358 pp., illus. \$20. Ohio State University Biosciences Colloquia, No. 2.

Second European Nutrition Conference. Munich, Sept. 1976. N. Zöllner, G. Wolfram, and Ch. Keller, Eds. Karger, Basel, 1977. xii, 516 pp., illus. \$55.75.

Selection in One- and Two-Locus Systems. Thomas Nagylaki. Springer-Verlag, New York, 1977. viii, 208 pp., illus. Paper, \$11. Lecture Notes in Biomathematics, vol. 15.

Solar Heating Design by the f-Chart Method. William A. Beckman, Sanford A. Klein, and John A. Duffie. Wiley-Interscience, New York, 1977. xviii, 200 pp., illus. \$14.95.

Sputnik, Scientists, and Eisenhower. A Memoir of the First Special Assistant to the President for Science and Technology. James R. Killian, Jr. MIT Press, Cambridge, Mass., 1977. xxiv, 316 pp., illus. \$14.95.

Steady-State Economics. The Economics of Biophysical Equilibrium and Moral Growth. Herman E. Daly. Freeman, San Francisco, 1977. xii, 186 pp. Cloth, \$9.95; paper, \$4.95.

Strength of Materials. John N. Cernica. Holt, Rinehart and Winston, New York, ed. 2, 1977. xii, 510 pp., illus. \$17.

Stroke. Richard A. Thompson and John R. Green, Eds. Raven, New York, 1977. xiv, 238 pp., illus. \$20. Advances in Neurology, vol. 16.

Student-to-Student Counseling. An Approach to Motivating Academic Achievement. William F. Brown. Published for the Hogg Foundation for Mental Health by University of Texas Press, Austin, ed. 2, 1977. xiv, 356 pp., illus. \$10.95. Hogg Foundation Research Series.

Sulphur and Its Inorganic Derivatives in the Canadian Environment. National Research Council of Canada Associate Committee on Scientific Criteria for Environmental Quality, Ottawa, 1977. 428 pp., illus. Paper, \$5.

Tales from the South Pacific Islands. Told by Anne Gittins. Illustrated by Frank Rocca. Stemmer House, Owings Mills, Md., 1977. vi, 90 pp. \$4.95.

Underfoot. An Everyday Guide to Exploring the American Past. David Weitzman. Scribner, New York, 1977. 192 pp., illus. Paper, \$7.95.

Urban Transportation Planning. Current Themes and Future Prospects. Papers from a conference, Leeds, England, 1976. Peter Bonsall, Quasim Dalvi, and Peter J. Hills, Eds. Abacus Press, Tunbridge Wells, Kent, England, and Allanheld Osmun, Montclair, N.J., 1977. vi, 386 pp. \$29.50.

What Is This Thing Called Science? An Assessment of the Nature and Status of Science and Its Methods. A. F. Chalmers. Humanities Press, Atlantic Highlands, N.J., 1977. xviii, 158 pp. Cloth, \$14.75; paper, \$8.75.

Work and Play among the Aged. Interaction, Replication and Emergence in a Jerusalem Setting. Don Handelman. Van Gorcum, Assen, the Netherlands, 1977. xvi, 194 pp. Paper, Dfl. 29.50.

The World's Worst Weeds. Distribution and Biology. LeRoy G. Holm, Donald L. Plucknett, Juan V. Pancho, and James P. Herberger. Published for the East-West Center by University Press of Hawaii, Honolulu, 1977. xii, 610 pp., illus. \$35.

The Year Book of Drug Therapy 1977. Daniel L. Azarnoff, Leo E. Hollister, and David G. Shand, Eds. Year Book Medical Publishers, Chicago, 1977. 426 pp., illus. \$24.50.

The Year Book of Pathology and Clinical Pathology 1977. Frank A. Carone and Rex B. Conn, Eds. Year Book Medical Publishers, Chicago, 1977. 444 pp., illus. \$25.75.

# Personnel Placement

Personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, or national origin.

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ties take display rate for all advertising. **Display (Positions Open, Market Place, and so forth):** \$5.80 per millimeter; \$145 minimum (covers 25 millimeters on single column; 25 millimeters equals 10 lines of 50 spaces per line), per insertion. No charge for use of box number. Rates net. No agency commission for ads under 4 inches. No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all other ads.

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SCIENCE 1515 Massachusetts Ave., NW Washington, D.C. 20005

#### **POSITIONS WANTED**

Agricultural Biochemist: Ph.D. 1975. Background: cereal protein quality, analytical biochemistry, food analysis, and herbicide pesticide work. Previous international assignment; seeking supervisory R & D position. J. H. Wolfram, 68 New Road, Southampton, Pennsylvania 18966; telephone: 215-355-5826. 2/24; 3/3

Biochemist: Ph.D. Seeking 2- to 3-year research position; 2-year postdoctoral research; 1 year at NIH; publications; reproductive endocrinology of rodents and monkeys, radioimmunoassays of cyclic AMP, steroids, gonadotropins, immunology, and cell culture. Box 63, SCIENCE.

Chemical/Biomedical Engineer: doctorate (summer 1978); master's in CHE; graduate certificate in BME. Teaching experience; research experience; opening position in university/industry. Box 67, SCIENCE. X

Chemist/Pharmacologist. Ph.D. seeks challenging position in government, industry, or academia. Experience: pharmacokinetics, metabolism, protein drug binding, protein chemistry, radioisotopes, kidney disease, rheumatoid arthritis, and muscle disease. Box 65, SCIENCE. X

Immunologist-Microbiologist. M.S., D.V.M., postdoctorate. Wants to change position. Several years of experience in research and practice. Seeks industry/research/teaching position. Negotiable term. Box 68, SCIENCE. X

**Oncologist.** ABIM. MO. Medical school faculty with administrative health care experience; desires relocation. Preference: medical school interested in developing cancer program. Box 64, SCIENCE. 2/24; 3/3, 10, 17

**Project Leader:** M.S.E.E.; experience in biomedical and engineering projects; familiar with medical device legislation. Seeks industry/government/research position with project responsibility, for example, product manager, principal engineer, staff scientist. Box 66, SCIENCE. X

Veterinarian, laboratory animal; experienced; AC-LAM diplomate; ACVP eligible; M.P.H.; research interests; New York license; New York metropolitan area. Box 62, SCIENCE. X

#### POSITIONS OPEN

#### ANATOMY AND PHYSIOLOGY

Applications are invited for a tenure-track position at the assistant or associate professor level available beginning September 1978. Applicants should have a Ph.D. Primary duties involve teaching anatomy and physiology to undergraduate students in Allied Health Programs. Development of an advanced course in specialty area encouraged. Send résumé and three names of references to: Dr. D. F. Gordon, Jr., Chairman, Department of Medical Laboratory Sciences, Box 191, Quinnipiac College, Hamden, Conn. 06518.

An Affirmative Action/Equal Opportunity Employer

#### DEPARTMENT OF ANATOMY WEST VIRGINIA UNIVERSITY SCHOOL OF MEDICINE

Applications are invited from anatomists experienced in teaching gross, microscopic, and neuroanatomy. Applicants must have postdoctoral research experience and an established research program of high quality which applies in vivo microscopic, physiologic, and pharmacologic methods to the study of the microvascular systems of organs. Closing date for applications is 15 March 1978. Submit curriculum vitae, brief description of research interests, and names of three references to: Dr. Robert S. McCuskey, Department of Anatomy, West Virginia 26506. West Virginia University is an Equal Opportunity-Affirmative Action Employer.

AQUATIC BIOLOGISTS. Possibility of one or more 1-year positions in the areas of fisheries, macroinvertebrates, and phycology for environmental impact studies. B.S. required. Salary \$10,200 to \$11,988. Send résumé, transcripts, and two letters of recommendation to: Personnel Office, Central Michigan University (CMU), Mt. Pleasant, Michigan 48859 by 15 March.

CMU is a non-discriminatory Education Institution and Employer.

A position of AQUATIC ECOLOGIST is available in the Water Resources Division, U.S. Geological Survey. Applicants should have research experience in nutrient uptake, stream ecology, and ecological modeling. The incumbent will participate in a study of nutrient dynamics in stream ecosystems with a geochemist and a hydrologist and will provide a comprehensive data set, consistent with needs of an ecological model, to begin elucidation of processes regulating solute concentrations in streams. Applicants should submit a résumé and publications to: Dr. Harry V. Leland, Research Advisor for Ecology, Water Resources Division, U.S. Geological Survey, Menlo Park, California 94025.

ASSISTANT DIRECTOR, MARINE LABORATO-RY. Ph.D. and marine-oriented research background required. Administrative responsibility for managing the Baruch field station near Georgetown, S.C. Some research. Salary of \$16,000 per year and residence on the field station provided. This is a 3year appointment. Send a letter of intent, curriculum vitae, and names and addresses of three references by 20 March 1978 to: Dr. Bruce C. Coull, Baruch Institute, University of South Carolina, Columbia, S.C. 29208.

#### DENDROLOGY-ASSISTANT PROFESSOR

Tenure-track position with primary responsibility of teaching undergraduate dendrology. Teaching of specialized forest ecology and silviculture courses will also be required. Ph.D. required in forestry or related field. Send application and professional papers by 15 March 1978 to: Dr. Dale A. Thornburgh, Forestry Department, Humboldt State University, Arcata, California 95521.

#### ASSISTANT PROFESSOR-MICROBIOLOGIST/ IMMUNOLOGIST

IMMUNOLOGIST Tenure-earning position in the Department of Biological Sciences at Florida International University to begin September 1978. Ph.D. required with commitment to teaching and research in microbiology and immunology. Applicants should submit résumé, transcripts, statement of research interests, and three letters of recommendation by 1 March 1978: Dr. C. K. Okubo, Department of Biological Sciences, Florida International University, Miami, Florida 33199. An Equal Opportunity/Affirmative Action Employer. A member of the State University System of Florida.

