980, to:

NATIONAL INSTITUTES OF HEALTH

Public Health Service
Division of Research Services
9000 Rockville Pike
Building 12A, Room 4057
Bethesda, MD 20205
Equal Opportunity Employer

Microbiologist

Ph.D. Microbiologist

A group leader position for a Microbiologist is immediately available in the Biochemical and Microbiological Research Department of the Research Division with Wyeth Laboratories, a leading Pharmaceutical Company located in Suburban Philadelphia. The successful candidate will act as a group leader with a small research team concerned with the evaluation of agents, development of new techniques and assays, and antibiotic studies. Use of IN VITRO and IN VIVO approaches to research.

This position offers rewards commensurate with the challenge. These include a competitive salary, an attractive benefits package and career growth opportunities. Applicants send resume and salary requirements to:

JOHN W. PINKERTON PERSONNEL DEPARTMENT



WYETH LABORATORIES
P.O. Box 8299, Philadelphia, PA 19101
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FACULTY POSITIONS DEPARTMENT OF PUBLIC HEALTH OF THE UNIVERSITY OF ALABAMA IN BIRMINGHAM:

Expansion of the Department of Public Health, an accredited School of Public Health, dictates the need to fill up to eight new faculty positions for which we solicit applicants or nominees. General qualifications for all positions include a commitment to excellence in graduate level instruction at the masters and doctoral levels, demonstrated excellence in research and community service, and the appropriate terminal degree. Knowledge of Spanish and/or French preferred but not essential for evolving international program. Excellent opportunity for travel and teaching abroad if desired. Specific requirements are listed below. Ordinarily Professor and Associate Professor positions are tenured. Salaries and fringe benefits are highly competitive.

PROFESSOR OR ASSOCIATE PROFESSOR: Analytical chemist with environmental emphasis. Responsibilities include developing and directing analytical support services for a new division of Environmental Health Sciences, in addition to developing graduate programs in Environmental Chemistry. Experience in management of non-profit laboratories helpful. Collaborative research areas include toxicology, molecular biology, water quality, air quality, and industrial hygiene.

PROFESSOR OR ASSOCIATE PROFESSOR: Senior level specialist in health policy and politics and public health services. Terminal degree may come from a variety of academic disciplines. Administrative responsibilities dependent upon the interest of the candidate.

ASSOCIATE OR ASSISTANT PROFESSOR: Doctoral degree in industrial hygiene or a related field and both professional and academic experience. Will instruct Masters level students in basic and advanced industrial hygiene topics and monitor practical experience requirements.

ASSOCIATE OR ASSISTANT PROFESSOR: Doctoral level specialist in Health Education or Behavioral Science with strong evaluation/quantitative background and either graduate degree or experience at a school of public health. At least two years experience in teaching, advising and research at the graduate level required.

ASSOCIATE OR ASSISTANT PROFESSOR: Physician Board qualified in occupational medicine or related clinical specialty with strong interests in occupational medicine. Responsibilities include developing and revising curriculum materials for medical, graduate and postgraduate students. Additional opportunities will involve collaboration with graduate students and public health faculty in categorical disease centers research, as well as with industrial managers, workers and their representatives.

ASSISTANT PROFESSOR: Occupational Safety Engineer to teach students in industrial hygiene, occupational health, nursing, environmental health and engineering. Education in an engineering discipline preferred, with specialized training and/or experience in occupational safety and health. Training and experience in environmental health (air or water pollution) is desirable.

ASSISTANT PROFESSOR: Individual with expertise in Public Health Finance and Planning. Both administrative and teaching responsibilities, with opportunities for collaborative research.

ASSISTANT PROFESSOR: Ph.D. in Medical Sociology with strong evaluation/quantitative background in behavioral science. Will be responsible for teaching core course in Medical Sociology. Opportunities exist for collaborative research with faculty in public health, medicine and nursing. At least two years experience in teaching, advising and research at the graduate level preferred.

APPLICATION CLOSING DATE: January 31, 1980

Send Curriculum Vitae to: Dr. H. Michael Maetz, Vice Chairman—Department of Public Health, University of Alabama in Birmingham, University Station, Birmingham, Alabama 35294. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION available in the spring of 1980 for studies on the biochemistry of hormonally controlled eukaryotic messenger RNA. Work will involve determination of cap structures, 5'-terminal sequences and their interaction with the protein synthetic machinery. \$14,500 per year. Send curriculum vitae and names of three references to: **Dr. Robert E. Rhoads, Department of Biochemistry, Medical Sciences Building, University of Kentucky, Lexington, Kentucky 40536. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available 1 January 1980, for studies of flavivirus replication. Ph.D. and previous experience in tissue culture and molecular virology techniques required. Salary determined by NIH stipend guidelines. Send curriculum vitae and three letters of recommendation to: **Dr. Margo Brinton, Wistar Institute, 36th and Spruce Streets, Philadelphia, Pa. 19104** by 15 January 1980. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately to study membrane transport and metabolism in maturing reticulocytes and erythrocytes. Starting salary negotiable. Send curriculum vitae and names of three references to: **Dr. H. D. Kim, Department of Pharmacology, The Medical Center, University of Alabama in Birmingham, Birmingham, Ala. 35294. An Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.**

POSTDOCTORAL POSITION

Postdoctoral position available for studies on development, regeneration and plasticity in the visual system of lower vertebrates. Send curriculum vitae to

