

**Principles and Techniques of Electron Microscopy.** Biological Applications. Vol. 8. M. A. Hayat. Van Nostrand Reinhold, New York, 1978. xviii, 318 pp., illus. \$27.50. *To order this book circle No. 429 on Readers' Service Card*

**Progress in Aerospace Sciences.** Vol. 17. J. A. Bagley and P. J. Finley, Eds. Pergamon, New York, 1978. vi, 356 pp., illus. \$75. *To order this book circle No. 430 on Readers' Service Card*

**Progress in Allergy.** Vol. 24. Paul Kallos, Byron H. Waksman, and Alain L. de Weck, Eds. Karger, Basel, 1978. xiv, 366 pp., illus. \$81.25.

**Psychology.** The Experimental Approach. Douglas Candland and Robert S. Moyer. McGraw-Hill, New York, ed. 2, 1978. xiv, 466 pp., illus. \$17. *To order this book circle No. 431 on Readers' Service Card*

**Raman Spectroscopy.** D. A. Long. McGraw-Hill, New York, 1977. xiv, 276 pp., illus. \$24.50. Advanced Book Program. *To order this book circle No. 432 on Readers' Service Card*

**R-Factors.** Their Properties and Possible Control. Papers from a symposium, Vienna, Apr. 1977. J. Drews and G. Högenauer, Eds. Springer-Verlag, New York, 1978. x, 362 pp., illus. \$29.50. Topics in Infectious Diseases, vol. 2. *To order this book circle No. 416 on Readers' Service Card*

**Space Relativity.** Papers from two symposia, Lisbon, Sept. 1975, and Anaheim, Calif., Oct. 1976. Walter Wrigley, Ed. Pergamon, New York, 1978. viii, 132 pp., illus. Paper, \$30. *Acta Astronautica*, vol. 5, No. 1-2. *To order this book circle No. 410 on Readers' Service Card*

**Understanding Human Anatomy and Physiology.** Eldra Pearl Solomon and P. William Davis, McGraw-Hill, New York, 1978. xvi, 640 pp., illus. \$18. *To order this book circle No. 433 on Readers' Service Card*

**Unitary Symmetry and Elementary Particles.** D. B. Lichtenberg. Academic Press, New York, ed. 2, 1978. xvi, 276 pp., illus. \$23.

**The U.S. Government Foreign Disaster Assistance Program.** National Academy of Sciences, Washington, D.C., 1978. x, 108 pp. Paper.

**Vertebrate Photoreception.** Papers from a symposium, London, Sept. 1976. H. B. Barlow and P. Fatt, Eds. Academic Press, New York, 1977. xx, 380 pp., illus. \$29.

**Visual Learning, Thinking, and Communication.** Papers from a conference, Iowa City, Oct. 1976. Bikkar S. Randhawa and William E. Coffman, Eds. Academic Press, New York, 1978. xvi, 228 pp., illus. \$18. Series in Cognition and Perception.

**Water Pollution Microbiology.** Vol. 2. Ralph Mitchell, Ed. Wiley-Interscience, New York, 1978. xii, 442 pp., illus. \$24.95.

**Wild Flowers of the Northeastern States.** Text and slides by Frederick W. Case, Jr. McGraw-Hill, New York, 1978. x, 34 pp., illus. + slides. \$18.95. *To order this book circle No. 417 on Readers' Service Card*

**Workbook in Physical Anthropology.** Philip L. Stein and Bruce M. Rowe. McGraw-Hill, New York, ed. 2, 1978. xiv, 242 pp., illus. Paper, \$7.95.

**Zur Weltsituation auf dem Gebiet der menschlichen Siedlungen—Probleme und Ergebnisse der Habitat-Konferenz der UNO.** Gerhard Kosel. Akademie-Verlag, Berlin, 1977. 74 pp., illus. Paper, 7.50 M. Sitzungsberichte der Akademie der Wissenschaften der DDR, 17N, 1977.

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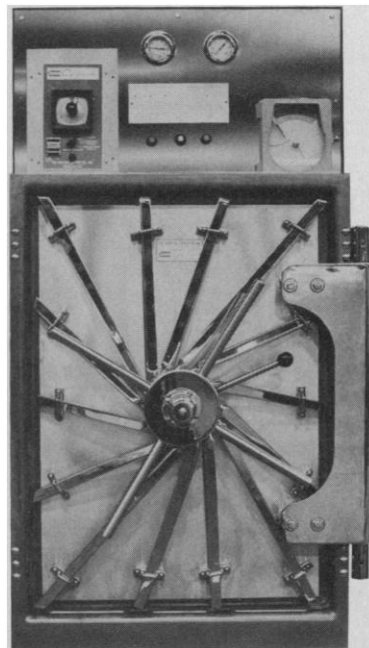
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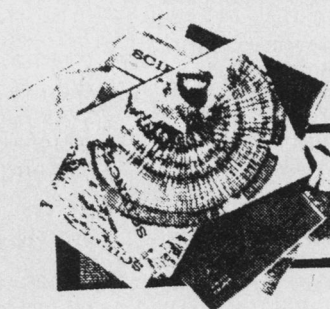


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Applications are invited from qualified Ph.D.'s and/or M.D.'s with demonstrated research potential in genetics and with a background in biochemistry or cell biology. Candidate must have significant research accomplishments and teaching capabilities in one or more genetic fields. Preference given to persons whose research involves application of molecular genetics (or molecular cytogenetics) techniques to eukaryotic organisms. Please send complete curriculum vitae and three references prior to 1 February 1979 to: Chairperson, Faculty Search Committee, Department of Human Genetics, University of Pennsylvania, School of Medicine, Philadelphia, Pa. 19104. An Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

**ANALYTICAL/INORGANIC CHEMIST.** Assistant professor to teach undergraduate chemistry and to develop research and graduate programs. Ph.D. required. Effective fall 1979, contingent on state funding. Send curriculum vitae, description of proposed research, three letters of recommendation, and transcripts to: Dr. Kris C. Knudsen, Chairman, Department of Chemistry, University of Alaska, Anchorage, 3221 Providence Drive, Anchorage, Alaska 99504. An Equal Opportunity/Affirmative Action Employer.

### ANATOMISTS

Two assistant professors, Ph.D. or M.D., with postdoctoral research and teaching experience and ability to develop independent research programs; with research interests in cell biology (developmental biology or neurobiology); and with teaching interests in gross anatomy or microscopic anatomy. Send curriculum vitae to: Dr. G. Gordon Robertson, Department of Anatomy, University of Tennessee Center for the Health Sciences, Memphis, Tennessee 38163. Equal Opportunity/Affirmative Action Employer, M/F.



## Aquatic Biologist

Recent Ph.D. or M.S. with experience required for a position with multidisciplinary team investigating larval fish behavior in the Southern California—Los Angeles region. Experience in marine fish larvae behavior and experimental design, general ecology, or culture techniques desirable.

Must have demonstrated writing ability and familiarity with statistics. Position may involve some "hands-on" development work.

Please submit résumé, recent publication reprints, and college transcripts in addition to salary requirements to:

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Applications are invited for the position of ASSISTANT PROFESSOR beginning 1 July 1979. Candidates should have strong teaching and research interests in one or more of the following fields: immunology, protein biochemistry, molecular genetics (recombinant DNA), and virology. The successful applicant will be required to teach at the undergraduate and graduate levels and carry on an active research program. A Ph.D. is required and postdoctoral experience desirable.

Applications including curriculum vitae, lists of publications, a brief statement of research plans, and the names of three referees who have been requested to send letters of recommendation should be sent to: Professor A. T. Matheson, Chairman, Department of Biochemistry and Microbiology, University of Victoria, P.O. Box 1700, Victoria, British Columbia, Canada V8W 2Y2, as soon as possible.

The Department of Psychology at the University of Pittsburgh hopes to have a position for an ASSISTANT PROFESSOR IN CLINICAL PSYCHOLOGY, to begin September 1979. The position includes graduate and undergraduate teaching and supervision of graduate students in research and clinical practicum. Candidates must have a strong research orientation and show promise of developing an active research program. Preference will be shown to candidates with demonstrated research competence. Preferred areas of interest are community, adolescence, psychopathology, or biofeedback, although other areas will be considered. Send curriculum vitae, representative publications, and at least three letters of reference to: Dr. Susan B. Campbell, Chairperson, Search Committee, Clinical Psychology Center, University of Pittsburgh, Pittsburgh, Pa. 15260. The University of Pittsburgh is an Equal Opportunity/Affirmative Action Employer under the mandates of Title IX.

## POSITIONS OPEN

**Marine Sciences Institute/Geology and Geophysics. ASSISTANT/ASSOCIATE PROFESSOR.** September 1979. Teach undergraduate and graduate courses in physical oceanography; advise M.S. and Ph.D. candidates; also conduct fundable research in physical oceanography. Require Ph.D. in related area; preference given for postdoctoral experience in research and teaching in coastal and estuarine processes, and a successful record of obtaining extramural grants. Apply by 28 February 1979 to: A. R. Philpotts/S. Feng, U-45, University of Connecticut, Storrs, Conn. 06268. An Equal Opportunity Employer.

### ASSISTANT PROFESSOR OF ANATOMY EMORY UNIVERSITY SCHOOL OF MEDICINE

Position available for individual with M.D. or Ph.D. degree to teach human gross anatomy. Candidates should have at least 2 years of postdoctoral training and an active laboratory research program dealing with fundamental problems related to the ultrastructure and/or immunocytochemistry of excitable or endocrine tissues. Members of the faculty are expected to obtain extramural support for their research activities. Deadline for receipt of application is 1 February 1979. Send curriculum vitae and names of three referees to: Chairman, Department of Anatomy, Emory University School of Medicine, Atlanta, Georgia 30322.

Emory University is an Equal Opportunity/Affirmative Action Employer.

**ASSISTANT PROFESSOR OF EPIDEMIOLOGY** to organize and teach graduate courses in the epidemiology of arboviral diseases and arboviral pathogens in arthropods and to initiate original research in the pathogenesis of arboviral infections in arthropods, and vector competence with arboviruses. Candidate should have a doctoral degree in an appropriate field, experience in graduate level teaching, in fluorescein and radioisotope labeling, mosquito inoculation, insectary management including biocontainment of hazardous viruses, and viral assays in arthropod and vertebrate cell cultures. Internal and external candidates will be considered. Yale University is an Equal Opportunity Employer. Apply (before 31 January 1979) to: Director, Yale Arbovirus Research Unit, Department of Epidemiology and Public Health, 60 College Street, New Haven, Connecticut 06510.