ASSISTANT OR ASSOCIATE PROFESSOR, ANI-MAL PHYSIOLOGY, at Cornell University, Division of Biological Sciences. Teach, coordinate senior/ graduate course in mammalian physiology, including extensive laboratory section. Candidate should have good background in modern and classical techniques good background in modern and classical techniques in vertebrate organ physiology. Ph.D., M.D., D.V.M., or equivalent required, with postdoctoral experience desirable. Preference given to applicants with teaching and research expertise in endocrine, skeletal, cardiovascular, respiratory, or renal physi-ology. Send curriculum vitae and three letters of rec-ommendation by 7 April 1978 to: Dr. R. H. Wasser-man, Room 717 Veterinary Research Tower, New York State College of Veterinary Medicine, Cornell University, Ithaca, N.Y. 14853. An Affirmative Ac-tion/Equal Opportunity Employer. Applications from women and minorities are encouraged.

## ASSISTANT PROFESSOR OF ENVIRONMENTAL STUDIES

Seeking individual to teach introductory soils, physical geography, and one or more of the following: regional planning, impact statement preparation, hy-drology, environmental economics, or other enviregional planning, impact statement preparation, hy-drology, environmental economics, or other envi-ronmental specialties. Must be oriented toward un-dergraduate teaching and willing to handle both in-troductory and advanced courses. Ph.D. required. Stockton State College is a new, lively institution with a strong science faculty. The Environmental Studies Program is large and diverse. Located in ru-ral New Jersey (Pine Barrens) with easy access to Philadelphia and the shore. Write for detailed de-scription. Send applications by 15 March to: Philip Nanzetta, Dean, Faculty of Natural Sciences and Mathematics, Box 7440, Stockton State College, Po-mona, N.J. 08240. Affirmative Action/Equal Opportunity Employer

Affirmative Action/Equal Opportunity Employer

The DEPARTMENT OF PHYSIOLOGY of the University of Minnesota, Duluth, School of Medicine invites applications for a full-time faculty position at the level of ASSISTANT or ASSOCIATE PROFESSOR. Candidates should be available by 1 August 1978. The individual would be expected to engage in renal research and to participate in teaching physiology to undergraduate as well as medical students. Excellent research opportunities. Preference will be given to those candidates with teaching experience in medical school and ability to participate in the development of innovative medical education programs. Curriculum vitae should be sent to: Dr. R. S. Pozos, Chairman, University of Minnesota-Duluth, Minnesota 55812. The University of Minnesota-Duluth is an Equal Opportunity Employer with an Affirmative Action Program. The DEPARTMENT OF PHYSIOLOGY of the Uni-

#### CHESAPEAKE BAY INSTITUTE

ASSISTANT STAFF BIOLOGIST position available on or about 1 April 1978 to assist in investigation of micro-zooplankton trophic-dynamics. Applicants must have M.S. or equivalent experience, demon-strate ability to work independently, and be willing to spend 2 months in British Columbia each summer. Send inquiries or applications with names of profes-sional references to: Director, Chesapeake Bay Insti-tute, The Johns Hopkins University, Charles and 34 Streets, Baltimore, Md. 21218. The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.

#### ASSOCIATE PROFESSOR

Immediate position available for pharmacologist, Ph.D. or M.D.; must have experience with tox-icology, microscopic pathology, electron micros-copy, and independent research. Medical pharma-cology teaching required. Send curriculum viae to: Search Committee, Department of Pharmacology, Medical College of Wisconsin, 561 North 15 Street, Milwaukee, Wisconsin 53233.

Equal Opportunity Employer, M/F

#### **BIOLOGY FACULTY**

Anticipated position as assistant professor of biol-ogy with specialty in human anatomy-microbiology for September 1978. Ph.D. and teaching experience required. \$13,371 for academic year. Apply by 30 March 1978, to: Chairman, Department of Biology, West Chester State College, West Chester, Pa. 19380. Supply complete credentials including transcripts and three letters of recommendation.

An Equal Opportunity/Affirmative Action Employer

**24 FEBRUARY 1978** 

#### POSITIONS OPEN

#### ASSOCIATE ADMINISTRATOR

Cornell University is seeking a qualified person to administer the business and nonacademic personnel aspects of the Division of Nutritional Sciences. In-terested individuals should have considerable training and experience in business management and in federal grant and contract administration. A mas-ter's degree is preferred but individuals with a bachelor's degree and several years of appropriate expe-

Interested individuals should submit a résumé and references to: Dr. M. C. Nesheim, Director, Division of Nutritional Sciences, Cornell University, 124 Sav-age Hall, Ithaca, New York 14853.

Cornell University is an Affirmative Action/Equal Opportunity Employer.

# BIOCHEMICAL PHARMACOLOGIST

Applicants are invited for a research assistant's position in our CNS Research Unit. Candidates should have M.S. in biochemistry or a B.S. with laboratory experience. Training in CNS pharmacology as well as experience in procedures used in small laboratory animals would be beneficial. Additional training in computer science helpful.

Kalamazoo is a medium-sized, southwestern Michigan community with an excellent mix of cultural/recreational pursuits.

Send résumé, including salary requirements, in confidence to:



Myra W. Johnson The Upjohn Company 7171 Portage Road Kalamazoo, Mich. 49001 An Equal Opportunity Employer, M/F

Ph.D. BIOCHEMIST, with strong background in either physical or inorganic chemistry. Duties to in-clude: (i) a full-year course in introductory chemclude: (i) a full-year course in introductory chem-istry, (ii) an upper-level course for biochemistry ma-jors, and (iii) a one-term course in either physical or inorganic chemistry. Supervision of undergraduate research is expected. Teaching experience is highly desirable. This is a recently approved regular ap-pointment to commence 1 September 1978, in a six-member undergraduate department. Send personal letter, three recommendations, and complete tran-scripts by 1 April to: Dr. Roger W. Armstrong, Chairman, Chemistry Department, Russell Sage Col-lege, Troy, N.Y. 12180. An Equal Opportunity/Af-firmative Action Employer.

## **BIOLOGICAL OCEANOGRAPHER and FISHERIES POPULATION DYNAMICIST**

The University of North Carolina at Chapel Hill, Curriculum in Marine Sciences, has two junior facul-ty openings. One, a 2-year term appointment at Chapel Hill for a biological oceanographer to teach a graduate core course and other marine science courses. The other, an initial 2-year appointment at the Marine Institute at Morehead City for a popu-lation dynamicist to develop a research program on marine shellfish. Applications, curriculum vitae, and three letters of recommendation should be sent to: Dirk Frankenberg, 12-5 Venable Hall 045-A, Univer-sity of North Carolina, Chapel Hill, N.C. 27514. Clos-ing date: 24 March 1978.

An Equal Opportunity/Affirmative Action Employer

BIOLOGIST. Broadly trained in biology with specif-ic competence in one or more of the following areas: human anatomy/physiology, medical mycology, parasitology, histology. Position available August 1978 (apply before I April). Must be willing to teach lower-level biology and to teach in evening program. Ph.D. desired. Salary \$12,000 to \$13,000 per aca-demic year. Send curriculum vitae, transcripts, and three references to: David E. Taylor, Chairperson, Science Division, University of South Carolina at Spartanburg, Spartanburg, S.C. 29303. The Univer-sity of South Carolina at Spartanburg is an Affirm-ative Action/Equal Opportunity Employer. ative Action/Equal Opportunity Employer

#### POSITIONS OPEN

BIOLOGY POSITIONS at the Pennsylvania State University. Three faculty positions at assistant or associate professor level are available August 1978: (i) terrestrial plant ecologist; (ii) vertebrate physiolo-gist; and (iii) experimental plant or animal biologist; with preference given to competence in comparative physiology, developmental biology, neurobiology, or organelle genetics. Evaluation will be based on demonstrated excellence in research, potential for obtaining external funding, and ability to communi-cate effectively with colleagues and students. Teach-ing will include an advanced course related to re-search area and a lower level course to be deter-mined. Curriculum vitae and three letters of recommendation should be sent to: the Search Com-mittee, Department of Biology, Box A, 208 Life Sci-ences, The Pennsylvania State University, University Park, Pa. 16802, for receipt by 15 April 1978. Equal Opportunity/Affirmative Action Employer BIOLOGY POSITIONS at the Pennsylvania State

Equal Opportunity/Affirmative Action Employer

#### BIOLOGISTS

Two positions are anticipated. One, at the assistant professor level, is tenurable and requires the Ph.D. Research is expected. Teaching involves human physiology for pre-health science students, general biblious for the students. biology, and a course in specialty. The other posi-tion, at the **instructor** level, does not require the Ph.D. and is not tenure-track. Teaching involves hu-Ph.D. and is not tenure-track. Teaching involves hu-man anatomy and physiology to nursing and pre-health science students. Applicants should state their teaching and research interests and send cur-riculum vitae and list of references to: **Dr. Lewis C. Goldstein, Department of Biology, Virginia Common-wealth University, Richmond, Virginia 23284.** Appli-cation deadline 15 April. An Equal Opportunity/Af-fermative Action Employer firmative Action Employer.