**Dr. S. C. Sharma
Department of Ophthalmology
New York Medical College
Valhalla, New York 10595**

POSTDOCTORAL RESEARCH ASSOCIATE position available 1 January to participate in interdisciplinary study of synaptic plasticity initiated by experimental brain damage. Recent Ph.D. and training in electrophysiological techniques are essential. Send curriculum vitae and at least two reference names to: **Dr. J. Victor Nadler, Department of Pharmacology, Duke University Medical Center, Durham, North Carolina 27710.**

Duke University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE NUCLEAR PHYSICS

A postdoctoral research associate position is open in the application of nuclear physics techniques to mass spectrometry employing a 3-MV tandemtron as a molecular dissociator. Applicants should have experience in nuclear physics with electrostatic accelerators and the instrumentation of nuclear physics. The position is for a maximum of 3 years and involves the supervision of the construction and the installation of the apparatus and further development of the systems for radio carbon dating, geological ion microprobe work, and nuclear physics.

Send résumé and two letters of reference to:

**Professor D. W. Strangway
Department of Geology
University of Toronto
Toronto, Ontario, Canada M5S 1A1**

UNIVERSITY OF TORONTO DEPARTMENT OF GEOLOGY

Applications are invited for the position of **RESEARCH ASSOCIATE** to work with the Ultra-Sensitive Analysis Facility. This facility, incorporating ion microprobe, DC accelerator, and mass spectrometer is being set up jointly by the Departments of Physics and Geology. The applicant should have a geological background, competence in physics, and a familiarity with instrumental methods of analysis of rocks and minerals, preferably including mass spectrometry. Duties will be to participate in the establishment of the laboratory, and in the development of geochronological and ultra-low level trace element analytical methods. The appointment will be for a maximum period of 3 years. Salary will be based on NSERC postdoctoral rates. Send résumé and names of two referees to:

**Professor D. W. Strangway
Department of Geology
University of Toronto
Toronto, Ontario, Canada M5S 1A1**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE IN MARINE NATURAL PRODUCTS CHEMISTRY OR BIOCHEMISTRY

Applications are invited from qualified individuals with demonstrated experience to conduct research collaboratively with biologists on the chemical ecology of feeding, fright, and mating behavior of marine predatory boring snails, beginning February 1980. Chemical research will focus on isolation and characterization of compounds released by bivalve molluscs which may evoke or suppress feeding by snails. Applicants should be familiar with separation and characterization of proteins, and secondarily, with lipids (for example, saponins, glycosides, and terpenes). The position will be based in the Marine Studies Complex in Lewes. Consultation and instrumentation will also be available in the University of Delaware's Department of Chemistry. The associate will also have the opportunity to initiate his/her own research in the general area of the project. Candidates submit curriculum vitae and three letters of recommendation by 1 January to: **Dr. Melbourne R. Carriker, College of Marine Studies, University of Delaware, Lewes, Del. 19958. The University of Delaware is an Equal Opportunity Employer which encourages applications from qualified minority groups and women.**

POSTDOCTORAL RESEARCH ASSOCIATE

Position available for research into the effects of sun, ultraviolet light, and tumor promoters on epidermal DNA and polyamine biosynthesis. Applicants should have a strong background in biochemistry or biochemical pharmacology. Salary: \$12,000. Send curriculum vitae and three letters of recommendation to:

**Dr. Nicholas J. Lowe
Division of Dermatology
University of California, Los Angeles
School of Medicine
Los Angeles, Calif. 90024**

We are an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE in the Dermatology Research Laboratories at Duke University Medical Center. Available winter 1980. Somatic cell genetics and monoclonal antibody (hybridoma) methodology to be used in studies of genetic and neoplastic diseases of the epidermis and other epithelia. Experience in tissue culture, biochemistry, or immunology desirable. NIH stipend levels for U.S. citizen or permanent resident. Application with curriculum vitae and three letters of reference to:

**Dr. Lowell A. Goldsmith
Division of Dermatology
Duke University Medical Center
Durham, North Carolina 27710**

Duke University is an Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Immediate position available for a bioorganic chemist to work on the biosynthesis and metabolism of polyprenoids in the laboratory of Dr. Eliahu Caspi. Candidates should have the Ph.D. degree but we will consider applicants with master's degree. Arrangements for completion of the Ph.D. requirements can also be made. Please send résumé and request three referees to send letters of recommendation to: **Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545.**

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL AND RESEARCH ASSISTANT PROFESSOR OPENINGS are available for immunological, chemical modification, and physicochemical characterization studies on mitochondrial proton pumps. Available immediately for 2-year appointment. Salary: \$12,000 to \$15,000, depending on qualifications. Send curriculum vitae and names of three references to: **Dr. Ronald R. Fisher, Chairman, Department of Chemistry, University of South Carolina, Columbia, S.C. 29208. An Equal Opportunity/Affirmative Action Employer.**

MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT), Department of Meteorology, POSTDOCTORAL RESEARCHER IN CLIMATE STUDIES to begin January 1980. Ph.D. in meteorology or atmospheric physics required; some experience with radiative transfer problems advantageous. Send curriculum vitae and three reference addresses to: **Professor R. E. Newell, MIT, Room 54-1520, Cambridge, Mass. 02139.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH BIOCHEMIST THE DEPARTMENT OF PHYSIOLOGY-ANATOMY UNIVERSITY OF CALIFORNIA BERKELEY

A postdoctoral research biochemist is sought to pursue a program of the molecular mechanisms of oxidative damage to mammalian cells, enzymes and organelles. We are seeking an individual who has experience in the detection and assay of oxygen radicals, protective enzymes like superoxide dismutase and catalase, and chemical mechanisms of protection, and who has demonstrated innovative ability in developing assays for detection of damage of membrane lipids and proteins by biochemical and EPR methodologies.