**ASSOCIATE/ASSISTANT PROFESSOR OF BIOSTATISTICS** in Department of Medical Computer Science. Tenure-track. Available fall 1979 or sooner. Requirements: Ph.D. in biostatistics or statistics; research and teaching experience preferred; and a strong interest in research teaching and consulting in a medical environment. Excellent computation facilities available. Rank and salary commensurate with qualifications. Send curriculum vitae and names of three references to:

Joan S. Reisch, Ph.D.  
Chair of Medical Computer Science  
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**ASSISTANT PROFESSOR: INORGANIC CHEMISTRY.** The Department of Chemistry of the University of Pennsylvania invites qualified persons to apply for the position of assistant professor of chemistry. Applicants will be expected to commence teaching and research in fall 1979. A Ph.D. is the minimum requirement for this position; postdoctoral research experience is desirable. Complete curriculum vitae, names of at least three persons from whom letters of recommendation may be obtained, a list of publications, and a detailed statement of research plans and needs should be sent to: Inorganic Chemistry Search Committee, Department of Chemistry, University of Pennsylvania, 231 South 34 Street, Philadelphia, Pa. 19104. Applications should be received by 15 January 1979. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

**ASSISTANT PROFESSOR IN METEOROLOGY** Position anticipated for fall 1979. Duties: teaching "core" and specialized courses, active research program with graduate students. Ph.D. required. Prefer proven research ability, teaching experience desirable, in area of physical meteorology. Send curriculum vitae by 15 January 1979; have three letters of reference sent directly to: D. D. Houghton, Chairman, Department of Meteorology, University of Wisconsin, Madison, Wis. 53706. An Equal Opportunity Employer.



## POSITIONS OPEN

### ASSISTANT PROFESSOR, IMMUNOLOGY

**Immunologist/immunogeneticist** required at assistant professor (and postdoctoral fellow) level to join others in a medical school immunology group. Special research strengths of this group are a good HLA laboratory (international workshop standard), complement allotyping, collaborative relationships with the blood bank, biochemical genetics, cytogenetics and with clinical investigators, plus the availability of large families. Our group is also involved in teaching, in a clinical immunology diagnostic laboratory, and with a transplantation program. For more information please write, preferably sending detailed curriculum vitae plus any relevant reprints to: **Dr. W. H. Marshall, Professor of Immunology, Faculty of Medicine, Memorial University of Newfoundland, St. Johns, Newfoundland, Canada A1B 3V6.**

### ASSISTANT PROFESSOR—NUTRITION

The Division of Environmental and Nutritional Sciences, University of California, Los Angeles (UCLA), School of Public Health, invites applications from qualified individuals for an assistant professorship in the area of nutrition. The applicant should have a doctorate and be trained in nutrition. The successful applicant will be responsible for lecturing, teaching laboratory courses involving analyses of foods and animal tissues, developing a seminar in nutrition, and directing masters and doctoral candidates in nutritional research. The applicant must have a demonstrated commitment to public health problems and an ongoing research program in an area of experimental nutrition. Curriculum vitae, bibliography, and three letters of recommendation should be submitted to: **Ralph W. McKee, Chairman, Search Committee, Department of Biological Chemistry, UCLA School of Medicine, Los Angeles, Calif. 90024, by 15 February 1979. UCLA is an Equal Opportunity Employer conforming to Affirmative Action policies, actively seeking women and minority appointees.**

The New England College of Osteopathic Medicine (NECOM) seeks faculty:

- 1) **ASSISTANT PROFESSOR OF PHYSIOLOGY**, Ph.D. with two or more years of postdoctoral experience, preferably in neuromuscular and neurosensory physiology. Position available 1 January 1979.
- 2) **INSTRUCTOR OR ASSISTANT PROFESSOR**, M.S. or Ph.D. in anatomy. Position available 1 September 1979.
- 3) **ASSOCIATE PROFESSOR OF BIOCHEMISTRY**, with 5 years of teaching and research experience. Position available 1 April 1979.
- 4) **ASSISTANT PROFESSOR OF PHARMACOLOGY**. Position available 1 July 1979.

All positions require a definite commitment to teaching. Send curriculum vitae and names of three references before 1 January 1979 to: **Chairman, Search Committee, NCOM, 605 Pool Road, Biddeford, Maine 04005. NCOM is an Equal Opportunity/Affirmative Action Employer. Do not have recommendation letters sent at this time.**

**BIOCHEMIST (Ph.D.)**. Position available immediately for a 6-month appointment at research associate level. Future funding for this position is pending. Postdoctoral experience is required in the enzymology of zymogen activation and preferably experience with insoluble keratin proteins. Send curriculum vitae and names of three references to: **Dr. Beverly A. Dale, Department of Periodontics, SM-44, University of Washington School of Dentistry, Seattle, Wash. 98195. The University of Washington is an Equal Opportunity Employer.**

### BIOCHEMISTRY FACULTY POSITION UNIVERSITY OF CALIFORNIA

Applications are invited for new faculty position, jointly with Merrill College, in chemistry at University of California, Santa Cruz. Preference will be given to candidates with research interests in area of biochemical approaches to cellular regulation. Teaching duties will include both undergraduate and graduate courses in metabolism and regulation. Likely level of this appointment is assistant professor. Send résumé, brief outline of future research/teaching plans, and three letters of reference to:

**Thomas Schleich, Chairperson  
Biochemistry Search Committee  
Division of Natural Sciences  
University of California  
Santa Cruz, California 95064**

Closing date is 17 January 1979.

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## POSITIONS OPEN

**ASSOCIATE DEAN, COLLEGE OF ARTS AND SCIENCES, OAKLAND UNIVERSITY**: Applications and nominations are invited for the position of associate dean with responsibility for the area of science and mathematics. The associate dean reports to the dean of the college and shall take leadership in implementing a projected interdisciplinary science Ph.D. program, coordinating undergraduate and graduate course planning, scheduling, program and faculty development, and shall advise the dean on budget and personnel matters. Applicants must have an earned doctorate, substantial teaching and research experience, the qualifications necessary for an appointment with tenure in mathematics or in one of the science departments, and will be expected to teach at least one course per academic year. Administrative experience desirable. Rank and salary commensurate with qualifications and experience. Send application or nominations to: **Dean Reuben Torch, College of Arts and Sciences, Oakland University, Rochester, Michigan 48063.** Nominations and applications must be received by 1 January 1979. *Oakland University is an Equal Opportunity/Affirmative Action Employer.*

### ASSOCIATE SPECIALIST THE DEPARTMENT OF PHYSIOLOGY-ANATOMY UNIVERSITY OF CALIFORNIA BERKELEY

Invites applications to fill a position of associate specialist to organize and maintain a research laboratory, set up procedures for preparations of biological material, biochemical and biophysical assays, and for electron microscopy.

The applicant's background should be in the area of plant ultrastructure including electron microscope and specialized biochemical techniques for protein separation and concentration and for the identification and assay spectroscopically of biological oxidation catalysts. We are seeking a person with an M.Sc. in the biological sciences who has at least 10 years of experience with evidence of familiarity in the above areas as evidenced by experience and publication highly desirable. Specific areas of expertise should be with light energy transforming membrane systems in photosynthetic and halophilic microorganisms. This is a full-time position at present with a salary of \$19,668 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 1 January 1979. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

**BIOCHEMIST**—To direct lipid analysis laboratory, teach lipid metabolism, and conduct research in lipid transport and atherosclerosis. This is a full-time, tenure-possibility position. Assistant professor with postdoctoral experience preferred, but extensive experience in the field would qualify for instructorship. Salary commensurate with education and experience. Send curriculum vitae and letters of recommendation to: **Dr. Peter Kuo, Department of Medicine, College of Medicine and Dentistry of New Jersey, Rutgers Medical School, P.O. Box 101, Piscataway, N.J. 08854. Equal Opportunity/Affirmative Action Employer, M/F.**

### CHAIRPERSON—BOTANY

The University of Florida invites applications for chairperson of the Department of Botany. Candidates must be at the associate or full professor level and have an outstanding record of accomplishment in botanical teaching and research with demonstrable administrative ability. Applications should be submitted before 31 January 1979 and should include curriculum vitae and reprints of important publications. A brief statement of the applicant's philosophy concerning administration and the role of a botany department in a multidisciplinary university should be included. Applicants should arrange to send five letters of reference directly to:

**Indra K. Vasil, Professor and Chairman  
Department of Botany  
University of Florida  
Gainesville, Florida 32611**

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

## POSITIONS OPEN

**BEHAVIORAL GENETICIST—NORTHWESTERN UNIVERSITY**. Assistant professor, tenure-track. Applicants should be well trained in genetics: postdoctoral experience is required. Prefer individual using genetic techniques to study behavior at the level of the nervous system. Send curriculum vitae, reprints, other supporting documentation, and names of at least three references to: **Search Committee, Department of Biological Sciences, Northwestern University, Evanston, Illinois 60201.**

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**BEHAVIORAL TOXICOLOGIST**. A research associate position will be available to study the behavioral effects of environmental contaminants in mice within the context of a multidisciplinary toxicology research program. Postdoctoral experience in behavioral toxicology or behavioral pharmacology is desirable. This position is contingent upon the award of grant funds expected early in 1979, at which time the 2-year position will be filled as soon as possible. Send curriculum vitae and the names of references to: **Dr. Robert L. Balster, Pharmacology Department, Medical College of Virginia, Virginia Commonwealth University, Richmond, Va. 23298. An Equal Opportunity/Affirmative Action Employer.**

### BIOLOGICAL SYSTEMS SCIENTIST UNIVERSITY OF LOUISVILLE

A vacancy exists for a tenurable entry level assistant professor in the Systems Science Institute, a program within the Graduate School of the University of Louisville. Applicant must have a doctorate with an interdisciplinary flavor, emphasizing the systems science and/or related disciplines. Preference will be given to those candidates who have demonstrated quantitative skills in applying systems theory concepts in one or more of the following areas: living systems and quantitative biology, biosystems engineering or science, ecosystems, systems methods in medicine and health. The position will be available spring 1979.

The successful candidate should be prepared to carry on individual research, interact with ongoing research projects at the institute, as well as teach graduate level courses and advise doctoral and masters students.

Interested persons should send curriculum vitae, including transcripts and three references, to: **Dr. Rammohan K. Ragade, Chairman of Faculty Search Committee, Systems Science Institute, University of Louisville, Louisville, Ky. 40208, telephone: 502-588-6482.** Closing date for applications is 31 December 1978.