#### BIOLOGY

Faculty position (9 months), Assistant professor. Begin fall 1978. Ph.D. required. Molecular biology. Teach genetics, biological chemistry, and general bi-ology courses. Teaching experience preferred. Ap-plication deadline: 10 March 1978. Send curriculum vitae and three letters of reference to:

Dr. Denton B. May, Academic Dean King's College Wilkes-Barre, Pa. 18711

An Equal Opportunity/Affirmative Action Employer

#### BIOLOGIST

Assistant professor of biology to begin September Assistant professor of biology to begin September 1978. Ph.D. required. Appointee will teach general biology, plant physiology, and will be respon-sible for another advanced undergraduate/graduate course. Appointee should have experience with ra-dioactive materials and be qualified to serve as the department's radiation safety officer. The research concentration is to be in the physiological or bio-chemical areas chemical areas

Salary competitive and dependent on qualifica-tions and experience. Send résumé before 31 March 1978, including at least three references, to:

Dr. Peter M. Mitchell Provost and Vice President for Academic Affairs Seton Hall University South Orange, N.J. 07079

An Equal Opportunity/Affirmative Action Employer

**BIOLOGY.** Assistant professor, tenure-track posi-tion in vertebrate ecology beginning fall semester 1978. Ph.D. in zoology with training or research in-terest in ornithology and vertebrate taxonomy re-quired; college teaching experience preferred. Must have commitment to undergraduate teaching; will-ingness to instruct non-majors, particularly in envi-ropmental science: and a record of research peringness to instruct non-majors, particularly in envi-ronmental science; and a record of research per-formance. Curriculum vitae, undergraduate and graduate transcripts, and three letters of recommen-dation should be sent before 1 April 1978 to: Dr. Wil-liam Morrison, Department of Biology, Slippery Rock State College, Slippery Rock, Pa. 16057. Affirmative Action/Equal Opportunity Employer

The College of Wooster seeks a **BOTANIST** with the Ph.D. to teach courses in botany for non-science majors, introductory organismic biology (shared), advanced botany, microbiology, and to direct independent study. Ability to participate in a cross-disciplinary freshman program is desirable. Send résumé, graduate and undergraduate transcripts, and three letters of reference to: D. Wise, Biology Department, Box S, College of Wooster, Wooster, Ohio 44691, by 31 March 1978. Appointment: 1 September 1978, instructor or assistant professor. Equal Opportunity Employer. **Opportunity** Employer

**CELL BIOLOGIST.** Full-time position at the rank of lecturer to teach cell physiology, introductory cell biology, and introductory microbiology. The individual should have a strong interest in teaching and be willing to devote considerable time to working with students. The doctorate is required. Current salary range is \$14,246 to \$17,136, based on qualifications of a strong thread that are former to the solution of the soluti salary range is \$14,246 to \$17,136, based on qualin-cations. Send curriculum vitae, three letters of refer-ence, and a short statement of teaching philosophy to: the Search and Screen Committee, Department of Biology, California State College, Bakersfield, Calif. 93309. An Affirmative Action/Equal Opportunity, Title IX Employer, M/F. Deadline: 1 March 1978.

CHAIRMAN, Biochemistry Department. To head small department of three Ph.D's plus laboratory as-sistant. Emphasis on teaching excellence in first year medical program. Qualifications: biochemistry Ph.D., proven excellence in teaching for at least 5 years since doctorate, flexibility in planning, mature judgment, and ability to lead department in college objective of training family practice physicians. Pre-fer knowledge in clinical chemistry. Research en-couraged. One month annual vacation. Medical and TIAA benefits. Rank and salary dependent on quali-fications. Modern 426-bed campus hospital. Ex-TrAA benefits, Kank and salary dependent on quain-fications. Modern 426-bed campus hospital. Ex-cellent suburban living choices. Send résumé and list of four references by 24 March to: Dr. E. H. Whitten, Associate Dean, College of Osteopathic Med-icine, 2105 Independence Boulevard, Kansas City, Missouri 64124. Equal Opportunity/Affirmative Ac-tion Employer. tion Employer.

#### CHEMIST III

Applications are invited for analytical chemist to conduct and supervise pesticide analyses of environ-mental samples. Position requires M.S. in analytical chemistry or equivalent and experience in pesticide residue analysis, familiarity with mass spectrometry and chromatographic procedures, and statistical de-sign. Immediately available. Beginning salary: \$14,219 per annum. Applications close 17 March 1978. Send biographical résumé, transcripts, and names of three references to: names of three references to:

Dr. W. B. Ennis, Jr. Professor and Center Director Agricultural Research Center University of Florida 3205 SW, 70 Avenue Ft. Lauderdale, Fla. 33314

CLINICAL PATHOLOGIST to join two pathologists CLINICAL PATHOLOGIST to join two pathologists in Department of Pathology Laboratories in center with general acute hospital operating 160 beds and medical group of 70 doctors. As assistant to chair-man responsible for administration of Clinic Labora-tories, approved in 1977 by C.A.P. and J.C.A.H. Af-filiated with local medical school for resident and fel-low training. Located in metropolitan area of 375,000 population, with advantages of Southwest living. Contact: David J. Ottensmeyer, M.D., Medi-cal Director, Lovelace-Bataan Medical Center, 5200 Gibson Boulevard, SE, Albuquerque, New Mexico 87108. Telephone: 505-842-7073.

## DEAN, INSTITUTE OF TECHNOLOGY UNIVERSITY OF MINNESOTA

Applications and nominations are invited for the position of dean of the Institute of Technology at the University of Minnesota. The institute is a unique combination of engineering, mathematics, physical science, and architecture. The faculty of approxi-mately 400 is organized into schools and depart-ments which include: Aerospace Engineering and Mechanics, Architecture and Landscape Archi-tecture, Chemical Engineering and Material Sci-ence, Chemistry, Civil and Mineral Engineering, Computer Science, Earth Science, Electrical Engi-neering, Mathematics, Mechanical Engineering, and physics and Astronomy. The undergraduate and graduate enrollments are 4500 and 1400, respective-ly. Candidates should have a doctorate in an appro-Applications and nominations are invited for the

Candidates should have a doctorate in an appro-Candidates should have a doctorate in an appro-priate field, significant scholarly accomplishments, a sense of quality and a strong commitment to ex-cellence in teaching, research, and service. They should have demonstrated exceptional talents in leadership and administration, along with the ability to work effectively with groups in and outside an ac-ademic institution

to work effectively with groups in and outside an ac-ademic institution. Send applications and nominations to: Professor A. O. C. Nier, Chairman, Search Committee, School of Physics and Astronomy, University of Minnesota, 116 Church Street, Southeast, Minneapolis, Minn. 55455. Deadline date for receipt of applications and nominations is 1 May 1978. The University of Minnesota is an Equal Opportu-nity Educator and Employer.

#### POSITIONS OPEN

University of California, Irvine, Department of Pa-University of California, irvine, Department of ra-thology, recruiting for faculty position at assistant or associate professor level as CHIEF OF SURGICAL PATHOLOGY. Required: M.D. Board-qualified, service experience in surgical and autopsy patholo-gy, demonstrated interest in independent research. Duties: teach medical students and house staff; limit-ed administrative responsibility. All qualified coned administrative responsibility. All qualified can-didates welcome; minorities and women encouraged atours we know, many mess and women encounteged to apply. Send curriculum vitae and references to: Edward R. Arquilla, M.D., University of California, Irvine, Medical Center, Department of Pathology, 101 City Drive South, Orange, California 92668 by 1 April 1978.

## DEAN, COLLEGE OF ENGINEERING AND SCIENCE

The University of Detroit is seeking a dynamic leader with a commitment to the concept of liberal edu-cation for the position of dean of the College of Engi-neering and Science. Candidates should have a neering and Science. Candidates should have a Ph.D. or equivalent in engineering, ability to interact with the industrial and professional community, and an ability to serve the integrated and separate needs of engineering, science, and mathematics programs. Candidates should also have proven leadership ca-pability in administration, research, and program planning, preferably with administrative experience. The college has eight departments offering 11 under-graduate degree programs, 13 master's programs, a Ph.D. in chemistry and a doctor of engineering, maintains a close relationship with the professional and industrial community, and has had mandatory cooperative education programs in engineering since 1911.

Send résumé by 10 March 1978 to: Academic Vice President UNIVERSITY OF DETROIT Detroit, Michigan 48221

An Equal Opportunity Employer

## DIRECTOR, STATE OF WASHINGTON WATER RESEARCH CENTER

The center is a joint entity of the University of Washington and Washington State University (WSU) and is located on the WSU campus in Pull-man, Washington. The director is a faculty member of WSU and holds an appropriate rank in a depart-ment or program of his/her professional discipline. A Ph.D. degree in a relevant discipline is required. Candidates must have significant experience of deministrative onstrated technical competence and administrative ability in an area related to water resources. Five years or more experience is preferred. The position is immediately available. Salary is open depending upon qualifications and experience. Submit appli-cations, nominations, or requests for detailed posi-tion information to:

## C. J. Nyman, Dean The Graduate School Washington State University Pullman, Washington 99164

Completed applications must include a résumé of education and professional experience and the names of three references. Consideration of can-didates will begin 10 March 1978 and will be com-pleted as soon thereafter as possible.

WSU is an Equal Opportunity/Affirmative Action Employer. Women, minorities, and handicapped persons are encouraged to apply.

## GAS CHROMATOGRAPHY-MASS SPECTROMETRY LABORATORY DIRECTOR

The Medical College of Georgia invites appli-cations for the position of GCMS Laboratory direc-tor which will be vacated in several months by its present incumbent. Candidates are expected to have present incumbent. Candidates are expected to have a Ph.D. degree or its equivalent and the successful candidate will be appointed as an assistant professor or a more senior faculty rank depending on qualifica-tions in the Department of Medicine with a joint ap-pointment in the appropriate preclinical science de-partment. The director will supervise the perform-ance of clinical drug and toxin screens, will collaborate in clinical pharmacology and endocrinol-ogy projects already ongoing, and will be expected to pursue his/her own research interests as well. Let-ters of inouiry and curriculum vitae should be sent ters of inquiry and curriculum vitae should be sent to: E. D. Bransome, Jr., M.D., Chief, Section of Metabolic and Endocrine Disease, Medical College of Georgia, Augusta, Georgia 30901; telephone: 404-828-3445.