Additional experience required is in the area of oxygen toxicity, particularly radicals and radical-forming species and enzymes which protect against oxidative damage. Applicants should have a knowledge of biological oxidation and bioenergetics and a demonstrated publication record in this area with approximately 2 years of postdoctoral experience. This is a full-time position at present, with a salary of \$14,220 per year.

Interested individuals should write a letter explaining their qualifications for the particular position, and enclose current curriculum vitae and a list of three or more persons who could act as referees, and send to:

**Search Committee
Department of Physiology-Anatomy
2544 Life Sciences Building
University of California
Berkeley, California 94720**

Applications must be received by 7 January 1980. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

POSTDOCTORAL RESEARCH TRAINEE POSITIONS are available in the Biochemistry Department for studies of molecular mechanisms in cancer. Qualified candidates are sought for research on the biochemistry of cellular membranes, glycopeptides, and glycoproteins. Additional areas of faculty expertise include molecular endocrinology, regulation of growth initiation, growth factors, and biochemistry of chromatin and its constituents. Only U.S. citizens or permanent residents will be considered. Salaries conform to the DHEW scale. Send résumé and three letters of reference to: **Dr. Lubomir S. Hnilica, Department of Biochemistry, Vanderbilt University School of Medicine, Nashville, Tennessee 37232. Vanderbilt University is an Affirmative Action/Equal Opportunity Employer.**

PREDOCTORAL AND POSTDOCTORAL TRAINING IN NEUROBIOLOGY AND MEMBRANE BIOPHYSICS UNIVERSITY OF MIAMI SCHOOL OF MEDICINE

The Department of Physiology and Biophysics emphasizes cellular and molecular approaches to biological problems and offers training in neurobiology, developmental neurobiology, and membrane biophysics. Traineeships, fellowships, and assistantships are available. For details write: **Dr. S. J. Socolar, Department of Physiology and Biophysics, R430, University of Miami School of Medicine, Box 016430, Miami, Fla. 33101. An Equal Opportunity/Affirmative Action Employer.**

PROGRAM DIRECTOR of Physical and Chemical Oceanographic Data Facility (PACODF) at Scripps Institution of Oceanography, Ocean Research Division.

The facility constitutes one of the most advanced groups specializing in the collection and processing of physical and chemical measurements in the ocean. Programs carried out encompass institutional, national, and international oceanographic programs. The program director of the facility is responsible for the guidance of this group as well as for directing the development and introduction of new oceanographic techniques, instrumentation, and data processing procedures. Participation in the scientific endeavors of the various programs is encouraged. At present the facility employs about 40 people. Academic administrator salary range: \$30,000 to \$42,000. For further information, address: **Search Committee, PACODF, c/o Chairman, Ocean Research Division, A-020, Scripps Institution of Oceanography, La Jolla, Calif. 92093. The University of California is an Equal Opportunity/Affirmative Action Employer.**

Director Immunology Research

Join Warner Lambert . . . where your contributions to the development of new immunological diagnostic products will impact strongly on your career.

This highly visible position requires a PhD Immunologist with 10 years solid industrial experience, including five in a managerial role. Responsibilities will be broad, including planning, directing and administering a comprehensive departmental research program.

We offer excellent salary and benefits. For confidential consideration send curriculum vitae to Mr. R. Benthien, General Diagnostics Research Personnel.



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EXECUTIVE DIRECTOR LOUISIANA UNIVERSITIES MARINE CONSORTIUM

The newly established Louisiana Universities Marine Consortium (LUMCON) is an organization of thirteen state universities and four higher education boards. The state legislature has provided funds for the Consortium to construct coastal research facilities and vessels and institute a program of marine-related instruction in coastal Louisiana. The principal facility will be the LUMCON Research and Education Center at Cocodrie, a coastal township near Houma, Louisiana. The Executive Director will oversee fiscal operations of the Consortium, hiring and management of support staff, finalization of facilities designs, completion of construction projects, and institution of research and education programs. Qualifications include a Ph.D. degree in an appropriate discipline, demonstrated experience and special skills in administration, acquisition of funding research, and education. Position available on or before August 1, 1980. Applications will be accepted through March 1, 1980. Letter of application, resume and references (or inquiries) should be directed to:

Dr. Darryl L. Felder, Chairman
LUMCON Council
c/o LUMCON Planning Office
P. O. Box 42451
University of Southwestern Louisiana
Lafayette, LA 70504
(318) 264-6753

The Louisiana Universities Marine Consortium is an Equal Opportunity, Affirmative Action Employer.

DRUG METABOLISM BIOANALYTICAL SECTION

E.R. Squibb & Sons, Inc. a leader in the pharmaceutical industry, has several key openings in the Drug Metabolism Department in our newly developed section involved with bioanalytical chemistry. We are seeking qualified professionals for the following positions:

SECTION HEAD - To assume a broad based leadership role in the development of analytical methodology for the analysis of drugs and metabolites in biological fluids. Ideal candidate will have Ph.D. in chemistry (analytical or pharmaceutical) and 5-10 years drug metabolism experience including a strong state-of-the-art knowledge of HPLC and/or GC (including GC/MS). Excellent communication skills a must. Knowledge of pharmacokinetics a plus.