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**BIOLOGIST**. Sarah Lawrence College seeks a biologist with broad interests for a 3-year renewable tenure-track appointment. A doctorate and teaching experience are required. Responsibilities include teaching general biology and courses in at least two of the following areas: development, histology, physiology, botany, comparative anatomy, and ethology. Sarah Lawrence is a small, liberal arts college dedicated to quality teaching through individualized instruction. *We welcome applications from all qualified individuals, especially women and members of minorities.* Send curriculum vitae and three letters of recommendation by 15 January to: **Dr. R. D. Clarke, Biology Department, Sarah Lawrence College, Bronxville, N.Y. 10708.**

The Department of Biology at Indiana University-Purdue University, Indianapolis, anticipates the possibility of an opening for a tenure-track faculty position with specialization either in **BOTANICAL ECOLOGY (AQUATIC OR TERRESTRIAL)** or **DEVELOPMENTAL BIOLOGY WITH EXPERTISE IN GENETICS.**

The successful applicant is expected to develop an independent research program, to teach in the undergraduate program, and to develop a graduate course in the applicant's area of specialization. It is anticipated that the position will be filled at the assistant professor level but appointment at a higher rank is possible for qualified senior candidates. Please send résumé, including a statement of research goals and transcripts, by 31 January 1979, and arrange to have three letters of recommendation sent to:

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

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## POSITIONS OPEN

### BIOLOGIST, KENYON COLLEGE

Visiting instructor/assistant professor. Ph.D. required. A 2-year appointment with major teaching responsibilities in a lecture course for nonscience majors and an introductory laboratory course for majors. There are opportunities for research in a large, modern, well-equipped building. Send letter of application, curriculum vitae, course transcripts, and three letters of recommendation to: **Search Committee, Department of Biology, Kenyon College, Gambier, Ohio 43022** before the 15 February 1979 closing date. *An Equal Opportunity Employer.*

### BOTANIST (MYCOLOGY)

Assistant/associate professor, Ph.D., beginning 15 August 1979. Teaching introductory mycology, graduate courses in phycocomycetes, ascomycetes, and basidiomycetes. Must have a strong background in the higher fungi, undertake a strong research program, and direct graduate students in addition to teaching. Deadline: 15 March 1979. Send curriculum vitae, publication list, and three letters of reference to: **C. R. Dillon, Mycology Search Committee, Botany Department, Clemson University, Clemson, S.C. 29631.**

### CELL BIOLOGIST

Applications are invited for position at assistant professor level. Applicants should hold Ph.D. degree and preferably have postdoctoral experience. Successful applicant will conduct an active teaching and research program, including instruction in undergraduate cell biology courses, participation in academic program of Oakes College, and training of graduate students. We particularly seek someone with expertise in study of plant or animal cells at molecular and/or developmental level. Salary is based on candidate's qualifications and experience. Please send résumé, statement about future research and teaching plans, and names of four references to: **Biology Research Committee, Thimann Laboratories, University of California, Santa Cruz, Calif. 95064.** Applications close 1 February 1979. *An Equal Opportunity/Affirmative Action Employer.*

### CELLULAR PHYSIOLOGIST

The Department of Physiology, University of North Carolina School of Medicine, invites applications for a tenure-track position in cellular physiology at the assistant or associate professor level. Preference will be given to applicants with research interests in mechanisms of interaction among cells. A minimum of 2 years of postdoctoral experience is required. Applicant must be willing to teach aspects of mammalian systemic physiology. By 15 February 1979, candidates should send curriculum vitae (including teaching experience) and summary of research plans and have three letters of recommendation sent to: **Cellular Physiology Search Committee, Department of Physiology 206H, University of North Carolina, Chapel Hill, N.C. 27514.** *An Equal Opportunity/Affirmative Action Employer.*

**CHAIRPERSON, Department of Botany.** The Department of Botany at Washington State University is seeking applications for the position of department chairperson. The appointment will be made for the academic year beginning in September 1979, at a senior level commensurate with experience. Candidates should have a record of quality research, proven ability to attract extramural funding, and a commitment to quality instruction at all levels. Their teaching and research interests should complement those of existing faculty. Administrative or supervisory experience is desired. The appointee will be expected to maintain an active research program and to participate in the instructional program of the department. Applicants should send curriculum vitae documenting their qualifications as a potential chairperson, a statement of current research interests and plans, and names of three references to: **Dr. Donald B. Fisher, Chairman, Chairperson Search Committee, Department of Botany, Pullman, Wash. 99164.** The closing date for the receipt of applications will be 15 February 1979. *Washington State University is an Equal Opportunity/Affirmative Action Employer.*

**CHEMIST** with background in geology or environmental science. Available August 1979. Tenure-track position. Teach introductory geology or environmental science and chemistry in specialty. Send résumé and references to: **Van W. Daniel, Clinch Valley College of the University of Virginia, Wise, Virginia 24293.** Deadline: 20 January 1979. *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

The Department of Biological Sciences invites applications for an **ASSISTANT PROFESSOR** tenure-track position in **COMPARATIVE ANIMAL PHYSIOLOGY**. The applicant must have a Ph.D. and may expect to teach in introductory anatomy/physiology courses, to develop an upper-level specialty course(s), and to be active in research.

Applicants are being sought for anticipated positions in biological sciences as a **MICROBIOLOGIST** and as a **LECTURER**. The former requires a Ph.D., is a tenure-track appointment at the assistant professor level, and has primary teaching responsibilities in introductory courses associated with allied health programs; research activity is expected. Those applying for the lecturer opening must have an M.S. and experience in college-level instruction. The primary charge is teaching the nonmajor general biology course and assisting in anatomy/physiology laboratories.

Appointments will be made effective August 1979, and no application will be accepted after 16 February 1979. Curriculum vitae, three references, and supporting information should be sent to:

**Dr. G. R. Hogan, Chairman  
Department of Biological Sciences  
Indiana University-Purdue University  
at Fort Wayne  
2101 Coliseum Boulevard East  
Fort Wayne, Ind. 46805**

*An Affirmative Action/Equal Opportunity Employer*

### DEAN COLLEGE OF SCIENCE AND MATHEMATICS UNIVERSITY AT ALBANY

Applications and nominations are invited for the position of dean of the College of Science and Mathematics, University at Albany. The college consists of Departments of Atmospheric Sciences, Biology, Chemistry, Computer Science, Geological Science, Mathematics and Statistics, and Physics. The college includes about 160 faculty, 350 graduate students, and 1100 upper-division undergraduates. The dean is the principal administrative and academic member of the college. His/her essential role is to provide intellectual leadership and direction for the instructional and research programs of the college.

Desired qualifications include an earned doctorate, proven scholarly ability and professional competence, appropriate academic and administrative experience, and the ability to provide creative leadership.

Applications and nominations with résumés should be sent by 31 January 1979 to:

**Dr. John F. Dewey, Chairman  
Dean Search Committee  
E.C.C.—LC B31  
State University of New York at Albany  
1400 Washington Avenue  
Albany, N.Y. 12222**

*The University at Albany is an Equal Opportunity/Affirmative Action Employer. Applications from women, minorities, and handicapped are especially welcomed.*

### MC GILL UNIVERSITY, FACULTY OF MEDICINE, DEPARTMENT OF PHARMACOLOGY AND THERAPEUTICS DEVELOPMENTAL PHARMACOLOGY DRUG BIOTRANSFORMATION ANTITUMOR PHARMACOLOGY

Applications are invited from persons with an M.D. or Ph.D. degree who have research and teaching interests in the above fields. Salaries and professional rank for these faculty positions will be commensurate with qualifications and experience. Curriculum vitae, bibliography, summary of research interests, and names of three referees should be sent to: **Dr. R. I. Ogilvie, Chairman, Department of Pharmacology and Therapeutics, McGill University, 3655 Drummond Street, Montreal, Quebec, Canada H3G 1Y6.**

### DIRECTOR OF RESEARCH AND DEVELOPMENT LABORATORY

The University of Washington seeks an experienced leader in science or engineering for director of Applied Physics Laboratory with staff of 185, engaged in sponsored research cooperating with other university divisions. Diverse activities are largely ocean-related. The director must have extensive research and development experience and be qualified for appropriate faculty appointment. Send résumé and availability by 15 February 1979 to: **Dean, College of Engineering, University of Washington, Seattle, Washington 98195.** *The University of Washington is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

Anticipated opening for **DIRECTOR**, Coastal Ecology Laboratory, with established record of research in coastal or wetland ecology to direct one of four departments within the Center for Wetland Resources. A high degree of professional competence with Ph.D. in ecology or related discipline required; administrative experience is mandatory. To supervise about 30 professional-level ecologists, administer to existing research programs, and develop new programs primarily through grants and contracts. A joint appointment and teaching duties in the graduate Marine Sciences Department is encouraged. Send curriculum vitae and names of three references not later than 1 February 1979 to: **Dean Jack Van Lopik, Center for Wetland Resources, Louisiana State University, Baton Rouge, La. 70803.** *Equal Opportunity/Affirmative Action Employer.*

### DIRECTOR, DIVISION OF SOCIAL SCIENCES, NATIONAL SCIENCE FOUNDATION

The Directorate for Biological, Behavioral, and Social Sciences seeks candidates for a 2-year term as director of the Division of Social Sciences to begin in summer or fall 1979. The division includes programs in Economics, Geography and Regional Science, Political Sciences, Sociology, Law and Social Sciences, Measurement Methods and Data Resources, and History and Philosophy of Science. The division director is responsible for administering programs of basic research grant support, planning and budgeting, representing the social sciences in the Foundation, and providing leadership for the division staff. The position requires broad knowledge of the social sciences, experience in basic research, and administrative skill. It is expected that this position will be included in the Senior Executive Service of the Federal Government, which is to be established on 13 July 1979. There may, therefore, be additional qualification requirements established which are not known at this time. The position is currently excepted from competitive civil service and equivalent to GS-16 or GS-17. The salary range is from \$44,756 to \$47,500. Send applications and nominations to: **National Science Foundation, Division of Personnel and Management, 1800 G Street, NW, Washington, D.C. 20550. Attention: Section B. Telephone: 202-632-4106.** *The National Science Foundation is an Equal Opportunity Employer.*

### NATIONAL SCIENCE FOUNDATION SECTION HEAD

The National Science Foundation (NSF) is seeking qualified applicants who are interested in spending 1 or 2 years at NSF as section head for its Metallurgy and Materials Section in the Division of Materials Research. This section is responsible for supporting research on ceramics, polymers, and metallurgy. The position is currently excepted from the competitive civil service and pays \$44,756 to \$47,500. Applicants should have a Ph.D. or equivalent in materials science or engineering and should possess administrative and managerial experience relative to research and development activities of substantial magnitude. It is expected that this position will be included in the Senior Executive Service of the Federal Government, which is to be established on 13 July 1979. There may, therefore, be additional qualification requirements established which are not known at this time. Those interested should send current résumés by 15 January 1979 to: **Division of Personnel and Management, Section B., National Science Foundation, 1800 G Street, NW, Washington, D.C. 20550. Telephone: 202-632-4106.** *The National Science Foundation is an Equal Opportunity Employer.*

**FACULTY POSITION IN PHYSIOLOGY.** The Department of Zoology, University of Maryland, College Park, invites applications for a position in physiology at the rank of assistant professor to become available in August 1979. We are seeking an individual with the Ph.D. to teach courses in advanced vertebrate physiology, to direct graduate student thesis and dissertation research, and to initiate and maintain an active research program in a modern area of physiology. Individual should offer evidence of potential for, or successful experience in, obtaining extra-university federal or private foundation support of an ongoing research program. Physiologists with strong backgrounds in biochemistry are preferred. Salary is negotiable and will be based on the qualifications of the successful applicant. Send curriculum vitae, names of five references, synopsis of research interests, and reprints to: **Dr. Howard J. Brinkley, Chairman, Physiology Search Committee, Department of Zoology, University of Maryland, College Park, Maryland 20742.** *An Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

**ENVIRONMENTAL SCIENCE.** Dickinson College, an undergraduate liberal arts college emphasizing quality teaching, seeks a person to assume responsibility for an interdisciplinary environmental science course, with laboratory, for nonscience majors, and possibly an upper-level seminar. Qualifications include an advanced degree, preferably a recent Ph.D., in a biological, earth, or environmental science with interests in field study and applied ecology. Field or laboratory experience in environmental work is highly desirable. The 2-year appointment is nonrenewable. Please send résumé and names and addresses of three references by 10 January 1979 to: **Professor Candie Wilderman, Dickinson College, Carlisle, Pa. 17013.** An Equal Opportunity/Affirmative Action Employer.