An Equal Opportunity/Affirmative Action Employer

#### POSITIONS OPEN

ECOLOGIST—ASSISTANT PROFESSOR. Ph.D. required; appointment available September 1978. To required; appointment available september 1978. To teach undergraduate and graduate courses in ecol-ogy and to develop a graduate research program. Applicants should be willing to accept commitment to working in an interdisciplinary environmental bi-lary environmental biology program. Salary competitive. Applications will be accepted until 17 March 1978. Send curriculum vitae, statement of professional objectives, and have three letters of recommendation sent to: Chair-man, Department of Biological Sciences, Wright State University, Dayton, Ohio 45435. An Equal Opportunity/Affirmative Action Employer.

**TWO FACULTY POSITIONS.** Appointment as visiting assistant or visiting associate professor depending upon qualifications for academic year 1978–1979. Salary competitive. Subsequent tenure-track apprintment.

MOLECULAR GENETICIST. Strong background in genetics and biochemistry required. Biochemical ap-proach to genetics research. Postdoctoral experi-ence desirable. Desire to interact with ongoing research in comparative biochemistry of steroid bio-synthesis essential. INVERTEBRATE PHYSIOLOGIST. Strong back-

ground in zoology and biochemistry. Postdoctoral experience desirable. Desire to interact with ongoing departmental research in biochemistry and physiolo-gy essential. Send résumés and addresses of three references to: J. W. A. Burley, Ph.D., Head, Depart-ment of Biological Sciences, Drexel University, Phila-delphia, Pa. 19104. Equal Opportunity/Affirmative devices Presslower Action Employer

FACULTY POSITION IN PHARMACEUTICS. The School of Pharmacy at the State University of New York at Buffalo has an opening for a faculty position York at Buffalo has an opening for a faculty position in pharmaceutics. Applicants should have a Ph.D. degree in pharmaceutics or chemistry, and also post-doctoral experience in either a School of Pharmacy or the pharmaceutical industry. Responsibilities in-clude undergraduate and graduate teaching in phar-maceutics, principally physical pharmacy and devel-opment of an active research program, preferably in the press of design and availation of novel drug do the areas of design and evaluation of novel drug de-livery systems. Apply by 1 April 1978 by sending curriculum vitae to:

# Dr. Ho-Leung Fung Department of Pharmaceutics State University of New York at Buffalo Amherst, New York 14260

The University is an Equal Opportunity/Affirmative Action Employer.

#### HEMATOLOGIST-ONCOLOGIST

A position is available for a board-qualified physi-A position is available for a board-qualified physi-cian to join a specialist in private practice in a large upper Midwestern city. Medical school affiliation will be required as well as commitment to develop-mental therapeutics in cancer chemotherapy. Salary is negotiable. There is an opportunity for rapid de-velopment to independent practice or partnership. Reply with curriculum vitae to: **Box 61, SCIENCE.** 

#### UNIVERSITY OF OTAGO **Faculty of Medicine** WELLINGTON CLINICAL SCHOOL OF MEDICINE Wellington, New Zealand LECTURER OR SENIOR LECTURER IN HEMATOLOGY

Applications are invited for the position of lecturer or senior lecturer in hematology. A particularly well-qualified candidate could be considered for the position of head of hematology within the Hospital Laboratory Service and could be appointed with the stat-us of associate professor.

Further particulars are available from: the Further particulars are available from: the Secretary-General, Association of Common-wealth Universities (Appointments), 36 Gor-don Square, London WC1H OPF, England, or from D. W. Girvan, Registrar, P.O. Box 56, Dunedin, New Zealand, or from the Dean, Wellington Clinical School, Wellington Hospi-tal, Wellington 2, New Zealand.

Applications, quoting reference number A.78/3, close in London *and* with D. W. Girvan in New Zealand on 31 March 1978.

#### NON-TENURED FACULTY POSITIONS IN BIOCHEMISTRY

The Department of Biochemistry and the Inter-The Department of Biochemistry and the Inter-national Institute for the Study of Human Reproduc-tion, Columbia University, College of Physicians and Surgeons, invite applications from qualified indi-viduals for non-tenured faculty positions. The can-didate must have a serious commitment to research and teaching in the areas of chromatin structure or having predictions of chromatin structure or brain peptides. Applications should include curricu-lum vitae, bibliography, four names of references, and reprints, and should be addressed to:

Drins, and should be addressed to. Dr. Georgiana Jagiello Center for Reproductive Sciences College of Physicians and Surgeons of Columbia University 630 West 168 Street New York, N.Y. 10032

#### FACULTY POSITION—SENSORY ANATOMY

The Institute for Sensory Research at Syracuse University is seeking candidates for a full-time tenune-track position in sensory anatomy. It is expected that the position will be at the assistant professor level. A Ph.D. is required. Candidate will develop and operate a laboratory for neuroanatomical stud-ies of vertebrate and invertebrate sensory systems. ies of vertebrate and invertebrate sensory systems. Must be skilled in the preparation, staining, mount-ing, and analyzing of specimens using both light and electron microscopy. Must have a working knowl-edge of sensory electrophysiology, physiology, psy-chophysics, and mathematical systems analysis. Must be able to interact strongly in a highly quan-titative systems-oriented basic research institute. Will teach sensory anatomy at the graduate level. Must be capable of supervising Ph.D.-level students. Will be expected to develop grant proposals for indi-Will be expected to develop grant proposals for indi-vidual research. Starting salary is \$16,000 for the academic year

ademic year. Send curriculum vitae and names of at least three references to: Dr. Earl J. Kletsky, Institute for Sen-sory Research, Syracuse University, Merrill Lane, Syracuse, N.Y. 13210. Closing date for applications is 1 June 1978. Syracuse University is an Affirmative Action/Equal Opportunity Employer

FACULTY POSITIONS IN NEUROBIOLOGY in the Department of Anatomy, University of Connecticut Health Center, available for outstanding persons able to carry out independent research programs in an interdisciplinary setting and to participate in teaching graduate, medical, and dental students. Preference given to individuals with sufficient post-Preference given to individuals with sufficient post-doctoral experience to have developed excellent re-search programs. Desire a **NEUROCHEMIST** with strong background in fundamental biochemistry working in area of synaptic transmission and a **CNS NEUROPHYSIOLOGIST**, preferably with com-mitment to auditory studies. Rank and salary depen-dent on experience and professional standing. Send curriculum witae bibliography and references to: curriculum vitae, bibliography, and references to: Dr. D. K. Morest, Neuroscience Search Committee, Department of Anatomy, University of Connecticut Health Center, Farmington, Connecticut 06032. Equal Opportunity Employer.

#### IMMUNOLOGIST

Assistant professor to teach immunology at the ele-mentary and advanced levels, to participate in the core curriculum, and to develop an active research program in cellular immunology, immunogenetics, or immunochemistry. This position also offers an un-usual opportunity to investigate lymphocyte al-continent in conjunction with an origing program usual opportunity to investigate lymphocyte al-loantigens in conjunction with an ongoing program in immunogenetics of avian erythrocyte alloanti-gens. Ph.D. degree is required and postdoctoral re-search is preferred. Applicants should send curricu-lum vitae, copies of publications, a brief statement of research interests, and arrange to have three let-ters of reference sent by 16 March 1978 to: Dr. James A. McChery, Cheirpergen Dametment of Fi James A. McCleary, Chairperson, Department of Bi-ological Sciences, Northern Illinois University, De-Kalb, Ill. 60115.

Northern Illinois University is an Affirmative Action/ Equal Opportunity Employer.

PARASITOLOGIST/INVERTEBRATE ZOOLOGIST. Ph.D., assistant professor, to teach one semes-ter course in parasitology and one semester sur-vey course in invertebrate zoology. Participation in vey course in invertebrate zootgo, Participation in principles of biology course and usual departmental duties are required. A graduate course may be devel-oped. Address inquiries to: W. R. West, Jr., Ph.D., Department of Biology, University of Richmond, Richmond, Virginia 23173. The University of Rich-mond is an Equal Opportunity/Affirmative Action Employer. Employer

24 FEBRUARY 1978

#### POSITIONS OPEN

MARINE BIOLOGIST and MARINE BIOCHEMIST or Research Center in Baja California, Mexico. The entro de Investigaciones Biologicas A.C., located in La Paz, Baja California, Mexico has a limited number of positions for qualified M.S. or Ph.D. main biochemists, or marine chemists to do research in Baja California coastal waters. The center is a small organization supported by CONACyt, the state government, and U.N.A.M., with the purpose of doing biological research in the peninsula. We are preferably looking for retired or pensioned experi-enced scientists who have a desire to cooperate and lead small numbers of science students into marine research projects, and who would like to take advan-tage of the peninsula's climate and unpolluted envi-ronment for a pleasant living situation. Send curricu-lum vitae to: Dr. Felix Córdoba, Director, CIB, Apartado Postal 128, La Paz, B.C.S., Mexico.

#### POSITIONS OPEN

NEUROPHYSIOLOGY (HUMAN)-ACADEMIC POSI-**TION.** Unexpected opening; immediate availability. Evoked potentials, EEG, sleep, skin conductance; applications to mental health. Ongoing projects in-clude studies of hemispheric lateralization, psychopharmacology, acupuncture. Successful candidate expected to contribute to the ongoing research effort as well as to develop own research program. Compe-tence in human neurophysiology and psycho-physiology essential. Skills in electronics and minicomputer programming desirable. Salary dependent upon qualifications. Send curriculum vitae to: Dr. Warren A. Thompson, Missouri Institute of Psychia try, a Division of the Department of Psychiatry, School of Medicine, University of Missouri-Columbia, 5400 Arsenal Street, St. Louis, Missouri 63139.