SENIOR SCIENTISTS - Ph.D. in analytical or organic chemistry required with up to 5 years experience in field. State-of-the-art knowledge of modern analytical instrumentation necessary (HPLC, GC, MS). Experience helpful in either analysis of drugs in biological fluids or isolation and identification of drug metabolites in biological samples. Knowledge of pharmacokinetics and familiarity with computerized data handling desirable.

Squibb offers unique challenges and unlimited potential for personal and professional development. Our salaries and benefits are fully attuned to the importance of these positions. Send complete resume and salary history or requirements to:



SQUIBB

Linda L. Hyman
E.R. SQUIBB & SONS, INC.
Department BM, P.O. Box 4000
Princeton, New Jersey 08540

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POSITIONS OPEN

DEPARTMENT OF ANESTHESIOLOGY WASHINGTON UNIVERSITY SCHOOL OF MEDICINE (BARNES HOSPITAL, ST. LOUIS)

Searching for **PROFESSOR AND HEAD** of Department of Anesthesiology at Washington University School of Medicine and **ANESTHESIOLOGIST-IN-CHIEF** at Barnes Hospital. Research accomplishments particularly important. Submit curriculum vitae with complete bibliography to:

M. K. King, Dean
Washington University School of Medicine
Box 8106
660 South Euclid Avenue
St. Louis, Missouri 63110

BARNARD COLLEGE OF COLUMBIA UNIVERSITY, DEPARTMENT OF PSYCHOLOGY, has two openings for 1980-1981, one at the assistant and the other at the associate professor level. We are seeking candidates who can teach two or more of the following courses: sensation and perception with laboratory, statistics, physiological psychology with laboratory, and personality. Computer skills are desirable. For one individual, facilities are available in the animal research area, and for the other individual, facilities for working with human subjects are available. An active research program is essential. Candidates should send curriculum vitae and letters of recommendation by 31 January 1980 to: **Dr. Rae Silver, Chairman, Psychology Department, Barnard College of Columbia University, 606 West 120 Street, New York, N.Y. 10027, Barnard College is an Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSOCIATE—Position available immediately in morphological effects of various chemical agents on the central nervous system. Background in morphology and fine structural analysis. At least 3 years of postdoctoral experience in an ultrastructural laboratory. Training and/or experience in cryomicrotomy and energy-dispersive microanalysis. Send curriculum vitae and two letters of recommendation to: **Martin R. Krigman, M.D., Department of Pathology, School of Medicine, University of North Carolina, Chapel Hill, North Carolina 27514. An Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSOCIATE. Two postdoctoral positions in endocrinology are available immediately for the study of the mechanism of glucocorticoid hormone action in rat liver. Starting salary range: \$10,000 to \$12,000. Send curriculum vitae and two letters of recommendation to: **Dr. M. Kalimi, Department of Physiology, Medical College of Virginia, Richmond, Virginia 23298. An Equal Opportunity/Affirmative Action Employer.**

SABBATICAL APPOINTMENTS. Estuarine research laboratory occasionally has funds for salary supplement and research supplies for individuals on sabbatical leave who wish to collaborate with our faculty. Major program areas include microbiology, plankton, finfish, pollution, and systems ecology. Queries should be directed to: **Joseph J. Cooney, Head, Chesapeake Biological Laboratory, University of Maryland, Solomons, Maryland 20688.**

SEED SCIENTIST. Assistant professor, tenure track. Responsibilities: 5 percent overseeing activities of state seed-testing laboratory, 15 percent teaching undergraduate course in seed science at Ithaca once every 2 years, and 80 percent research on factors affecting and/or improving seed quality, seedling emergence, and field performance. Ph.D. required. Salary competitive. Send résumé, transcripts, and names of at least three references to: **M. T. Vittum, Department of Seed and Vegetable Sciences, New York State Agricultural Experiment Station, Cornell University, Geneva, N.Y. 14456. An Affirmative Action/Equal Opportunity Employer.**

SEED SCIENTIST, research associate, not on tenure track. Duties: 50 percent supervising routine operations of state seed-testing laboratory, and 50 percent assisting and cooperating in seed research to improve the accuracy of germination, purity, and vigor testing. Ph.D. or M.S. degree with several years of experience directing a seed-testing laboratory is required. Salary competitive, commensurate with qualifications. Send résumé, transcripts, and names of at least three references to: **M. T. Vittum, Department of Seed and Vegetable Sciences, New York State Agricultural Experiment Station, Cornell University, Geneva, New York 14456. An Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION IN PEPTIDE NEUROBIOLOGY available immediately for qualified applicant with Ph.D. degree to carry out research on enzymology and regulation of post-translational processing of neuropeptide precursors. Excellent opportunity for person with background in enzymology or general biochemistry to obtain training in contemporary peptide neurobiology in interdisciplinary environment. Starting salary: \$15,000. Candidates should send curriculum vitae and names and addresses of three references to: **Dr. Jeffrey F. McKelvy, Director, Neuroendocrinology Program, Western Psychiatric Institute and Clinic, Departments of Psychiatry and Biochemistry, University of Pittsburgh School of Medicine, 3811 O'Hara Street, Pittsburgh, Pa. 15261. An Equal Opportunity/Affirmative Action Employer.**