Full-time academic **FACULTY MEMBER** in **ANATOMIC PATHOLOGY** for established Department of Pathology. Title and salary commensurate with credentials. Applications will be received until position is filled. Must be eligible for licensure in the state of California. Send résumé and five references to: **George Lundberg, M.D., Chair, Department of Pathology, Room 3453, M.S.I., University of California, Davis, California, 95616.** The University of California is an Equal Opportunity/Affirmative Action Employer. Applications will be accepted until position is filled.

### FACULTY POSITION IN MOLECULAR GENETICS

A position in the Division of Human Genetics of the Cincinnati Children's Hospital Research Foundation is available for a Ph.D. or M.D. with a strong record of training and research accomplishments in the molecular genetics of animal cells. This position includes faculty rank on a tenure-track in the Department of Pediatrics of the College of Medicine at the University of Cincinnati. It will be the primary responsibility of the successful candidate to maintain a vigorous research program in his/her area of expertise. Rank and salary will be commensurate with qualifications. Applicants should send résumé, description of research objectives, and names of three references to: **Dr. Roger E. Ganschow, Children's Hospital Research Foundation, Eland and Bethesda Avenues, Cincinnati, Ohio 45229.** The Children's Hospital Research Foundation is an Equal Opportunity/Affirmative Action Employer. Deadline for applications is 15 January 1979.

### EXPERIENCED GROSS ANATOMIST

Applications are invited for an experienced gross anatomist preferably with teaching background in various dental programs. Applicants must have a Ph.D. and/or D.D.S. degree(s) and will be considered at the assistant or associate professor level. Please submit curriculum vitae and the names of three references to: **Dr. Marilyn L. Zimny, Chairman, Department of Anatomy, Louisiana State University, Medical Center, 1542 Tulane Avenue, New Orleans, La. 70112.**

**HEMATOPATHOLOGIST** to direct Hematology Section, Clinical Laboratories, Emory University Hospital. Minimum of 4 years of experience in morphology, coagulation, general procedures, and laboratory management in academic medical center with demonstrated abilities in teaching and research required. Faculty appointment and salary commensurate with experience. Reply: **Rex B. Conn, M.D., Department of Pathology and Laboratory Medicine, Emory University School of Medicine, Atlanta, Georgia 30322.** Emory University is an Equal Opportunity Employer.

The Chemistry Department of Washington University solicits applications for a tenured **FACULTY POSITION IN PHYSICAL CHEMISTRY/NMR SPECTROSCOPY.** Applicants should be well grounded in the broad aspects of magnetic resonance theory with particular emphasis on relaxation phenomena and pulse techniques. Familiarity with instrumentation is essential. Applicants should be interested in applications of magnetic resonance, particularly of NMR, to biological systems, and to advances in instrumentation and technique aimed at widening the scope of such applications. Demonstrated accomplishment and recognition in the above is required. Submit curriculum vitae and arrange to have three or more letters of recommendation sent to: **Professor William D. Phillips, Chairman, Department of Chemistry, Washington University, St. Louis, Mo. 63130.** Closing date: 31 January 1979. Washington University is an Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### FACULTY POSITIONS

Faculty are needed for the Kelowna School of Resource Management of Simon Fraser University. The university is planning to initiate this interdisciplinary program in natural resource management in September 1979. The school, located in Kelowna in the Okanagan Valley, will offer third- and fourth-year courses culminating in a bachelor's degree. The university expects to appoint approximately six faculty this year with additional appointments being made over the next 18 months to total 15 full-time faculty. Final program approval and budgetary support from the Universities Council of British Columbia are pending; a final decision is expected before the end of 1978.

The initial requirements for faculty are centered in the following general areas: ecology, geomorphology, population dynamics, resource economics, resource management, and systems analysis.

Applications are invited from persons with expertise in one or more of the areas indicated above. Positions are available at all ranks. Faculty will be expected to teach undergraduate courses, to undertake research, and to participate in the development of the school and its program. Applicants should normally have a Ph.D. degree. Preference will be given to those who have previous teaching, research, or professional experience in an interdisciplinary approach to natural resource management.

Applicants should send curriculum vitae and the names of three referees to:

**Dr. J. M. Munro, Director  
Kelowna School of Resource Management  
Simon Fraser University  
Burnaby, British Columbia, Canada V5A 1S6**  
from whom further information may be obtained.

### DEPARTMENT HEAD MICROBIOLOGY

The University of Georgia invites applications and nominations for the position of head of the Department of Microbiology, starting 1 July 1979 or later. Applicants should have qualifications commensurate with the rank of professor including doctoral degree in microbiology or a clearly related field; national/international reputation in microbiological research; and preferably teaching and administrative experience. Deadline for applications, including curriculum vitae and names of five references, is 15 February 1979. Send all material to: **Dr. Raymond T. Damian, Chairman, Search Committee, Department of Zoology, University of Georgia, Athens, Georgia 30602.**

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

### FACULTY VACANCY IN THE DEPARTMENT OF ANATOMY AT GEORGE WASHINGTON UNIVERSITY MEDICAL CENTER

On 1 July 1979 there will be a vacancy in the Department of Anatomy for an assistant professor. The teaching responsibilities will be in the field of gross anatomy. Evaluation will be largely based on demonstrated excellence in research, potential for obtaining external funding, and ability to effectively teach students. All applicants should have the M.D. degree or Ph.D. degree in anatomy and should have completed at least 2 years of postdoctoral training.

Candidates should submit their curriculum vitae and bibliography to: **Dr. Richard S. Snell, Professor and Chairman, Department of Anatomy, 2300 Eye Street, NW, Washington, D.C. 20037.** An Equal Opportunity/Affirmative Action Employer.

**GENETICS—UCLA.** The Department of Biology will appoint a geneticist at the assistant professor level. While the specific area of research is open, applicants must be committed to excellence in undergraduate and graduate education in genetics and have an outstanding research record. Applicants with graduate degrees from Departments of Genetics or from institutions with strong genetics programs are especially sought. Postdoctoral experience is required. Application material, to include the names of three references to be used for letters of reference, curriculum vitae, and list of publications, teaching records, and a summary of research plans, should be sent before 1 February 1979 to: **Genetics Search Committee, Department of Biology, University of California, Los Angeles, Calif. 90024.** An Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### HYDROGEOLOGY—WATER CHEMISTRY—ENVIRONMENTAL GEOLOGY

Environmentally oriented undergraduate Earth Science Program at University of Wisconsin-Parkside has a tenure-track opening at the assistant professor level beginning August 1979. Research and teaching are emphasized; applicants must have the Ph.D. and have teaching and applied research interests in one or more of the following areas: hydrogeology, water chemistry, water resource management, or environmental geology. Forward résumé and at least three letters of recommendation by 15 February to: **Dr. James H. Shea, University of Wisconsin-Parkside, Kenosha, Wis. 53141.** The university is an Equal Opportunity Employer and actively seeks applications from all qualified persons, whatever their sex, race, color, religion, age, marital status, handicap, or national origin.

**INSECT BEHAVIORIST.** Tenure-track position for an entomologist with specialization in insect behavior is available effective 1 July 1979. An 11-month appointment; approximately 75 percent research, 25 percent teaching, with previous postdoctorate teaching/research experience desirable, is available with salary and level commensurate with experience. Responsibilities include research on basic and applied insect behavior, teaching a course on insect behavior, and supervision of graduate students. Submit curriculum vitae, transcripts, bibliography, reprints, manuscripts in press, and names and addresses of five referees to: **Bruce D. Hammock, Search Committee Chairman, Division of Toxicology and Physiology, Department of Entomology, University of California, Riverside, Calif. 92521.** The University of California is an Equal Opportunity/Affirmative Action Employer.

### INSECT ECOLOGY

The Department of Ecology and Evolutionary Biology, University of California, Irvine, invites applications for a faculty position in insect ecology. Preference will be given to persons active in experimental research with phytophagous insects and with skills in such areas as population ecology, nutrition, physiology, biochemistry, and population genetics. The position begins July 1979 at assistant or associate professor rank. All qualified candidates are welcome; women and minorities are encouraged to apply. Send curriculum vitae, publications, statement of interest and qualifications, and three letters directly from references to:

**Dr. Peter R. Atsatt  
Chair of the Search Committee  
Department of Ecology and Evolutionary Biology  
University of California  
Irvine, California 92717**

The closing date for applications is 15 February 1979.

**INSECT GENETICIST—RESEARCH LEADER.** To assume leadership of an established research group investigating insects of agricultural and veterinary importance. Salary based on qualifications and experience. GS-13/14 level position. For information contact: **L. E. LaChance, Director, Metabolism and Radiation Research Laboratory, P.O. Box 5674, State University Station, Fargo, N.D. 58105.** Telephone: 701-237-5771, extension: 5401. For application forms, contact: **James Knox, North Central Region Administrative Office, USDA/SEA/AR-1, 2000 West Pioneer Parkway, Peoria, Ill. 61614.** An Equal Opportunity Employer.

## STATE UNIVERSITY OF NEW YORK AT STONY BROOK

### DEPARTMENT OF NEUROBIOLOGY AND BEHAVIOR

The State University of New York (SUNY) at Stony Brook is developing a new Department of Neurobiology and Behavior and will be seeking **NEUROBIOLOGISTS** for faculty positions at all levels for the 1979-1980 and 1980-1981 academic years. Applicants should submit curriculum vitae and the names of three references to: **Dr. David H. Cohen, Chairman, Department of Neurobiology and Behavior, SUNY-Stony Brook, Stony Brook, New York 11794.** An Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### INVERTEBRATE GENETICIST

A tenure-track position in genetics of marine invertebrates at the assistant professor level is open at the Horn Point Environmental Laboratories (HPEL), University of Maryland. Principal activities to include research and graduate education in genetics of marine invertebrate, especially shellfish. Some undergraduate teaching required. Training in population genetics of aquatic invertebrates required; physiology training desirable.

Starting date: July 1979. Deadline for applications: 26 January 1979. Submit résumé, statement of experience and interests, and names and addresses of three referees to: Search Committee, HPEL, P.O. Box 775, Cambridge, Maryland 21613.

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

**NEUROPHARMACOLOGIST.** To undertake study of the role of the autonomic nervous system in the etiology of alcoholism. Some teaching in neuropharmacology required.

Center of Alcohol Studies, Rutgers University  
New Brunswick, New Jersey 08903.

Affirmative Action/Equal Opportunity Employer

### POSTDOCTORAL APPOINTMENTS

The Ames Laboratory of the U.S. Department of Energy has a number of vacancies for postdoctoral fellows in the fields of chemistry, physics, metallurgy, and engineering. The appointments would be for 1 year, renewable for a second year if mutually agreeable. In some instances there may be a possibility for continued employment beyond the 2-year postdoctoral appointment if circumstances warrant.

Interested persons should submit a complete résumé, along with the names and addresses of three professional references, to:

Ames Laboratory  
Personnel Office  
127 Spedding Hall  
Iowa State University  
Ames, Iowa 50011

An Equal Opportunity Employer

## POSITIONS OPEN

### NEUROPHYSIOLOGIST SUNY—Upstate Medical Center

The Department of Neurosurgery of State University of New York (SUNY) at Upstate Medical Center invites applications from persons trained in neurophysiology who are committed to research and teaching. Appointment will be at the assistant professor level. Responsibilities for teaching and supervision of neurosurgery residents in the applicant's specialty as well as basic neurophysiology are expected.