Equal Opportunity Employer

Canade Service

# Canada **RESEARCH SCIENTISTS -**

MARINE MAMMALOGISTS (2 positions)

Initial salary up to \$36,760 (dependent on experience) Ref. No: 77-PSTP-32-155 (S)

**Fisheries and Environment Canada** St. John's, Newfoundland

#### Duties

Open to both

men and women

Two research scientists are required in the Marine Fisheries Management Program to conduct independent research into the biology, ecology and population dynamics of marine mammals in the North-West Atlantic area. One position involves work on the harp and hood seals and the other involves the cetacean species. The selected scientists will organize and participate in field surveys for the collection of data and specimens for investigations; and will analyse data, interpret variables and present results to the scientific community and resource managers in order that the latter may formulate policies for the rational use of each species.

#### Qualifications

Applicants must possess a Ph.D. or a lesser degree with evidence of research experience and productivity equivalent to that of the Ph.D. in the field of biology. Experience in the fields of marine mammalogy and population biology is also required. Knowledge of English is essential.

#### How to Apply

Send application form and/or résumé to:

Professional, Scientific and Technical Program Public Service Commission of Canada Ottawa, Ontario K1A OM7

Closing Date: March 20, 1978

Please quote the applicable reference number at all times.

#### NEUROBIOLOGIST

The Department of Physiology is seeking a neuro-biologist at the assistant professor level. Preference will be given to individuals whose work relates to the function of the central nervous system. The position permits considerable time for research; oppor-tunities exist for graduate and medical student teaching.

Please send curriculum vitae, bibliography, and the names and addresses of three references to: Chairman

Chairman Neurobiologist Search Committee Department of Physiology Yale University School of Medicine 333 Cedar Street New Haven, Conn. 06510 Applications from women and members of minority groups are encouraged. An Equal Opportunity/Af-firmative Action Employer. Applications should be received before 30 March 1978.

# UNIVERSITY OF SOUTHERN CALIFORNIA (USC) ORE PETROLOGIST

The Department of Geological Sciences invites ap-plications for a possible opening in ore petrology be-ginning September 1978, at the assistant professor level. Applicant must hold Ph.D. and be field orient-ducities the protocological sector performance of the performance of ed with expertise in metamorphic or igneous petroloed with expertise in metamorphic or igneous petrolo-gy and high-temperature geochemistry. Additional background in one or more of the following areas is desirable, but not required: structural geology, geo-thermal and other energy resources, applied geo-physics, and environmental or engineering geology. Appointee will be expected to develop a teaching and research program in economic geology and de-velop cooperative relationships with the mineral in-dustry. Please send résumés, including three refer-ences to: Dr. Greeory A. Davis, Chairman, Denartaustry. Please send resulties, including three refer-ences, to: Dr. Gregory A. Davis, Chairman, Depart-ment of Geological Sciences, University of Southern California, Los Angeles, California 90007. USC is an Affirmative Action/Equal Opportunity Employer.

#### PHARMACOLOGIST

Ph.D. with postdoctoral training or experience in bronchopulmonary pharmacology, to evaluate new drugs for bronchopulmonary activities. This is a sen-ior position with an expanding biomedical research division. Excellent fringe benefits and publication perpendicible interacted coefficients abude and so opportunities. Interested applicants should send ré-sumé and salary requirements to:

J. MacLachlan Cooper Laboratories, Inc. 110 East Hanover Avenue Cedar Knolls, New Jersey 07927

#### PHYSICAL OCEANOGRAPHER

Applications are invited for a research faculty posi-tion in the Department of Oceanography, University of Washington. Areas of prime interest for prospec-tive candidates include: theoretical aspects of ocean dynamics; experimental oceanography on open ocean, coastal, or estuarine problems. Level of ap-pointment will depend upon qualifications of the candidate. Send complete résumé and four letters of reference to: Dr. Dora P. Henry, Chairman, Faculty Recruitment Committee, Department of Oceanogra-phy, WB-10, University of Washington, Seattle, Wash. 98195. The University is an Equal Opportu-nity/Affirmative Action Employer. Applications are invited for a research faculty posinity/Affirmative Action Employer.

## TWO POSITIONS, PLANT PHYSIOLOGIST AND LABORATORY TEACHING ASSOCIATE

The Department of Biological Sciences, Smith Col-lege, invites applications for two positions with ap-pointment for September 1978. PLANT PHYSIOLO-GIST, preferably with research experience in photo-synthesis, to teach and conduct research in plant physiology and to contribute to courses in cell biol-ogy and plant biology. This position, which carries the title of lecturer, is a 3-year, nonrenewable ap-pointment at the assistant professor level. LABORA-TORY TEACHING ASSOCIATE to instruct labora-tories in introductory biology and possibly partici-pate in an additional course depending on the Applicant's field of interest. The initial appointment is for 2 years. Applicants for either position should send a résumé, statement of interests, transcripts (if recent), and the names of three references to: Dr. David A. Haskell, Department of Biological Sciences, Smith College, Northampton, Massachusetts 01063. Smith College is an Affirmative Action/Equal Oppor-tunity Employer. The Department of Biological Sciences, Smith Coltunity Employer.

#### POSITIONS OPEN

#### PHYSICS FACULTY POSITION

The University of Michigan-Dearborn announces a tenure-track position as assistant or associate protenure-track position as assistant or associate pro-fessor of physics, effective September 1978. Ours is a growing urban campus within the University of Michigan system. Applicants must demonstrate a strong interest in undergraduate teaching as well as strong research capability in an area of experimental physics. Ph.D. required. Teaching and/or post-doctoral research experiences preferred. Submit curriculum vitae, three letters of recommendation, and transcripts to: Faculty Search Secretary, College of Arts, Sciences, and Letters, The University of Michigan-Dearborn, Dearborn, Michigan 48128. A nondiscriminatory, Affirmative Action/Title IX Em-plover. ployer.

PHYSIOLOGICAL AND/OR SENSORY PSYCHOL-PHYSIOLOGICAL AND/OR SENSORY PSYCHOL-OGY. Applicants with research interests in the bio-logical determinants of behavior are sought for a ten-ure-track position at the level of assistant professor in the Department of Psychology. Selection of a can-didate will be based primarily on the strength of re-search and teaching credentials rather than on spe-cific fields of expertise. However, some special con-sideration will be given to candidates with broad biobehavioral training and with postdoctoral experi-ence either in brain development in relation to be-havior or in sensory physiology. Duties include un-dergraduate and graduate teaching, and the develop-ment of a strong research program. Applicants dergraduate and graduate teaching, and the develop-ment of a strong research program. Applicants should send full curriculum vitae, a detailed state-ment of interests and qualifications (including re-prints, if available), and four letters of recommenda-tion to: Biopsychology Search Committee, Depart-ment of Psychology, Mezes Hall, University of Texas, Austin, Texas 78712. An Equal Opportunity/Affirm-ative Action Fundavar ative Action Employer.

PLANT POPULATION GENETICIST. To participate in the Lehman College-New York Botanical Garden Joint Doctoral Program in Plant Biology. Garden Joint Doctoral Program in Plant Biology. Graduate- and undergraduate-level teaching and the development of an individual research program ex-pected. Assistant professor rank with salary up to \$17,630, depending on qualifications and experience. Send résumé to: Dr. Dominick V. Basile, Department of Biological Sciences, Herbert H. Lehman College of the City University of New York, Bronx, New York 10468. An Equal Opportunity/Affirmative Action Employeer. Employer.

POSTDOCTORAL FELLOW. Position available, summer 1978. Research will center on the isolation and purification of human tumor-associated antigens and other biological markers from several sources Interested candidates with strong interests and expe Interested candidates with strong interests and expe-rience in the area of protein chemistry/immunology are encouraged to send their curriculum vitae and the names of three references. Publications in this area would be highly advantageous. Our department emphasizes progressive and innovative research in immunology and tissue culture and is part of a large upper midwestern university. Salary approximately \$12,000 per year with position as assistant professor available at conclusion of fellowship. **Box 57, SCI-ENCE.** ENCE.

POSTDOCTORAL FELLOW interested in somatic cell genetics and mutagenesis to participate in development of animal cell system for mutagen/carcino-gen testing. [*Proc. Natl. Acad. Sci. U.S.A.* 74, 679 (1977).] Please send curriculum vitae and names of three references to: Dr. Philip Coffino, Department of Microbiology, University of California, San Fran-cisco, Calif. 94143.

POSTDOCTORAL POSITIONS in cell biology/ biochemistry available. (i) Project with Dr. Gary Goldstein involves brain capillary function in vitro. (ii) Project with Dr. Ivan Diamond involves receptor regulation in the nervous system and tissue culture. Send curriculum vitae and names of three references to:

#### Department of Neurology, M-794 University of California San Francisco, California 94143

POSTDOCTORAL POSITION available 1 March 1978 for research in breast-epithelial-cell-specific an-tigens. Recent Ph.D. with background in membrane research, immunology, cell biology preferred. Appliresearch, minimitiology, cell biology preference. Appi-cant should send résumé, including brief statement of research experience, and names of references to: Roberto L. Ceriani, M.D., Ph.D., Bruce Lyon Memo-rial Research Laboratory, Children's Hospital Medi-cal Center, 51 and Grove Streets, Oakland, California 94609.

#### POSITIONS OPEN

POSTDOCTORAL POSITION in mammalian developmental neurogenetics. Available immediately to study gene action and CNS development using mu-tant mice and experimental chimeras. Background in tant mice and experimental chimeras. Background in neuroanatomy and/or developmental biology desir-able. In Department of Neuropathology, Harvard Medical School. Send résumé and names of three references to: Richard J. Mullen, Ph.D., Department of Neuroscience, Children's Hospital Medical Center, 300 Longwood Avenue, Boston, Mass 02115.