RESEARCH POSITION IN NEURAL CELL CULTURE available immediately for qualified applicant to oversee cell culture laboratory devoted to studies on neuroendocrine regulation at cellular level. Previous experience in cell culture necessary and experience in neural cell culture desirable but not required. Cell culture laboratory is part of interdisciplinary program emphasizing cellular neuroendocrinology and peptide neurobiology both at basic science level and with application to study of neuroendocrine aspects of affective disorders. Appointment can be made at senior research associate or junior faculty level, depending on experience, with excellent salary and benefits. Send résumé and names and addresses of three references to: **Dr. Jeffrey F. McKelvy, Director, Neuroendocrinology Program, Western Psychiatric Institute and Clinic, Departments of Psychiatry and Biochemistry, University of Pittsburgh School of Medicine, 3811 O'Hara Street, Pittsburgh, Pa. 15261. An Equal Opportunity/Affirmative Action Employer.**

RESEARCH POSITION. Permanent position at the Research Department of Louis-H. Lafontaine Hospital in Montreal. M.D. or Ph.D. or equivalent. Experience in clinical psychiatric research preferred. Salary according to convention with Quebec government. Candidate must be ready to acquire knowledge in French. Send complete curriculum vitae with reprints before 15 February 1980 to: **Dr. Y. Lamontagne, Research Department, Louis-H. Lafontaine Hospital, 7401 Hochelaga Street, Montreal, Quebec, Canada H1N 3M5.**

RESEARCH TECHNOLOGIST for biochemistry laboratory. Do coagulation, assays, protein isolations. *Equal Opportunity Employer, M/F.* Send résumé to: **Ruth Straub, Office of Personnel, American Red Cross, 18th and E Streets, Washington, D.C. 20006.**

RIA PRODUCT DEVELOPMENT—Immediate opening for a project leader to participate in all phases of development and scale-up of radioimmunoassays. Applicants must have M.S. in biochemistry, 3 years of experience in a biochemistry laboratory, knowledge of immunology techniques, and a strong background in protein chemistry. Industrial and supervisory experience very desirable. Competitive salary and benefits. Send detailed résumé in confidence: c/o Personnel Department, Kallestad Laboratories, Inc., 1000 Lake Hazeltine Drive, Chaska, Minn. 55318. *An Equal Opportunity/Affirmative Action Employer, M/F.*

Three positions available, rank and salary dependent on qualifications, for a Ph.D. and/or D.V.M., one each in **gross, applied, and microscopic**

VETERINARY ANATOMY beginning 1 July 1980. Applicants with teaching experience in these areas and/or productive research programs should send curriculum vitae, recent reprints, and three letters of recommendation to: **Dr. J. R. Carithers, Department of Veterinary Anatomy, 1092 Veterinary Medicine, Iowa State University, Ames, Iowa 50011. Closing date: 15 January 1980. Iowa State University is an Affirmative Action/Equal Opportunity Employer.**

VIROLOGIST. An expanding microbiology department is seeking applicants for a tenure-track position in the area of molecular and pathogenic virology. Applicants must have Ph.D. and appropriate postdoctoral training. Development of a strong research program will be expected. Send curriculum vitae and statement of interests, and have three letters of recommendation sent to: **Chairman, Search Committee, Department of Microbiology, University of Missouri-Columbia, School of Medicine, Columbia, Mo. 65212. Deadline: 15 January 1980. An Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

RESEARCH ASSOCIATE. Nontenure-track position for two or more years to study the neural basis of limb position sense. Ph.D. or equivalent training in neurophysiology required. Experience in recording from muscle afferents preferred. Starting salary: \$14,000. Send curriculum vitae, a list of publications and reference names and addresses to: **Dr. P. R. Burgess, Department of Physiology, University of Utah College of Medicine, Research Park, Salt Lake City, Utah 84108. The University of Utah is an Affirmative Action/Equal Opportunity Employer.**

SENIOR SCIENTIFIC PROGRAMMER

A Washington University research program in molecular modeling and graphics has a position available for a senior staff member to assist in the development of application software and support of a National Collaborative community. The community currently involves ten research groups who are using the MMS-X Computer Graphics System, developed by the Computer Systems Laboratory, for research on the structure and function of biologically important molecules.

Candidates should have a graduate research degree with experience in crystallographic computing and in the use of both high-performance graphics and minicomputer systems. The salary will depend on qualifications and experience. Applications should include a résumé and should be supported by letters of reference directed for the attention of:

Dr. C. D. Barry
Director, MMS-X National
Collaborative Research Program
Computer Systems Laboratory
724 South Euclid Avenue
St. Louis, Mo. 63110

SENIOR STAFF AND POSTDOCTORAL POSITIONS IN PSYCHOPHYSICS RESEARCH are available to study human sensory and perceptual mechanisms in the chemical senses (taste and olfaction). Applications will be considered from individuals with demonstrated research experience in gustation and olfaction or in the psychophysics of other sensory modalities but who are interested in working in the chemical senses. The Monell Chemical Senses Center is a multidisciplinary basic research center in the chemical senses. Send letter describing research interests, curriculum vitae, and the names and addresses of three references to: **Director, Monell Chemical Senses Center, 3500 Market Street, Philadelphia, Pa. 19104.**