Candidate should submit curriculum vitae, including a summary of teaching and research experience and interests, and arrange for three letters of reference to be sent to:

Dr. Robert B. King  
Professor and Chairman  
Department of Neurosurgery  
750 East Adams Street  
Syracuse, New York 13210

**PHYSIOLOGIST—PHARMACOLOGIST** at the level of assistant professor in a multidisciplinary department. Available 1 July 1979. Requirements include teaching physiology and pharmacology and developing and pursuing active research program. Ph.D. required and interest in one or more of the following areas preferred: oral physiology, neurophysiology, neuropharmacology, and dental therapeutics. Send curriculum vitae and names of three references to: Dr. W. Sprague, Chairman, Department of Oral Biology, University of Nebraska College of Dentistry, 40th and Holdrege, Lincoln, Nebraska 68583, by 1 March 1979.

Equal Opportunity/Affirmative Action Employer

**POSTDOCTORAL POSITIONS.** Biosynthesis of alkaloids and antibiotics, stereochemistry of enzyme reactions. Applicants should have experience in organic synthesis. Experience in one of the following desirable: (i) tracer methods, (ii) enzymology, and (iii) plant tissue culture. Starting salary: \$9,500 to \$10,000. Send curriculum vitae and names of two references to: Dr. Ronald Parry, Department of Chemistry, Rice University, Houston, Texas 77001.

## POSITIONS OPEN

**PLANT PHYSIOLOGIST.** The Department of Botany, University of Illinois, Urbana, Ill. 61801, has a tenure-track opening for an assistant professor to teach environmental plant physiology and to develop a research program in this field. We particularly welcome applications from candidates interested in the response and acclimation of terrestrial plants to the environment, but who are able to pursue these investigations at the biochemical-biophysical level as required. The Ph.D. is required and postdoctoral research experience is preferred. Salary commensurate with qualifications. The position is available in August 1979, subject to budgetary approval. Professional history, copies of publications, and three letters of reference should be sent to: Dr. J. B. Hanson, Search Committee, at the above address prior to 15 February 1979. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

### PLANT PHYSIOLOGIST

The Department of Biological Science, CALIFORNIA STATE UNIVERSITY, FULLERTON, seeks applicants for the above position effective September 1979. An active research program is expected. Courses to be taught include those at the undergraduate and graduate levels. Applicants should submit a résumé, reprints, and three letters of reference by 16 February 1979 to: Dr. Marvin J. Rosenberg, Chair, Department of Biological Science, California State University, Fullerton, California 92634.

The University is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITIONS** available immediately:

- 1) Ph.D. in microbiology or biochemistry interested in surface proteins of lymphoid cells and/or genetics of immunoglobulins.
- 2) Ph.D. in microbiology or immunology interested in the identification and functional classification of human lymphocyte subpopulations.

Send curriculum vitae and three recommendations to: Dr. Katherine Knight (1) or Dr. Marius Teodorescu (2), Department of Microbiology and Immunology, University of Illinois at the Medical Center, P.O. Box 6998, Chicago, Ill. 60680.

## DEVELOPMENTAL NEUROBIOLOGIST MORPHOLOGIST

Two positions open as of early 1979 at the Assistant Professor level in the Div of Neurobiology and Behavior.

**DEVELOPMENTAL NEUROBIOLOGIST** qualified to establish research program using a multidisciplinary approach for studying the development of neurons in marine invertebrate.

**MORPHOLOGIST** qualified to establish research program using Electrophysiological, Morphological & Behavioral techniques for studying the cellular neurobiology of aging in marine invertebrates. Candidates should have postdoctoral training, 3 or more years research experience in invertebrate Neurobiology & minimum 2 years teaching experience. Responsibilities will include teaching aspects of Neurosciences to graduates & medical students.

Send CV to Eric Kandel, MD, Div of Neurobiology & Behavior.

Columbia University

630 W. 168 Street, NY NY 10032

Affirmative Action/Equal Opportunity Employer

## LECTURER/ASST. PROFESSOR AT THE UNIVERSITY OF TROMSOE, NORWAY

Applications are invited for a position as lecturer/asst. professor in cytology/plant physiology at the Institute of Biology and Geology, University of Tromsøe in Tromsøe, Norway. The successful candidate is expected to teach undergraduate and graduate courses to students in biological sciences. Teaching responsibilities also include a graduate techniques course in electron microscopy and cytology. Instruction can initially be done in English, if necessary.

The position also provides an opportunity to conduct cytological/cytochemical research. Persons with research interests in disease resistance of plants and the biochemical basis for pathogenicity in microorganisms are especially encouraged to apply. The University of Tromsøe is unique in being the most northerly situated university of the world. Its Institute of Biology and Geology has completely new facilities for conducting research including fully equipped laboratories for physiological and biochemical analyses, growth chambers and a phytotron. Computer terminals and excellent library services are also available. The electron microscope laboratory is fully equipped for all types of scanning and transmission electron microscopy.

The position is available immediately. Salary from 91 439 Nkr. to 114 392 Nkr. depending on qualifications.

Application deadline: Dec. 20th. 1978.

For further information contact: Sylvia Labugt, Institute of Biology and Geology, University of Tromsøe, P. O. Box 790, N-9001 TROMSOE, tph.no. (083) 70011.



## POSITIONS OPEN

**PHYSIOLOGIST.** Ph.D. or equivalent degree. Tenure-track position is available beginning August 1979. Duties: participate in teaching physiology to dental and allied health professional students and initiate independent research program for which development funds are available. Potential exists to participate in graduate education. All specialties within physiology will be considered. Send curriculum vitae and a statement of research interests to: **Dr. Ralph A. Meyer, Jr., Head, Division of Physiology, Department of Basic Science, Marquette University School of Dentistry, 604 North 16 Street, Milwaukee, Wis. 53233.** Marquette University is an Equal Opportunity/Affirmative Action Employer.

## PLANT PATHOLOGIST

The Department of Biology, Utah State University, is seeking a plant pathologist to fill a tenure-track, assistant professor position. Applicants must have a Ph.D. in plant pathology. This is primarily a research position but teaching involvement will be required. The individual will be responsible for coordinating and teaching in a new undergraduate pest management program. Opportunity will also be given for the individual to develop and teach a graduate course in an area of interest and need. Considerable flexibility exists in selecting a research problem, but it is necessary that the research have the support of the Agricultural Experiment Station and be compatible with its goals and direction. Applications should be received by 1 February 1979. Send a personal résumé, transcripts, and three letters of recommendation to: **Dr. Neal Van Alfen, Department of Biology, UMC 53, Utah State University, Logan, Utah 84322.** Utah State University is an Equal Opportunity/Affirmative Action Employer.

## POSTDOCTORAL APPOINTMENT THE ECOSYSTEMS CENTER MARINE BIOLOGICAL LABORATORY

Candidates are sought for a 1- or 2-year postdoctoral research position to work on the chemical transformations of sulfur in estuaries. Extensive experience with sulfur chemistry and background in ecology required. Write: **G. M. Woodwell, Marine Biological Laboratory, Woods Hole, Mass. 02543.** The Marine Biological Laboratory is an Equal Opportunity Employer.

UNIVERSITY OF CALIFORNIA, IRVINE. Two positions available for **POSTDOCTORAL FELLOWS**, beginning summer 1979, in the Center for Pathobiology. Recent Ph.D. required, preferably in the area of cell biology, developmental biology, or genetics. Candidates to work on problems of stem cell differentiation, determination, pattern formation, or morphogenesis in hydra (with Doctors H. R. Bode or R. D. Campbell), *Drosophila* (with Doctors P. J. Bryant or H. A. Schneiderman), or amphibians (with Dr. S. V. Bryant). Applications from all qualified candidates are welcome; minorities and women are encouraged to apply. Arrange for three letters of reference to be sent, and submit résumé and brief description of research interests and experience to: **Dr. H. R. Bode, Center for Pathobiology, University of California, Irvine, Irvine, California 92717.** Closing date: 28 February 1979.

**POSTDOCTORAL POSITIONS.** Veterans Administration Medical Center (VAMC) is inviting applications from postdoctoral-level scientists to assist with research programs in the areas of: (i) molecular mechanisms of chemical mutagenesis and carcinogenesis, and (ii) metabolism of chemical toxicants. Applicants should have training in chemistry, pharmacology, or biochemistry. Interested persons should send curriculum vitae and three names for reference to: **Dr. K. D. Straub, ACOS for Research, VAMC, 300 East Roosevelt Road, Little Rock, Ark. 72206.**

## POSTDOCTORAL POSITION IN ESTUARINE RESEARCH

Applications are invited for a position available early in 1979. Candidate expected to work on a team effort in a broad program on population and community dynamics of estuarine organisms. Special emphasis to be placed on standing stock and functional aspects as related to environmental change problems in the coastal zone. Successful candidate must demonstrate familiarity with the ecology of estuarine systems. Apply by 31 December 1978. Send résumé, references, and supporting material to: **J. A. Mihursky, University of Maryland, Chesapeake Biological Laboratory, P.O. Box 38, Solomons, Maryland 20688.**

Equal Opportunity/Affirmative Action Employer

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately. Ph.D. in biochemistry or microbiology. Experience with protein purification is essential. To study factors regulating hemopoiesis in an RNA tumor virus-induced, acute leukemia. Salary: \$10,000 to \$12,000. Send résumé to: **Box 374, SCIENCE.**

**POSTDOCTORAL POSITION, CELL BIOLOGY.** Available 1 July 1979 for study of regulation of DNA replication in mammalian cells. Background in cell culture required. Training in molecular biology of nucleic acids, animal virology, or somatic cell genetics helpful. Recent Ph.D. preferred. Group includes other postdocs and graduate students. Opportunity available for interaction with other groups interested in nucleic acids research. Send curriculum vitae and references to: **Professor Roger Hand, Department of Microbiology, McGill University, 3775 University Street, Montreal, Quebec, Canada H3A 2B4.**

## POSTDOCTORAL POSITION

Available immediately. One-year appointment. To work on problems connected with origins of life. Some experience with nucleoside or organic phosphate chemistry desirable. Starting salary will depend on experience. Send curriculum vitae and names of three referees to:

**Dr. Leslie E. Orgel  
The Salk Institute  
P.O. Box 1809  
San Diego, Calif. 92112**

An Equal Opportunity Employer, M/F

**POSTDOCTORAL POSITION**—Available immediately for studies on transport of water across the insect integumentary epithelium during elaboration of moulting fluid. Experience with voltage clamping techniques and isotopic flux measurements desirable, but will train. Previous experience with insects unnecessary. Send curriculum vitae and list of three references to: **Dr. A. M. Jungreis, Department of Zoology, University of Tennessee, Knoxville, Tenn. 37916.**

**POSTDOCTORAL POSITION.** Applications are invited for a postdoctoral position in earthquake prediction and hazard assessment. Research at University of California, Los Angeles (UCLA), includes analysis of existing seismic, geodetic, magnetic, strain, and tilt data to identify earthquake precursors; collection and interpretation of data from our array of scalar and vector magnetometers near the San Andreas fault; and basic studies in seismic wave propagation, earthquake source mechanics, crustal deformation, statistical data analysis, and inverse problems. Applicants should have a Ph.D. and extensive experience in geophysical data analysis. Experience with the collection and transmission of magnetometer data is also desirable. Send résumé and three references to: **David D. Jackson, Department of Earth and Space Sciences, University of California, Los Angeles, Calif. 90024.** UCLA is an Equal Opportunity Employer with a commitment to Affirmative Action.