OSTDOCTORAL POSITIONS (TWO) IN REPRO-**DUCTIVE BIOLOGY**. Available immediately. To work on (i) mechanisms of mucus production by mammalian endocervical cells in vitro and (ii) biochemistry of sperm-egg interaction. Send curriculum vitae and three letters of reference to: Dr. S. V. Ni-cosia or Dr. D. P. Wolf, Department of Obstetrics and Gynecology, University of Pennsylvania School of Medicine, Philadelphia, Pa. 19104.

POSTDOCTORAL POSITIONS. Available spring, summer, or fall for biochemical or physical studies of the molecular mechanics of gene transcription and of the molecular mechanics of gene transcription and nucleic acid-protein interactions. Experience in mo-lecular biology or physical biochemistry desirable. Salary is \$11,200 per year. Interested applicants should send curriculum vitae and three letters of rec-ommendation to: Dr. C. W. Wu, Department of Bio-physics, Albert Einstein College of Medicine, 1300 Morris Park Avenue, New York, N.Y. 10461. An Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediate-POSTDOCTORAL POSITION available immediate-ly for recent Ph.D. Project involves purification of membrane-bound enzymes and reconstitution of multienzyme system. Experience with membranes, mitochondria, oxidases desirable. Stipend: \$11,000, plus fringe benefits. Send curriculum vitae and two letters of reference to: Dr. Lowell Wilson, Endocri-nology, Room 4418 MSI-A, University of California, School of Medicine, Davis, Calif. 95616. Equal Op-portunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN BIOCHEMISTRY available immediately for research in protein chem-istry and metabolism of lens and retina. Prefer fresh graduate. Potential renewal up to 3 years. U.S. citi-zenship required. Send résumé to:

Dr. C. H. Chen Wilmer Institute The Johns Hopkins Medical School Baltimore, Maryland 21205

POSTDOCTORAL POSITION is available immediately for a qualified individual with experience in membrane studies to work on location of enzymes in liver microsomal membranes. Send curriculum vitae plus names of references to: Dr. John B. Schenkman, Department of Pharmacology, Yale University School of Medicine, 333 Cedar Street, New Haven, Con-necticut 06510. An Equal Opportunity Employer.

POSTDOCTORAL POSITION in immunology available for 2 years beginning 1 July 1978, for Ph.D. or M.D. with training in immunology to join ongoing research in autoimmunity dealing with immune re-sponse to neoantigens. Supported by the National Retinitis Pigmentosa Foundation. Send résumé, statement of research interests, and three references to: Dr. Roberta L. Meyers, Jules Stein Eye Institute, University of California, Los Angeles, School of Medi-cine, Los Angeles, California 90024. Equal Opportu-nity/Affirmative Action Employer.

#### POSTDOCTORAL POSITION AVAILABLE

A research position is available immediately for a A research position is available immediately for a postdoctoral fellow with expertise in the area of mechano-chemistry of muscle. A good facility with mathematical modeling and computer programming (preferably in ALGOL) is required. Research will be primarily concerned with living and glycerinated cardiac muscle. Candidates must be capable of per-forming both mechanical and fluorometric analyses on these representation. Considerates must be LIS with on these preparations. Candidates must be U.S. citi-zens or have immigrant visas. Salary dependent upon qualifications

Interested applicants please send your letter of application and curriculum vitae to:

Professor Allan J. Brady Department of Physiology University of California School of Medicine Los Angeles, California 90024

Affirmative Action/Equal Opportunity Employer. Minority and women candidates are encouraged to apply.

Research The Upjohn Company's Cancer

Research Unit has an immediate opening for a research assistant in flow cytometry. This position re-quires operating the flow cytometer (Becton-Dickinson Fluorescence activated cell sorter) for approxi-mately 40 percent of the time. The other 60 percent is devoted to research projects involving the effect of drugs on the biology, biochemis-try, and kinetics on mammalian cells (normal and malignant in vitro and in vivo). B.S. or M.S. required; experience in cell culture and flow cytometry highly desirable, al-though candiates with other experi-

ence will be considered. Kalamazoo is a medium-sized, southwestern Michigan community with an excellent mix of cultural/recreational pursuits.

Submit résumé in confidence to:

Upjohn

Myra W. Johnson The Upjohn Company 7171 Portage Road Kalamazoo, Mich. 49001

An Equal Opportunity Employer, M/F

## つわゆゆのののののののののののののののののののののののののののののの COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION (CSIRO) CHIEF OF DIVISION DIVISION OF IRRIGATION RESEARCH GRIFFITH, N.S.W., AUSTRALIA

DIVISION OF TREGATION RESEARCH GRIFFITH, N.S.W., AUSTRALIA CSIRO has a broad charter for research into primary and secondary industry areas. The organization has approximately 7000 employees, 2300 of whom are research and professional scientists, located in divisions and sections throughout Australia. General: applications are invited for the position of chief of the CSIRO Division of Irrigation Research which is vacant following the retirement of the former chief, E. R. Hoare. The division is based at Griffith, in the Murrumbidgee Irrigation Area of New South Wales, and strategical-ly located in relation to the main irrigation areas of South East Australia. These areas produce a wide variety of fruits and vegetables, rice and other grain crops, and animal products. The division has well-appointed laboratories and facilities and provision for field work on two properties totaling 45 ha. It has a staff of 66 including 23 professional staff. Duties: chiefs of CSIRO divisions are responsible to the executive for the development, scientific direction, integration, and management of foresearch programs. The division's present research is mainly in the plant sciences, and covers crop breeding, environmental and biochemical physiology, crop adaptation and management, aquatic weed studies and engineering aspects of intensive crop production. To supplement this, the executive will expect the chief to develop a strong program on the management of soils and water. In terms of industry orientation, the division is concerned with temperate irrigated row crops. Although this is centered on Griffith, the chief will be expected to develop a program of general relevance to the major temperate irrigation areas of Australia. The executive would expect the chief to develop strong links with external bodies and with other CSIRO divisions working in related areas. The executive believes that to develop these initiatives a vigorous and innovative approach will be re-quired. Substantial research expreinence in plant science and/or s

Further information on the division is available on request from: the Secretary, CSIRO, P.O. Box 225, Dickson, A.C.T. 2602, Australia. Applications for the position stating full personal and professional details, the names of at least two referees, and quoting reference number 500/332, should reach:

The Secretary, CSIRO P.O. Box 225 Dickson, A.C.T. 2602 Australia

by 17 March 1978.  $\overline{\mathcal{O}}$ 



This new programme is being established as an in-ter-faculty initiative of which the first phase supports two limited tenure lectureships in the Faculty of Science.

1) LECTURESHIP (LIMITED TENURE) IN ANT-ARCTIC GEOPHYSICS, DEPARTMENT OF GEOL-OGY.

Applications are invited for a geophysicist to estab-Applications are invited for a geophysicist to estab-lish a research and teaching programme concerned with the structure of the Antarctic continent, its continental shelf, and its relation to the Southern Ocean and the Australian Plate. Preference will be given to applicants capable of mounting a marine geophysical programme of the Antarctic continental shelf, but others with specific geophysical pro-grammes which could be mounted on the Antarctic continent will che be given full consideration continent will also be given full consideration.

#### 2) LECTURESHIP (LIMITED TENURE) IN BOTANY, DEPARTMENT OF BOTANY.

A lecturer is required to develop a research pro-gramme in some aspects of Antarctic botany involv-ing, for preference, one or another of the following general areas: marine phytoplankton; marine benthic flora; ecology of terrestrial brycophytes and lichen communities; terrestrial phycology. The appointee will also be required to participate in the teaching of appropriate units at undergraduate and postgraduate levels. Preference will be given to ap-plicants with a Ph.D. or equivalent research degree and postdoctoral research experience.

Both positions will be available for 3 years from date of appointment.

Salary: A\$14,851 to A\$19,551 per annum.

Further information, including details of application procedure, is available from the Registrar. Appli-cations referring to Position Numbers (1) 626 020 and (2) 606 020 should be addressed to: The Regis-trar, University of Melbourne, Parkville, Victoria, 3052, Australia. Applications close on 15 March 1978

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# IN VITRO TOXICOLOGY

Establish and manage major new Section at the Stauffer Environmental Health Center in Farmington, Connecticut.

We are seeking an experienced research manager with expert techwe are seeking an experienced research manager with expert tech-nical knowledge of microbiology—specifically, mutagenesis/in vitro carcinogenesis assays—to head a new in vitro toxicology section. Responsibilities will be considerable. They include establishing and managing a new section, creating a strong product safety evaluation program, and supervising and coordinating the activities of a staff.

The successful candidate for this position, who should have several years of lab experience in microbiology and/or cell culture techniques, will be provided with new and well-equipped laboratories, and enough support to do an outstanding job. There is the possi-bility of a joint university appointment. We offer a fully commen-surate salary and comprehensive benefits.

Please send curriculum vitae, research and program management experience, and salary requirements to: Dr. Ralph I. Freudenthal, Stauffer Chemical Company, Westport, Connecticut 06880.

An equal opportunity employer, M/F



#### POSTDOCTORAL POSITION

A 1-year appointment in which the candidate will be expected to be actively involved in an ongoing research programme in plant growth and development and to teach a two-semester (26 weeks) course in plant physiology. Applications with curriculum vitae should be mailed to: **Professor G. Israelstram**, **Scarborough College**, University of Toronto, West Hill, Ontario, Canada M1C-1A4.

POSTDOCTORAL POSITION in DNA repair pro-cesses. Experience in mammalian cell culture or ul-traviolet radiation biology preferred. Salary: \$12,000. Position tenurable after 1 April 1978. Sub-mit curriculum vitae with publications list and letter of recommendation by 20 March 1978, to: Dr. Claud S. Rupert, Programs in Biology, University of Texas at Dallas, P.O. Box 688, Richardson, Texas 75080. In-dication of sex and ethnicity for Affirmativa Action dication of sex and ethnicity for Affirmative Action statistical purposes requested but not required. An Equal Opportunity/Affirmative Action Employer.