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SUMMER RESEARCH

FIELD BIOLOGY. Stipends of \$1700 are available for postdoctoral summer research at the Mountain Lake Biological Station of the University of Virginia. Proposals for studies on a wide variety of terrestrial and freshwater environments at Mountain Lake will be considered. Deadline: 1 April 1980. Write to: **James L. Riopel, Director, Mountain Lake Biological Station, Gilmer Hall, University of Virginia, Charlottesville, Va. 22901. Equal Opportunity/Affirmative Action Employer.**

GRADUATE STUDY

ENVIRONMENTAL SCIENCE. The School of Public and Environmental Affairs (SPEA), Indiana University, seeks qualified individuals interested in pursuing an M.S. degree in environmental science. A degree in science, mathematics, or engineering is necessary for admission to the program. Financial support is available to qualified applicants. Internship and placement services are provided. For further information, write: **Director, Environmental Programs, SPEA, Room 438A, Indiana University, Bloomington, Ind. 47405.**

GRADUATE STUDIES IN RADIOPHARMACEUTICAL CHEMISTRY

Graduate studies in radiological sciences with an emphasis on radiopharmaceutical chemistry. Financial assistance (\$5000 per year) available. Active research program with modern, well-equipped facilities. One position available for fall 1979. Application materials may be obtained from: **Graduate School of Arts and Sciences, George Washington University, Washington, D.C. 20052. The George Washington University is an Equal Opportunity/Affirmative Action Institution. Please telephone: Iva Beatty at 202-676-6210.**

HARVARD SCHOOL OF PUBLIC HEALTH GRADUATE PROGRAM IN HEALTH POLICY AND MANAGEMENT

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For further information contact:

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FIFTH BIENNIAL INTERNATIONAL SYMPOSIUM ON ALCOHOLISM 9 to 13 June 1980; Cardiff, Wales

Keynote presentations by internationally known researchers and poster presentations will address the following featured topics: peripheral pathology and markers for alcoholism; ethanol's effects on endocrine function and hormonal effects; ethanol's effects on membrane and neuronal function; electrophysiology of alcoholism, and reinforcement, preference, and peptides as determinants of alcohol intake.

For further information and abstract forms, contact: **Professor Boris Tabakoff, Department of Physiology and Biophysics, University of Illinois Medical Center, P.O. Box 6998H, Chicago, Illinois 60680.**

Organized by the International Group for Biomedical Research on Alcoholism, this symposium will be held in parallel with the 26th International Institute on the Prevention and Treatment of Alcoholism (Cardiff, Wales; 9 to 14 June 1980).

CONFERENCES

THE NEW YORK ACADEMY OF SCIENCES Conference on CALMODULIN AND CELL FUNCTIONS The Roosevelt Hotel, New York City 21 to 23 May 1980

The conference is cochaired by Frank F. Vincenzi (University of Washington) and D. Martin Watterson (Rockefeller University). Calmodulin is a calcium-binding protein that has no known enzymatic activity but will apparently regulate several enzyme activities, affect microtubule assembly in vitro, and bind antipsychotic drugs.

This conference will bring together investigators from a variety of fields to discuss the biochemistry, physiology, enzymology, cell biology, and pharmacology of calmodulins and the possible role of calmodulins in regulating cell functions. The conference will feature invited lectures and a limited number of poster presentations. Preference in selection of poster sessions will be given to young investigators and to novel and rigorous studies. The deadline for submission of abstracts is 1 March 1980. The abstracts should include the name of the author(s), institution, and 100- to 200-word summary of the work to be presented in the poster. Send abstracts for poster sessions and inquiries about details of the program and registration to:

**Conference Director
The New York Academy of Sciences
2 East 63 Street
New York, N.Y. 10021**

RECEPTOR-MEDIATED BINDING AND INTERNALIZATION OF TOXINS AND HORMONES

Conference sponsored by U.S. Army Medical Research Institute for Infectious Diseases (USAMRIID) to be held at Frederick, Maryland, on 24 to 26 March 1980. Program composed of talks by 25 international scientists expert in areas of toxins and polypeptide hormones. Attendance will be limited by space to 130 scientists. Further information may be obtained from and application made by writing to: **Dr. John L. Middlebrook, Pathology Division, USAMRIID, Fort Detrick, Frederick, Maryland 21701.**

TRAINING PROGRAM

PHYSIOLOGY GRADUATE AND POSTDOCTORAL TRAINING. The Department of Physiology, University of Arizona, College of Medicine, invites applications from qualified individuals interested in pursuing the Ph.D. degree in physiology. Applications are now being accepted for July 1980 entrance into the graduate programs. In addition, postdoctoral positions are available from time to time. Fellowships (U.S. citizens only) and predoctoral teaching assistantships are available for individuals accepted into the training programs of the department. The department provides facilities for study at both pre- and postdoctoral levels in cardiovascular, neural, renal, muscle, endocrine, pulmonary, gastrointestinal, and cellular physiology. For further information write: **D. G. Stuart, Graduate Admissions Coordinator, Department of Physiology, University of Arizona, College of Medicine, Tucson, Arizona 85724. The University of Arizona is an Equal Opportunity/Affirmative Action Employer.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS MISSOURI INSTITUTE OF PSYCHIATRY