**POSTDOCTORAL POSITIONS.** Available for Ph.D. in anatomy, biochemistry, physiology, or pharmacology with interest in lung development. Send résumé to:

**Dr. Edwin R. Hughes, Director  
Graduate Program in Basic Medical Sciences  
Medical Sciences Building 2152  
University of South Alabama  
Mobile, Ala. 36688**

**POSTDOCTORAL POSITION** available immediately to study the biochemistry of oil and protein synthesis in soybeans. Applicants should have experience in biochemistry and plant physiology. Salary commensurate with experience. Send résumé and names of references to: **Niels C. Nielsen, Agronomy Department, Purdue University, West Lafayette, Ind. 47907.**

An Equal Opportunity/Affirmative Action Employer

**POSTDOCTORAL POSITION** for biochemically trained person interested in cell differentiation. Current work deals with several approaches to the synthesis, assembly and spatial distribution of sporulation-specific structures in *Blastocladiella* and with regulatory mechanisms of de novo cell wall formation during zoospore germination. Contact: **D. R. Sonneborn, Zoology Research Building, University of Wisconsin, 1117 West Johnson Street, Madison, Wis. 53706.** Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

**POSTDOCTORAL RESEARCH ASSOCIATE** position available immediately. Research concerns the effects of drugs and hormones on the development of ventilatory control. Experience in respiratory and endocrine physiology, radioimmunoassay, and animal surgery desirable. Salary: \$11,000 to \$13,000. Send curriculum vitae and three letters of recommendation to: **Dr. George Olsen, Department of Pharmacology, School of Medicine, University of Oregon Health Sciences Center, Portland, Ore. 97201.**

**POSTDOCTORAL RESEARCH ASSOCIATE.** Position available immediately, for research in regulation of membrane lipid asymmetry in tumorigenic cells or for regulation of very low density lipoprotein physical properties. Candidates should have a Ph.D. in a biomedical science preferably in biochemistry, chemistry, or biophysics and should expect to spend 2 to 3 years in our laboratory. Send curriculum vitae and names of three references to: **Dr. Friedhelm Schroeder, Department of Pharmacology, University of Missouri, School of Medicine, Columbia, Mo. 65212.**

An Affirmative Action/Equal Opportunity Employer

## MIT POSTDOCTORAL/RESEARCH ASSOCIATE POSITION

A position for 1 to 3 years, available immediately or within several months, at MIT. The person involved will be studying the application of enzymes to remove toxic substances from the blood stream with particular emphasis on using immobilized enzymes to control heparin levels. Experience in biochemistry or organic chemistry is desirable. Send résumé to: **Professor Robert Langer, Department of Nutrition and Food Science, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139.**

**POSTDOCTORAL RESEARCH ASSOCIATE** for biochemical work in oceanographic research laboratory in Maine. One year of experience in (i) continuous culture of marine phytoplankton and (ii) assay of photosynthetic enzymes in such organisms, or 2 years of related experience. Additional expertise in measurement of pathways of photosynthetic CO<sub>2</sub> assimilation (and experience in making such measurements on oceanographic research cruises required). \$15,000 per annum. Curriculum vitae only to: **Bigelow Laboratory, West Boothbay Harbor, Maine 04575.** Equal Opportunity Employer.

**PREDOCTORAL POSITIONS** leading to research training in: immunology (immunoglobulins, cellular immunity, lymphocyte biology, immunogenetics, complement); oncology (carcinogenesis, tumor immunology); bacteriology (plasmids, genetics, bacterial membranes); molecular biology (gene DNA sequencing, mRNA processing); cell biology (liposomes, membranes, cell fusion); virology (viral persistence, oncology). Available: July to September 1979. Prerequisites: U.S. citizenship, B-plus average, and high GRE scores. Inquiries to: **Dr. Sheldon Dray, Head, Department of Microbiology and Immunology, University of Illinois Medical Center, P.O. Box 6998, Chicago, Illinois 60680.**

## PROFESSOR AND CHAIRMAN OF UROLOGY

The State University of New York at Buffalo (SUNYAB) School of Medicine is seeking a professor and chairman for its Department of Urology. Nominations and applications are being accepted through 31 December 1978. Candidates should be individuals whose credentials reflect exemplary clinical skill, as well as academic achievement and potential.

Please address all correspondence to: **Glen E. Gresham, M.D., Chairman of Urology Search Committee, Department of Rehabilitation Medicine, SUNYAB, 462 Grider Street, Buffalo, New York 14215. Telephone: 716-898-3217.**

The State University of New York at Buffalo is an Equal Opportunity Employer and does not discriminate on the basis of sex, race, or creed.

The Department of Civil Engineering at Carnegie-Mellon University invites applications for the position of **PROFESSOR and DEPARTMENT HEAD.** Applicants should have a strong interest in undergraduate and graduate civil engineering education, administrative experience, and a proven research record in one of the following areas: structural, environmental, or transportation engineering. Applications should be received prior to 1 February 1979 and should be addressed to: **Professor Steven J. Fenves, Search Committee Chairman, Department of Civil Engineering, Carnegie-Mellon University, Schenley Park, Pittsburgh, Pa. 15213.** An Equal Opportunity/Affirmative Action Employer.



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

An interdisciplinary educational program designed to train individuals in the understanding of health systems, the development of skills needed to plan allocation of resources, the execution of health programs and the delivery of health services. The degree of Master of Science in Health Policy and Management will be awarded after two years of full-time study. Applications from individuals with work experience in the health field are encouraged. As a matter of policy, Harvard does not discriminate in the admission treatment of students on the basis of race, sex or handicap. The deadline for applications for the 1979-80 academic year is February 1, 1979.

For further information contact:  
Linda Mastraccio, Associate Director  
Graduate Program in Health Policy and Management  
Harvard School of Public Health  
677 Huntington Avenue  
Boston, Massachusetts 02115

## BARROW NEUROLOGICAL INSTITUTE OF ST. JOSEPH'S HOSPITAL AND MEDICAL CENTER PHOENIX, ARIZONA

Five research positions will be available within the Division of Neurobiology beginning July 1, 1979. These positions are intended for highly qualified researchers with either Ph.D. or M.D. degrees who have recently completed their post-doctoral training. Initial appointments for three years will be made. Salary level will be competitive with starting salaries at the Asst. Professor level at major universities.

**Neuroanatomist:** Position is open to neuroscientist with special interests in the mammalian central nervous system and especially in the visual system. Initial funding for starting the laboratory is available.

**Neurochemist or Neuroendocrinologist:** An individual is sought who can develop a brain peptide research laboratory. The position is primarily a basic research position, but opportunities for collaborative work with interested neurologists and neurosurgeons will be available if desired by the successful candidate. Initial funding for starting the laboratory is available.

**Neurophysiologist:** An individual is sought to join an existing laboratory to work on problems of spatial vision and visual pattern recognition in mammalian visual cortices with Dr. Daniel Pollen.

**Neuroscientist with special interest in epilepsy:** A new laboratory for the study of epilepsy is available for an individual with a relevant background in either neurochemistry, neurophysiology or neuropharmacology. The individual will be selected on the basis of strength in his or her proposed work rather than on the basis of the subspecialty field from which the problem is approached. Initial funding for starting this laboratory is available.

**Neuroscientist with a special interest in pain:** The first James R. Atkinson Memorial Pain Research Fellowship will be awarded to a scientist to join an existing laboratory to carry out independent basic research and, if desired, clinically related research work within the Division of Neurosurgery with Dr. Andrew Shetter.

Applicants should send a curriculum vitae, bibliography, names of three references, pertinent reprints, and a statement about intended research objectives to Dr. Daniel A. Pollen, Director of Neurological Research and Chairman, Division of Neurobiology (as of July 1, 1979). Applications should be sent before March 1, 1979 to Dr. Daniel A. Pollen, Massachusetts General Hospital, Boston, Massachusetts 02114. An Equal Opportunity Employer.

## DIRECTOR PHARMACOLOGY- TOXICOLOGY PROGRAM

Applications and nominations are invited for the career Civil Service position of Director, Pharmacology-Toxicology Program, National Institute of General Medical Sciences, National Institutes of Health, Public Health Service. This program is responsible for the support of research project grants, research training grants, and research fellowship awards in biological and biochemical studies in molecular pharmacology, bio-related and synthetic chemistry, and basic pharmacological mechanisms in humans.

This program is the only formally designated program of grant support for pharmacology at NIH and supports grants totalling \$27 million. The Director of this program is expected to provide strong leadership in planning new areas of scientific endeavor and serves as the senior advisor to the Institute regarding important new scientific thrusts.

**Qualifications: Required**—Ph.D. or M.D. or equivalent training in pharmacologic or related biomedical sciences with 3 to 5 years experience, at least one of which must be equivalent to the GS-15 level, and demonstrated scientific and administrative abilities including the ability to implement EEO objectives. **Desired**—Evidence of substantial scholarly achievements, professional stature, and managerial skills.

The position is at the GS-15 or supergrade level with a salary in the range of \$38,160 to \$47,500, depending on qualifications. Interested candidates should submit a Personal Qualifications Statement (SF-171), a curriculum vitae, and bibliography by January 20, 1979 to:

Mrs. Elena D'Orazio  
NIGMS Personnel Office

## NATIONAL INSTITUTES OF HEALTH

5333 Westbard Avenue, Room 436  
Bethesda, Maryland 20016

An Equal Opportunity Employer



National Research  
Council Canada

Conseil national  
de recherches Canada

## ASTRONOMER

The Herzberg Institute of Astrophysics has an opening for an astronomer at its Dominion Astrophysical Observatory, Victoria, British Columbia. The incumbent will be expected to undertake independent research in observational astronomy.

### QUALIFICATIONS:

Candidates should have a Ph.D. or equivalent degree in astronomy or in a related discipline with several years of experience in astronomical research. Preference will be given to applicants with experience in extragalactic astronomy.

Knowledge of the English language is essential for this position.

Salary will depend on qualifications and experience.

Apply in writing giving complete details of education and experience to:

The Employment Officer, National Research Council of Canada, Ottawa, Ontario, Canada, K1A 0R6. Include a list of publications and the names of referees from whom confidential evaluations can be sought. In reply please quote HIA-56.

# NRC

## POSITIONS OPEN

### University of California, Irvine School of Social Sciences

Applications are invited for a **SENIOR PROFESSOR OF EXPERIMENTAL PSYCHOLOGY** in the area of mathematical modeling of perceptual events. The position is a high-level full professorship, and candidates are expected to have international reputation in both experimental and mathematical psychology. Duties include teaching graduate courses in experimental and mathematical psychology and undergraduate courses in psychology.

*Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.*

Applications should be sent to: **Dean Christian Werner, School of Social Sciences, University of California, Irvine, California 92717**, no later than 8 January 1979.

**POSTDOCTORAL TRAINING** in RNA tumor virology. Stipend from NIH training grant in tumor virology available immediately. Interests include the genetics of avian RNA tumor viruses and the biochemistry of viral gene products in infection and transformation. Applicants should have training in cell or molecular biology. Participating faculty include P. Nieman, R. Eisenman, M. Linial, and R. Rohrschneider. Send curriculum vitae, including names of three references, to: **Dr. Robert Nowinski, Fred Hutchinson Cancer Research Center, 1124 Columbia Street, Seattle, Wash. 98104**.

The deadline for applications will be 1 January 1979.

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

**POSTDOCTORAL RESEARCH TRAINING** positions are available in the areas of endocrinology, metabolism, and diabetes under the guidance of one of ten training faculty in six basic or clinical departments of Emory University School of Medicine. Ph.D. or M.D. graduates interested in advanced research and training in basic and clinical endocrinology and metabolic disorders for 1 or 2 years should send curriculum vitae, area of research interest, and names of two references to:

**Dr. Mario DiGirolamo**  
Program Director  
Emory University School of Medicine  
69 Butler Street  
Atlanta, Georgia 30303

Deadline for applications is 15 January 1979, with awards being made by 28 February 1979. *An Equal Opportunity/Affirmative Action Employer.*

### RESEARCH ASSISTANTS

Positions in reproductive biology, endocrine biology, neurobiology, and molecular/cell biology are available from time to time at the Worcester Foundation for Experimental Biology, Inc. All positions are competitive; rank and salary commensurate with qualifications and experience; ample fringe benefits. Interested individuals having either a bachelor's or a master's degree in biology, biochemistry, biophysics, or in other related fields should send résumé and complete academic transcripts to: **Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545**.

*An Equal Opportunity/Affirmative Action Employer*

### RESEARCH ASSOCIATE IN AQUATIC PLANT PHYSIOLOGY

Postdoctoral laboratory and field research on physiology of marine and freshwater angiosperms; root metabolism in relation to rhizosphere microflora and sediment chemistry. Twelve-month basis for 1 or 2 years, available January 1979. Submit curriculum vitae and three letters of reference to: **Dr. Robert G. Wetzel, W. K. Kellogg Biological Station, Michigan State University, Hickory Corners, Michigan 49060**. *Michigan State University is an Equal Opportunity Employer.*

**SEDIMENTARY GEOLOGIST.** State University of New York (SUNY) at Binghamton offers a permanent position, preferred specialization in physical processes of sedimentation, starting fall 1979. Teaching responsibilities would include graduate and undergraduate sedimentology. Appointment is planned at junior level; more experienced candidates will be considered. Applicants submit résumé and arrange for three letters of recommendation to be sent to: **Paul Enos, Geological Sciences, SUNY at Binghamton, Binghamton, N.Y. 13901**. *An Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

**Interdisciplinary POSTDOCTORAL RESEARCH TRAINING** in taste and olfaction; *women and minority candidates are encouraged to apply*. Individuals with interests in the following areas will be considered:

- 1) Age/culture in human food selection.
- 2) Nutritional status and chemical senses.
- 3) Biochemistry of taste and olfactory membrane receptors.
- 4) Electron microscopy of taste and olfactory epithelium.
- 5) Neurophysiology/behavior of feeding in gastropod mollusks and aquatic animals.
- 6) Clinical aspects of taste and olfaction.
- 7) Neuroanatomy/neurophysiology of mammalian CNS.
- 8) Mammalian chemical communication.

Send curriculum vitae and names of three references to: **Chairman, Monell Chemical Senses Center, 3500 Market Street, Philadelphia, Pa. 19104**. *An Equal Opportunity Employer.*

**RADIOLOGIST—DIAGNOSTIC.** Board-certified. Faculty position available. Rank and salary commensurate with qualifications and experience. Send curriculum vitae, list of publications, and references to: **Chairman, Department of Radiology, Wayne State University School of Medicine, 540 East Canfield Avenue, Detroit, Mich. 48201**. *Wayne State University is an Equal Opportunity/Affirmative Action Employer.*

### RESEARCH ASSOCIATE

Immediate position available for bio-organic 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 will consider experienced candidates with master's degrees. 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*

### RESEARCH ASSOCIATES

Positions available from time to time for M.D.'s, Ph.D.'s in areas of regulatory biology: (i) cell/molecular biology, (ii) reproductive biology, (iii) endocrine biology, (iv) steroid biochemistry, and (v) neurobiology. Applications are invited from persons trained in molecular biology, microbiology, virology, physiology, biology, organic chemistry, biochemistry, pharmacology, biophysics, or other related specialties. Applicants are expected to be familiar with advanced research techniques relevant to the area of interest and must have strong academic background. Salary range: \$10,000 to \$14,000, depending upon postdoctoral experience. Send résumé to: **Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545**.

*An Equal Opportunity/Affirmative Action Employer*

We invite applications for the position of **RESEARCH ASSOCIATE**, available immediately. The applicants must have a Ph.D. degree in molecular biology or biochemistry and must have some experience in microbial cell surface chemistry. The successful applicant will be involved in a project to determine the role of the bacterial cell wall in DNA replication and segregation and cell division. Please send (i) letter of intent and interest in the research area, (ii) full set of transcripts, and (iii) three letters of reference to either: **Dr. R. J. Doyle or Dr. U. N. Streips, Department of Microbiology and Immunology, School of Medicine, University of Louisville, Louisville, Kentucky 40232**. Salary will be competitive. *The University of Louisville is an Equal Opportunity/Affirmative Action Employer.*

**RESEARCH ASSOCIATE in biochemistry reproductive endocrinology.** Experience in peptide isolation and/or peptide chemistry to characterize naturally occurring inhibitor of oocyte maturation. Prospective colleagues are in an integrated training program emphasizing gonadal, pituitary, and CNS aspects of reproductive physiology. Mentor is professor of biochemistry. Send résumé and names of three references to: **Dr. Cornelia P. Channing, Department of Physiology, University of Maryland School of Medicine, 660 West Baltimore Street, Baltimore, Md. 21201**. *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**TERATOLOGIST—TOXICOLOGY STUDIES.** A degree-level person is needed to design, and conduct reproduction, teratology, and behavioral studies to support the development of new products. This person will be responsible for working with technicians, as well as preparing reports. Our facility is located in a semirural community approximately 20 miles east of downtown Indianapolis. Please send résumé to: **Joseph S. Quince, Personnel Representative, Eli Lilly and Company, P.O. Box 708, Greenfield, Indiana 46140**. *An Equal Opportunity Employer.*

### CSIRO RESEARCH SCIENTIST OR POSTDOCTORAL RESEARCH FELLOW DIVISION OF FISHERIES AND OCEANOGRAPHY CRONULLA, NEW SOUTH WALES

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

#### FIELD: FISHERIES BIOLOGY.

**DUTIES:** Initially to develop and supervise a research programme on the highly migratory fish species that occur in the seas adjacent to Australia. Field investigations on the division's vessels and on fishing vessels in the open sea will be involved. Temporary posting to other parts of Australia may be required.

**QUALIFICATIONS:** A Ph.D. or equivalent in one of the ecological sciences with heavy emphasis on mathematics and statistics and the use of computers. Specific training and/or experience in population dynamics is desirable.

**SALARY:** Research scientist: A\$14,829 to A\$18,177 per annum, or senior research scientist: A\$18,819 to A\$21,543 per annum. A higher salary might be offered to a more experienced applicant.

**TENURE:** An indefinite appointment, or a fixed-term appointment of 3 to 5 years, may be negotiated. Both carry superannuation benefits.

Applications stating full personal and professional details, the names of at least two referees and quoting reference number 320/609, should reach:

**The Chief**  
Division of Fisheries and Oceanography  
P.O. Box 21  
Cronulla, New South Wales 2230  
Australia

by 15 January 1979.

## FELLOWSHIPS

Two-year **POSTDOCTORAL FELLOWSHIP** in biochemistry/cell biology available immediately at the Jules Stein Eye Institute, University of California, Los Angeles. Eligibility limited to U.S. citizens and permanent residents. Position should attract someone wishing to work on mechanism of phagocytosis and/or chemistry of plasma membranes. Send résumé, statement of research interest, and names of three references to: **Dr. Michael Hall, Jules Stein Eye Institute, University of California, Los Angeles, School of Medicine, Los Angeles, Calif. 90024**. *An Affirmative Action/Equal Opportunity Employer.*

**RESIDENCY/FELLOWSHIP** in chemical pathology for 12 months or more, effective 1 January 1979, is available at VA Medical Center, Allen Park, Mich., affiliated with Wayne State University School of Medicine. Automated and special chemistry, toxicology, immunochemistry, and radioimmunoassay are included in this program. Salary dependent upon qualifications. Send inquiries to: **George Kaldor, M.D., Chief, Laboratory Service, VA Medical Center, Allen Park, Mich. 48101**. *An Equal Opportunity Employer.*

### NRSA POSTDOCTORAL FELLOWSHIP

The Department of Radiology, University of Utah, has a fellowship available for studies on the effects of hyperthermia and x-irradiation on chromatin structure and function as related to DNA replication and repair. Available 1 February 1979 for 2 years. Stipend depends on experience in conformity with NRSA guidelines. Send résumé and the names of three referees to: **Dr. Joseph L. Roti Roti, Department of Radiology, University of Utah Medical Center, Salt Lake City, Utah 84132**.

*Equal Opportunity/Affirmative Action Employer*



State University of Groningen, The Netherlands  
The Faculty of Medicine.  
At the Laboratory of Histology there will shortly  
be a vacancy for a

**professor in histology and  
microscopical anatomy**  
(gewoon hoogleraar in de histologie en  
microscopische anatomie)  
(vac. nr. 781026/2491)

This function comprises the education of the  
students of the Faculty of Medicine and Dentistry  
and contributing to the research activities of the  
Department of Histology.

Information about the post can be obtained from  
the Chairman of the Vacancy Committee, dr.  
Ph.J. Hoedemaeker, Oostersingel 63, Groningen,  
phone 050-116103.

The salary (gross-amount) will be at least  
Hfl. 6.679,- per month and at most Hfl. 10.488,-  
per month.

#### **applications:**

People who wish to apply for this post, and  
those who would like to call attention to  
potential candidates, are invited to send their  
applications, including curriculum vitae and  
list of publications to the Directeur van de  
Dienst Personeelszaken van de  
Rijksuniversiteit, Postbus 72,  
9700 AB Groningen.

#### TEMPORARY SCIENTIFIC POSITIONS WITH THE DIRECTORATE FOR BIOLOGICAL, BEHAVIORAL, AND SOCIAL SCIENCES NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF), in performing its function of support  
of scientific research, seeks highly qualified professional staff selected from a  
broad range of disciplines to fill 1- or 2-year rotational assignments as **program  
director** or **associate program director**. Candidates should be at the Ph.D., or  
equivalent, level, have at least 6 years of research experience beyond the Ph.D.  
(or equivalent), and be active in the relevant field. Associate program directors  
may have somewhat less research experience than program directors. Salaries,  
based on qualifications and experience, range from \$32,442 to \$47,500 per an-  
num.