Baylor College of Medicine seeks a recent Ph.D. in biochemistry for a **POSTDOCTORAL RESEARCH APPOINTMENT**. Should have experience in en-zyme purification and characterization. Starting sal-Zyme purification and characterization. Statung sar-ary from \$10,000 per year depending upon experi-ence. Available immediately. Reply with curriculum vitae to: D. Y. Graham, Department of Medicine, Baylor College of Medicine, Houston, Texas 77030.

An Equal Opportunity Employer

POSTDOCTORAL RESEARCH FELLOW and RE-SEARCH ASSOCIATE positions and a research technician position are open. Applications from those with training and experience in molecular ge-netics, protein chemistry, DNA enzymology, or bio-physical chemistry are invited. Apply to: **Professor James C. Wang, Conant Laboratory, Harvard Uni-versity, 12 Oxford Street, Cambridge, Mass. 02138.** 

#### UNIVERSITY OF CALIFORNIA, IRVINE

The Program in Social Ecology invites applications for a **POSTDOCTORAL RESEARCH POSITION** which is contingent on the award of a grant. Can-didates must have a Ph.D. in microbiology or in an equivalent field. The research will involve the study of the relationship between bacterial populations in water distribution systems and inhibition of coliform organisms. Knowledge of physical and chemical components of aquatic systems which affect coli-form bacteria, and the effect of particulates on bacteria are needed. To ensure consideration, apply be-fore 1 April 1978. The University of California is an Equal Opportunity Employer, minorities and women are encouraged to apply. Send curriculum vitae and three references to: Dr. B. H. Olson, Program in So cial Ecology, University of California, Irvine, Calif. 92717.

## PREDOCTORAL RESEARCH TRAINING IN PLATELET BIOCHEMISTRY

A predoctoral position is available from September A predoctoral position is available from September 1978 for a qualified individual who wishes to receive research training in enzymology with emphasis on platelet biochemistry. Research will lead to the Ph.D. degree in biochemistry. Applicants should have training in chemistry, biochemistry, or biology beyond the B.S. degree (M.S. preferred). Stipend and tuition remission is included. For application materials write before 1 April 1978 to: Dr. J. K. Hoo-ber, Director of Admissions, Department of Biochem-istry, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, Pa. 19140. Equal Opnorturity/Affrmative Action Employee. Opportunity/Affirmative Action Employer.

**RESEARCH ASSOCIATE**; person with biochemical RESEARCH ASSOCIATE; person with Diochemical background (M.D./Ph.D.) wanted for Department of Physiology and Biophysics. Please send curriculum vitae and references to: T. C. Welbourne Personnel Department I.SU Medical Center P.O. Box 33932 Shreveport, La. 71130 An Faurd Opportunity Employer

An Equal Opportunity Employer

**RESEARCH ASSOCIATE**: a postdoctoral position is RESEARCH ASSOCIATE: a postdoctoral position is available to join ongoing research in viral gene ex-pression during tumoregenesis. Background in mo-lecular/cell biology, biochemistry, or virology is de-sirable. Send curriculum vitae and references to: Dr. S. H. Socher Department of Cell Biology Baylor College of Medicine Houston, Texas 77030 An Equal Opportunity Employer

#### POSITIONS OPEN

**RESEARCH ASSOCIATE** and **ASSISTANT** positions available immediately to study gene expre sion tions available immediately to study gene expression and its regulation in eukaryotes. Experience in tran-scription, translation, and hybridization techniques desirable but not essential. The applicants for re-search associate position should hold a Ph.D. and/or M.D. degree; for research assistant position should hold a B.Sc. or higher degree. Salary for research associate \$12,000 and for research assistant \$10,000, initially. Send curriculum vitea to. **Dr. Lon. Fur. Chin** initially. Send curriculum vitae to: Dr. Jen-Fu Chiu, Department of Biochemistry, Vanderbilt University, Nashville, Tennessee 37232.

**RESEARCH ASSOCIATE** to carry out NIH-funded project on glycopeptide alterations on the surface of cells. Should be familiar with tissue culture tech-niques and have a biochemical, preferably on car-bohydrates. The position will be available for at least 1 year starting summer 1978. Salary open depending on qualifications. Send curriculum vitae and three latters of encommendatione to the second s letters of recommendations to:

Dr. C. Ceccarini Department of Biological Sciences Hunter College New York, N.Y. 10021

## MARINE SCIENCES RESEARCH LABORATORY (MSRL) MEMORIAL UNIVERSITY OF NEWFOUNDLAND **RESEARCH SCIENTIST-AOUACULTURE**

To conduct research on problems directly related to aquaculture in Newfoundland. The scientist will be expected to assume increasing responsibility for conducting projects already in progress and advise on major changes where appropriate. A Ph.D. in exon major changes where appropriate. A Ph.D. in ex-perimental animal biology required. Research expe-rience on live animals is essential and on fish pre-ferred. Applicants must be prepared to conduct re-search in the field as well as in the laboratory. Ability to liaise with nonscientists is important. A research scientist at the MSRL enjoys essentially the same privileges as an academic appointment. The MSRL is located 3 miles from St. John's and is a modern, well-equipped research laboratory. Salary is commensurate with qualifications and experience. Please respond with qualifications, experience. Please respond with qualifications, experience, and three references by 31 March to: Dr. D. R. Idler, Director, MSRL, Memorial University of New-foundland, St. John's, Newfoundland, Canada A1C

VISITING FACULTY POSITION(S). One-year, beginning September 1978. VISITING FACULTY POSITION(S). One-year, part-time appointment beginning September 1978. Ph.D. or equivalent required. Particularly suitable for faculty on sabbatical leave. Some teaching re-quired. Extensive research facilities. Outstanding outdoor recreational opportunities in scenic Rocky Mountain setting. Detailed curriculum vitae, list of publications, and at least three letters of reference addressing both research and teaching abilities and accomplishments should reach: Patrik Callis, Chem-istry Department, Montana State University, Boze-man, Montana 59717 (telephone: 406-994-4801), by 15 March 1978. An Equal Opportunity/Affirmative Action Employer.

#### VISITING SCIENTISTS

Beginning in autumn 1978 it is expected that the Joint Institute for the Study of the Atmosphere and Oceans (JISAO) will have several openings for visiting Ph.D.'s with research interests in climate dynamics and variability or estuarine processes. The term of appointment is normally 1 year, but renewterm of appointment is normally I year, but renew-als, extensions, or shorter term appointments are possible in individual cases. Salary will be negoti-ated on the basis of qualifications and experience. The institute was created in 1977 by an agreement between the University of Washington and the Envi-ronmental Research Laboratories of the National Oceanic and Atmospheric Administration. The sen-ior fellows of the institute are associated with the university departments of Atmospheric Sciences and Oceanography and the NOAA Pacific Marine Environmental Laboratory in Seattle. Visiting fel-lows of the institute are housed on the university campus.

To apply, please send a professional résumé, two letters of recommendation, and a brief research pro-spectus to: John M. Wallace, Interim Director, JISAO, Department of Atmospheric Sciences, AK-40, University of Washington, Seattle, Wash. 98195. Closing date for receipt of application material: 1 April 1978.

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#### POSITIONS OPEN

#### SCIENCE EDUCATION

Science education, tenure-track assistant/associate professor position open at the University of Wiscon-sin-Madison, fall 1978. Preparation: doctorate, broad academic preparation in philosophy, biology, chemistry, earth science, physics, and so forth; demonstrated research capability and interest; prov-en ability in teaching at the elementary/secondary level. Responsibilities include graduate and under-graduate teaching and advising, supervision of stu-dent teachers, productive scholarship, and program development. Send applications and credentials to: John M. Kean, Chairperson, Science Education Search Committee. Teacher Education Building, 225 Science education, tenure-track assistant/associate John M. Kean, Charperson, Science Education Search Committee, Teacher Education Building, 225 North Mills Street, University of Wisconsin, Madison, Wisconsin 53706. Application deadline is 15 April 1978. The University of Wisconsin-Madison is an Equal Opportunity/Affirmative Action Employer.

## AUSTRALIA THE UNIVERSITY OF ADELAIDE SENIOR TEACHING FELLOW IN ANATOMY

A professional qualification in medicine, dentistry, or physiotherapy is desirable. The appointment is available for up to 3 years. Salary within the range A\$12,782-376(1)-377(2)-374(1)-376(1) to A\$14,662. Potential applicants should first seek particulars from: the Registrar North Terrace, Adelaide, South Australia 5001, Australia. Closing date: 7 March 1978.

## SUPERVISOR, RADIOIMMUNOASSAY FACILITIES

The Department of Obstetrics and Gynecology at McGill University has an immediate opening for a person experienced in the development, validation, performance, and quality control of radioimmunoas-says for both steroid and peptide/protein hormones. Applicants should have a minimum of a M.Sc. de-gree (or equivalent), be prepared to work in an aca-demic records any incoment, and have avarationace demic research environment, and have experience in the supervision of technicians. Remuneration will be the supervision of technicians. Remuneration will be commensurate with professional experience. Please send curriculum vitae and names and addresses of three references before 15 March 1978 to: F. Nafto-lin, M.D., D. Phil., Professor and Chairman, Departi-ment of Obstetrics and Gynecology, Women's Pavil-ion, Royal Victoria Hospital, McGill University, 687 Pine Avenue West, Montreal, Canada H3A 1A1. An Equal Opportunity. Employer Equal Opportunity Employer.

The Psychology Department, University of Califor-nia, Riverside, announces the availability of teaching positions for the 1978–1979 academic year: (i) assist-ant professor or lecturer in comparative psychology; and (ii) lecturer (or visiting assistant or associate pro-fessor) in perceptual development.