Postdoctoral research fellowships for M.D.'s and Ph.D.'s are immediately available at the Missouri Institute of Psychiatry (MIP), Saint Louis, Missouri. Special research emphases are available in mental health computer application, neurochemistry, social or urban studies, and some areas of clinical research. Although the program is conceptualized as a 2-year fellowship, consideration of 1-year appointments is possible. MIP is a St. Louis segment of the University of Missouri-Columbia, School of Medicine, with faculty members holding academic appointments in the Department of Psychiatry and Biochemistry. All fellows will receive academic appointments in appropriate departments. For further information, applicants should send a résumé and a brief description of their objectives as a postdoctoral fellow to:

**Office of Graduate Education
Missouri Institute of Psychiatry
5400 Arsenal Street
St. Louis, Missouri 63139**

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Department of Neurology University of Iowa College of Medicine Iowa City

FELLOWSHIP IN BEHAVIOR NEUROLOGY

A fellowship position is available, for the academic year 1980-1981, in the Division of Behavioral Neurology. The program offers unusual opportunities for training and practice in clinical and basic research (human neuropsychology and experimental neuroanatomy) related to behavior. Candidates with an interest in the behavioral sciences and a completed neurologic residency may apply. Preference will be given to candidates with previous research experience.

Send application to: **A. R. Damasio, M.D., Director, Division of Behavioral Neurology, University Hospitals and Clinics, Iowa City, Iowa 52242.**

FELLOWSHIP PROGRAM

The Exploratorium, a science and perception museum, is offering a limited number of fellowships to study the design, construction, and pedagogy of interactive exhibitry. Sponsored by the Fund for Improvement of Postsecondary Education, HEW, these fellowships are intended for faculty in the sciences who are interested in exploring the use of exhibitry for teaching students and the general public scientific topics on or off campus. The fellowships are for periods of 2 to 4 months in either the spring or summer of 1980. The deadline for the application is 1 January 1980. Interested persons are encouraged to contact us as soon as possible. For information please contact: **Dr. Robert J. Semper, Exploratorium, 3601 Lyon Street, San Francisco, California 94123.**

POSTDOCTORAL RESEARCH FELLOWSHIPS

**Simpson Memorial Research Institute
University of Michigan Medical School**

NIH training positions available July 1980, for M.D.'s or Ph.D.'s in broad field of hematology/oncology. Major research programs in (i) immunology (macrophage/lymphocyte studies), (ii) leukocyte biochemistry, (iii) hematopoiesis, (iv) clinical and laboratory pharmacology, (v) tumor cell kinetics and biochemistry, (vi) gene expression in normal and malignant cells, (vii) corticosteroid receptor modulation in lymphoid cells, (viii) coagulation, (ix) platelet function and metabolism, (x) red cell biochemistry, (xi) hemoglobinopathies, and (xii) biochemical mechanisms of immunodeficiency states.

Applications should include curriculum vitae, two letters of recommendation, and indication of major research interests. Send application or letter of inquiry to: **Dr. Albert F. LoBuglio, Simpson Memorial Research Institute, University of Michigan, 102 Observatory Road, Ann Arbor, Mich. 48109.**

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FELLOWSHIPS AND RESEARCH ASSISTANTSHIPS for interdisciplinary study in biophysical science leading to the Ph.D. degree. Training in experimental and theoretical physical biochemistry, membranes, transport processes, biomechanics, mathematical biology, and other areas. Excellent facilities. GRE required. Contact: **Dr. H. C. Cheung, Box 104, DSB, University of Alabama Medical Center, Birmingham, Ala. 35294. An Affirmative Action/Equal Opportunity Employer.**

FELLOWSHIPS

Pre- and Postdoctoral Fellowships in Reproductive Endocrinology. One postdoctoral position is available immediately. Pre- and postdoctoral fellowships are also available for a summer 1980 starting date. Only U.S. citizens or holders of a permanent resident visa are eligible. For further information write or telephone:

**R. B. Billiar, Ph.D.
Department of Reproductive Biology
Case Western Reserve University
Cleveland, Ohio 44106
Telephone: 216-444-1693**

POSTDOCTORAL FELLOWSHIP—Position available for research concerning receptors for chemotactic factors on leukocytes. Strong background in receptor research is essential. Stipend dependent on background. Send curriculum vitae and bibliography to: **Dr. R. Snyderman, Box 3892, Duke University Medical Center, Durham, N.C. 27710.**

DOCTOR OF ARTS IN BIOLOGY: FELLOWSHIPS are available for qualified persons interested in the D.A. degree in biology. The program stresses preparation for undergraduate teaching at colleges and universities. Applicants should hold a master's degree in some area of biology. Deadline for receipt of application is 1 March 1980. For more information contact: **Dr. Donald P. Streubel, Chairman, D.A. Committee, Department of Biology, Idaho State University, Pocatello, Idaho 83209. An Equal Opportunity Employer.**

HAAGEN-SMIT/TYLER GRADUATE FELLOWSHIPS

In 1979 the John and Alice Tyler Ecology Award was presented to the California Institute of Technology in honor of and to commemorate Dr. Arie J. Haagen-Smit (1900-1977), professor of bio-organic chemistry and pioneer in the analysis of photochemical air pollution. This award has made it possible for Caltech to establish a series of fellowships in his memory. Four fellowships per year carrying a stipend of \$7200 per year (or \$5400 for 9 months) plus full tuition will be awarded to new or continuing graduate students pursuing environmental study and research toward the Ph.D. degree within any of Caltech's academic divisions.