Program directors have primary responsibility for the review, evaluation, and  
recommendation for disposition of proposals. This experience provides an ex-  
cellent opportunity to broaden scientific perspective and to gain an understand-  
ing of federally sponsored research programs. Since considerable benefit de-  
rives from communication of this experience to others at the home institution,  
candidates who are able to accept appointments on leave-of-absence from aca-  
demic or research positions are preferred.

The programs directed by "rotators" are:

##### Division of Behavioral and Neural Sciences

Anthropology  
Neurobiology  
Social and Developmental Psychology

##### Division of Environmental Biology

Ecology  
Ecosystem Studies  
Systematics (Program Director and Associate Program Director)

##### Division of Physiology, Cellular, and Molecular Biology

Biochemistry  
Biophysics  
Cell Biology  
Developmental Biology (Associate Program Director)  
Genetic Biology  
Regulatory Biology

##### Division of Social Sciences

Economics (Associate Program Director)  
Law and Social Sciences  
Political Science  
Sociology

Candidates interested in being considered now or in later years for positions as  
"rotators" as vacancies occur, should send curriculum vitae to: **National Sci-  
ence Foundation, Division of Personnel and Management, Attention: Section B,  
1800 G Street, NW, Washington, D.C. 20550. NSF is an Equal Opportunity Em-  
ployer.**

## RESEARCH ENTOMOLOGIST

**S.C. JOHNSON & SON, INC., Corporate R&D  
Division, is seeking an Entomologist to fill a  
challenging research position. Applicants  
should have PhD or MS with entomology re-  
search experience. This position involves  
research with and evaluation of insecticides,  
repellents and attractants. A strong back-  
ground in insect behaviour and/or in-  
secticide mode of action is essential. Famil-  
iarity with household insect pest control  
techniques is preferred.**

**Starting salary will be commensurate with  
experience plus an excellent benefit pro-  
gram including cash and deferred profit  
sharing. Please submit resume including  
work experience, academic record and sal-  
ary history, in confidence to: R.L. Meyers,  
Employment Manager, S.C. JOHNSON &  
SON, INC., 1525 Howe Street, Racine, WI  
53403.**

**Johnson wax**

*An Equal Opportunity Employer-M/F*

## FELLOWSHIPS

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

### POSTDOCTORAL FELLOWSHIPS

Two 3-year postdoctoral fellowships are available at the Friedrich Miescher-Institut, Basel, in a group studying correlations between structure and function in synaptic junctions from mammalian brain.

**BIOCHEMIST.** Preferably experienced in membrane biology, subcellular fractionation, and gel electrophoresis. Experience in immunochemistry or protein chemistry would be relevant. A grasp of the principles of light and electron microscopy would have to be developed and appropriate training will be given where necessary.

**ELECTRON MICROSCOPIST.** Preferably with experience of CNS ultrastructure. Experience of quantitative methods or immunohistochemical procedures would be relevant. Candidates should be prepared to utilize light microscopy exclusively should a particular problem demand it.

Reply to: **Dr. A. I. Matus, The Friedrich Miescher-Institut, P.O. Box 273, CH-4002 Basel, Switzerland,** sending brief curriculum vitae and names of three referees.

### FELLOWSHIPS IN MARINE POLICY AND OCEAN MANAGEMENT

Applications are invited for 1-year **POSTDOCTORAL FELLOWSHIPS** from scholars and practitioners from relevant fields in the natural sciences, social sciences, and management who are interested in applying their disciplinary training and experience to investigations into questions of marine policy and ocean management in which marine science is an important factor. Recipients of awards are expected to pursue research full-time, basing themselves in Woods Hole.

Applicants must have completed their doctorate degree or possess superior professional qualifications through career experience. Opportunities for investigators on sabbatical are also available. Fellowship stipend is \$15,000. Appointees are eligible for group health insurance and a modest research budget. Application deadline is 15 February 1979 for 1979-1980 awards. Awards will be announced in March. Write for application forms to: **Dean of Graduate Studies, Marine Policy and Ocean Management Program, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543, Equal Opportunity/Affirmative Action Institution.**

**TOXICOLOGY POSTDOCTORAL FELLOWSHIPS:** the Toxicology Training Program at the University of Rochester invites applications for training in environmental toxicology. This lateral entry program features course work and seminars, as well as research opportunities in the laboratories of faculty members with interests in behavioral, biochemical, developmental, and inhalation toxicology. It is designed to allow individuals with training in other disciplines to pursue careers in the toxicology of environmental agents. Only candidates who are U.S. citizens or permanent residents will be eligible for support from a National Research Service Award. For more information please write: **Dr. Victor G. Laties, Acting Director, Toxicology Training Program, P.O. Box Toxicol, University of Rochester School of Medicine and Dentistry, Rochester, New York 14642.**

### POSTDOCTORAL FELLOWSHIP

A postdoctoral position will be available in early 1979 through an NIH-sponsored interdepartmental training program in reproductive biology, biochemistry, and endocrinology. Faculty research is broad and includes both basic and clinical areas. This is an NRSA training grant and awards can be made only to American citizens or permanent residents. Applicants must have either a Ph.D. or M.D. (or equivalent), or have finished all formal requirements for the terminal degree. For further information please write: **Dr. J. David Puett, Program Director, Department of Biochemistry, Vanderbilt University, Nashville, Tenn. 37232, Vanderbilt University is an Equal Opportunity Employer.**

## GRADUATE STUDY

### GRADUATE STUDY IN ENVIRONMENTAL HEALTH SCIENCES AND ENGINEERING

School of Public Health  
Harvard University

Traineeships and fellowships available for graduate studies in industrial hygiene and occupational health environmental health management, radiation protection, medical radiological physics, and air pollution control. Deadline for completed applications: 1 February 1979. For details contact: **Dr. Dade W. Moeller, Harvard School of Public Health, 665 Huntington Avenue, Boston, Massachusetts 02115. Applications from women and members of minority groups are encouraged.**

**GRADUATE STUDIES IN THE ANATOMICAL SCIENCES** leading to the Ph.D. degree. Program provides preparation for careers in biomedical research and teaching. Actively supported research areas include cell, developmental, and reproductive biology, neurosciences, molecular evolution, and others. Teaching and research assistantships are available, with beginning stipends ranging up to \$5100 plus tuition. Contact: **Graduate Officer, Department of Anatomy, Wayne State University School of Medicine, 540 East Canfield Avenue, Detroit, Michigan 48201.**

## ASSISTANTSHIPS

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## TRAINING PROGRAMS

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The University of Wisconsin Endocrinology-Reproductive Physiology Program is an interdepartmental program. Graduate education leading to the Ph.D. degree in endocrinology-reproductive physiology as well as postdoctoral training are available. Research emphasis is on various aspects of mammalian reproductive physiology and biochemistry and is centered in several laboratories. *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.* For further information write to: **Dr. Richard C. Wolf, Program Director, Wisconsin Regional Primate Center, University of Wisconsin, 1223 Capitol Court, Madison, Wisconsin 53706.**

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Division of Toxicology  
Medical College of Virginia/  
Virginia Commonwealth University  
Department of Pharmacology  
Box 726  
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**Dr. John S. Laughlin**  
Head, Biophysics Laboratory  
Memorial Sloan-Kettering Cancer Center  
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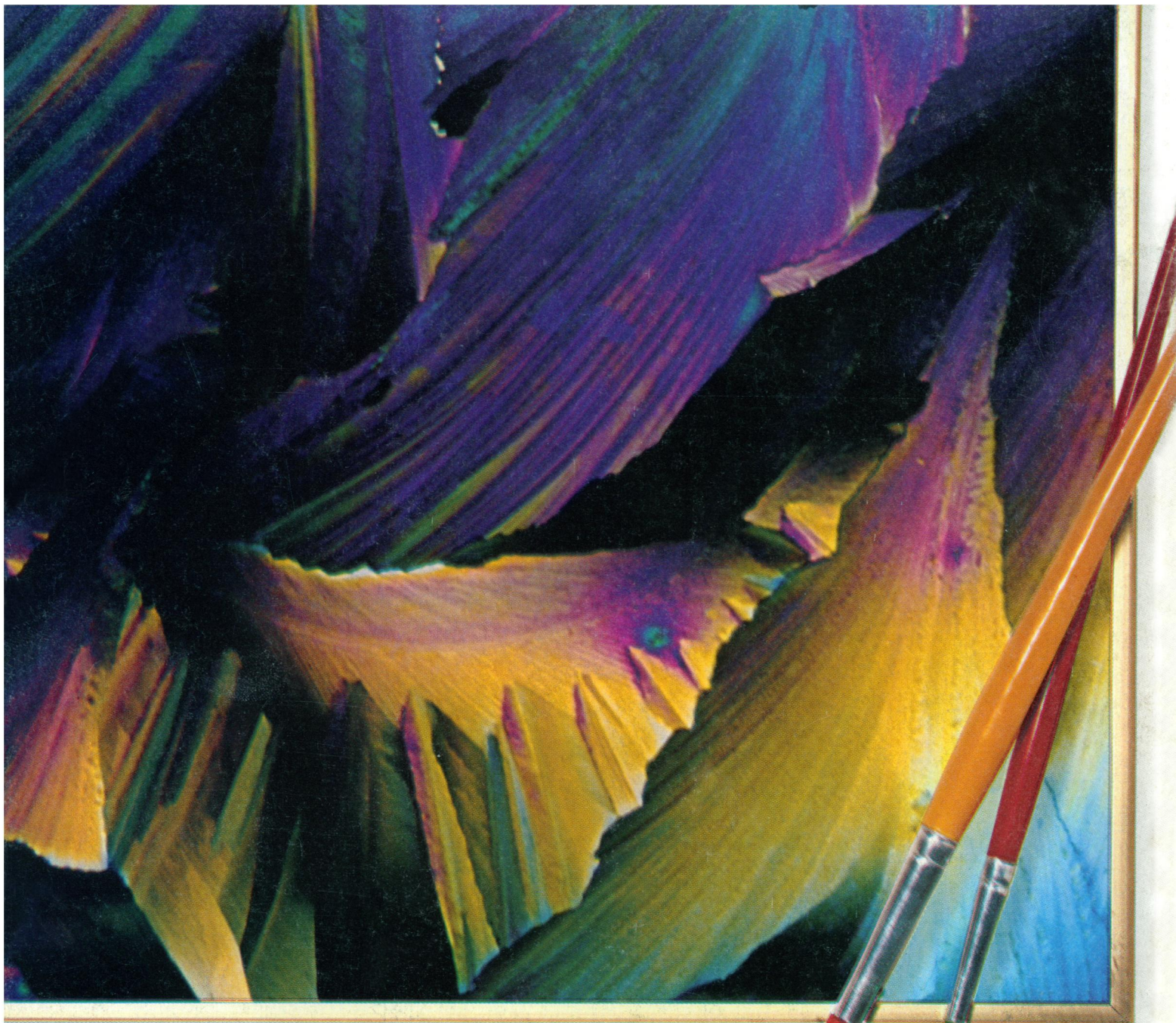
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