Applicants should write to: **Dean of Graduate Studies (Caltech, Mail Code 204-40, Pasadena, Calif. 91125)** for a regular application form for graduate admission and the special application form for the Haagen-Smit/Tyler Graduate Fellowship. Applications are due by 15 February 1980 for academic year 1980-1981. *Caltech is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIP available at American Red Cross, Bethesda, Maryland, for epidemiologic laboratory studies on blood donor populations, with particular reference to carriers of hepatitis types B, non A, and non B. Background in microbiology and experience in viral seroepidemiology preferred. One year with possible renewal. Stipend: \$14,000 to \$17,000. Send curriculum vitae, bibliography, and three references to: **Ruth Straub, Personnel Office, American Red Cross, 18th and E Streets, NW, Washington, D.C. 20006. Equal Opportunity Employer, M/F.**

POSTDOCTORAL FELLOWSHIP IN IMMUNOLOGY. Two-year postdoctoral fellowship starting 1 July 1980 available for qualified applicant with M.D. degree who has completed a 2-year residency in internal medicine. Position consists of 50 percent patient care and 50 percent research. The program is designed to train individuals for an academic career in clinical immunology. Send curriculum vitae, bibliography, and three letters of recommendation to: **H. Hugh Fudenberg, M.D., Professor and Chairman, Basic and Clinical Immunology and Microbiology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, S.C. 29403. An Affirmative Action/Equal Opportunity Employer; women and minorities are encouraged to apply.**

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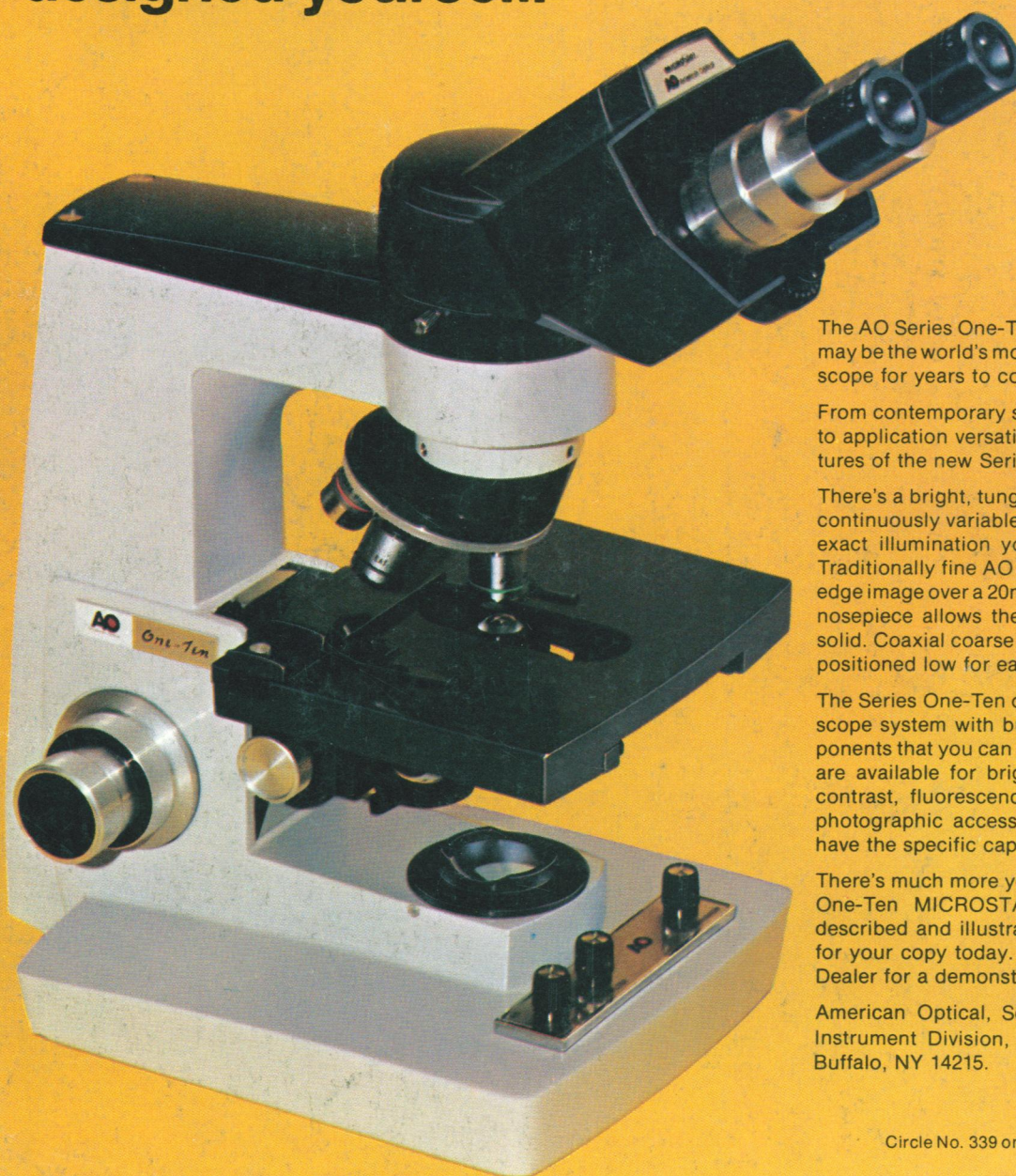
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