Applicants should have completed or be close to completing the Ph.D. degree and have strong inter-ests in teaching and research. Visiting professor appointments require a substantial record of research and teaching accomplishments.

Send curriculum vitae and three letters of reference to: Professor Austin H. Riesen, Chairman, Search Committee, Psychology Department, University of California, Riverside, Riverside, Calif. 92521.

The University of California is an Equal Opportu-nity/Affirmative Action Employer.

#### VETERINARY PATHOLOGIST

The Collaborative Radiological Health Laboratory (CRHL) and Department of Pathology, Colorado State University (CSU), seek applications from vet-erinary pathologists interested in research in an aca-demic environment. The CRHL is a multidisciernary pathologists interested in research in an aca-demic environment. The CRHL is a multidisci-plinary research group studying long-term effects of low level radiation in beagle dogs. Primary duties in-volve evaluation of a variety of disease states in a large canine population. An interest in aging and car-cinogenesis would be helpful. Three positions are available. Applicants for two senior pathology posi-tions should have a D.V.M. with advanced training in pathology, preferably a Ph.D. and/or ACVP eligi-bility or certification. A faculty appointment in the Department of Pathology with teaching responsibili-ties is available. Applicants for a junior pathology position should have a D.V.M. with advanced train-ing in pathology and ACVP eligibility. (Application deadline: 15 March 1978 or until positions are filled. Salaries negotiable. Anticipated starting date: 1 July 1978.) *CSU is an Equal Opportunity Office*, 314 Student Ser-vices Building. Contact: Stephen A. Benjamin, Direc-tor, CRHL, Department of Pathology, College of Vet-erinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, Colorado 80523.

### ENVIRONMENTAL PLANNER

Consumers Power Company, a gas and electric utility in Michigan, seeks a full-time person to develop, coordinate and conduct terrestrial environmental assessments, and monitoring programs and to assist in the preparation of environmental reports. MS required, course work in vertebrate ecology, mammalogy, ornithology preferred. Position to be filled by April 1. Send resume to:

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For descriptive brochure and application form, write to:

Dr. Eve L. MacDonald Program Coordinator Electron Microscope Institute Duke University Marine Laboratory Mailing Address:

Department of Toxicology & Experimental Pathology Wellcome Research Laboratories 3030 Cornwallis Road Research Triangle Park North Carolona 27709

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Formulates, initiates and administers a contract research program in Celluar and Membrane Biophysics.

Must have PhD in biophysics or equivalent extensive research experience and high accomplishment in biophysics. Scientific administrative ability desirable.

Salary \$26,022 to \$33,825 depending on qualifications.

Send resume or Standard Form 171 by 3 March to: Director, Personnel Services Attn: Ms. Talbot 77-57A-1 Office of Naval Research 800 N. Quincy Street Arlington, VA 22217

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A unique opportunity for a person with proper qualifications to supervise and work closely with an excellent support staff of microbiologists, parasitologists, and serologists. For overall animal health assessment and monitoring of several large experimental animal holding facilities as well as a newly rederived experimental animal production facility. Due to the support role of the Animal Resources Program for NCI and NCI-contracts the Diagnostic Laboratory as well as the overall Animal Health Assessment Area potentially can become an international reference center under a person of proper qualifications and motivation.

Letters of application, accompanied by a comprehensive curriculum vitae, complete bibliography, and three references should be addressed to:

Dr. Michael G. Hanna, Jr. Director, Cancer Biology Program Frederick Cancer Research Center Post Office Box B, Building 426 Frederick, Maryland 21701

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**RESEARCH ASSISTANT PROFESSOR.** Applications are invited from candidates having a background in basic pathologic processes and with an interest in cardiovascular disease. A Ph.D. in pathology or closely related discipline and at least several years of postdoctoral experience are required. The person should have experience with analysis for mutagens (for example, the Ames test) and the study of mutation, its frequency and kind in mammalian cells and in particular with human cells. Experience with virus behavior and their effects on cells is needed as well as experience in handling of arterial wall cells. Curriculum vitae, bibliography, and letters of reference should be sent to: Earl P. Benditt, M.D., Professor and Chairman, Department of Pathology, School of Medicine, University of Washington, Seattle, Washington 98195. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

#### COURSES

#### MARINE BIOLOGICAL LABORATORY (MBL) WOODS HOLE, MASSACHUSETTS

Will present residential laboratory courses for scientists and physicians on biological electron microscopy. ELECTRON MICROSCOPY IN THE BIO-LOGICAL SCIENCES, 23 April to 5 May, deals primarily with specimen preparation for and operation of conventional transmission electron microscopes. It is limited to 12 participants and will be taught by Blair Bowers and Morton Maser with guest lectures by Keith Porter and Morris Karnovsky. SCANNING ELECTRON MICROSCOPY IN THE BIOLOGI-CAL SCIENCES, 14 to 19 May, includes SEM operation, specimen preparation for SEM, interpretation of cell surface morphology, cytochemistry in SEM, x-ray probe microanalysis, and morphometric techniques. The primary instructor is Bruce Wetzel. Applications and additional information are available from: the Director of Admissions, Marine Biological Laboratory, Woods Hole, Mass. 02543; telephone: 617-548-3705. MBL is an Equal Opportunity Emplover.

#### THE SHOALS MARINE LABORATORY (SML) SUMMER COURSES, 1978

SUMMER COURSES, 1978 SML, operated cooperatively by Cornell University and the University of New Hampshire on Appledore Island in the Gulf of Maine, will offer the following summer courses: Introduction to Marine Science, 1 to 28 June or 25 July to 21 August; Anatomy of the Gull, 29 June to 5 July; Field Phycology, 29 June to 19 July; Introductory Marine Science for Teachers, 29 June to 5 July or 6 to 12 July or 13 to 19 July; Underwater Research, 6 to 12 July; Research in Biology, dates arranged. For more information and applications write: Shoals Marine Laboratory, 204 Plant Science Building, Cornell University, Ithaca, N.Y. 14853.

#### Fifth annual program in ELECTRON MICROSCOPY STATE UNIVERSITY OF NEW YORK (SUNY) TEM; SEM; FREEZE-FRACTURE (ETCHING)

TEM; SEM; FREEZE-FRACTURE (ETCHING) Course I: SCANNING and TRANSMISSION ELEC-TRON MICROSCOPY. 5 to 16 June. Dr. B. L. Redmond, SUNY, principal lecturer. Course II. FREEZE-FRACTURE (ETCH) MICROSCOPY. 19 to 23 June. Dr. Russell Stere, U.S. Department of Agriculture, principal lecturer. The lectures and laboratories of each course are designed to introduce the participant to the theoretical and practical aspects of the instruments and techniques. Enrollment is limited to permit maximum individualized and "hands-on" instruction. Tuition: \$450. For further information and application forms write or call: Dr. B. L. Redmond, Department of Biology, State University of New York, New Paltz, N.Y. 12562. Telephone 914-257-2549 or 2175.

#### PROGRAMS

#### VIROLOGY—IMMUNOLOGY—PATHOLOGY TRAINING PROGRAM

An NIH-sponsored training program for postdoctoral fellows in virology, immunology, and pathology of nervous system diseases is available at the Neurology Research Laboratory, Veterans Administration Hospital, San Francisco, California 94121. Interested individuals should contact: Dr. J. Richard Baringer or Dr. Kenneth P. Johnson at 415-752-0223.

#### PROGRAMS

#### DOCTORAL PROGRAM IN MOLECULAR AND CELLULAR BIOLOGY AND PATHOBIOLOGY

Interdisciplinary program leading to Ph.D. degree seeks qualified candidates interested in fundamental molecular and cellular biology and its application to disease states in man. Research training is available in a broad range of basic and clinical disciplines. Stipends are available on a competitive basis. Contact: Graduate Training Director, Program in Molecular and Cellular Biology and Pathobiology, Dean's Office, College of Graduate Studies, Medical University of South Carolina, Charleston, South Carolina 29403.

#### SASKATCHEWAN SCHOLARS PROGRAM

The Saskatchewan Research Scholar Awards are to encourage and assist researchers who have demonstrated high promise in research and scholarship. Scholars receive \$17,000 per year for 2 years, possible renewal for a third year. Ph.D. (or equivalent) and normally 1 or 2 years of additional experience, plus the ability to do independent research. Scholarship may be held in any field, humanities, social sciences, life sciences, physical sciences, or engineering. Canadian citizens and landed immigrants have priority. Closing date for applications: 15 May 1978 for awards to commence between 1 July 1978 and 1 January 1979. Further information and application forms available from: The Dean, College of Graduate Studies and Research, University of Saskatchewan, Saskatoon, Saskatchewan, Canada S7N 0W0.

#### ASSISTANTSHIPS

#### RESEARCH ASSISTANTSHIP-POPULATION ECOLOGY DEPARTMENT OF BIOLOGY IDAHO STATE UNIVERSITY

Research assistantship leading to M.S. or Ph.D. degree available immediately or 1 June 1978. Support level: \$3456 to \$4320 and fees, depending on degree sought. Duties: collection and analysis of data on vertebrate populations, with special reference to small mammals, occupying a subsurface nuclear waste area in semi-desert habitat. Location of research: Idaho National Engineering Laboratory National Environmental Research Park in southeastern Idaho. Application deadline: 15 March 1978. Send three letters of reference, official transcript, résumé, and Graduate Record Exam scores to: Dr. Barry L. Keller, Department of Biology, Idaho State University, Pocatello, Idaho 83209.

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#### **FELLOWSHIPS**

FELLOWSHIPS. Postdoctoral training program in clinical pharmacology, Michigan State University Medical Center for individuals with an M.D. degree or equivalent who are U.S. citizens or permanent residents. Individuals with a Ph.D. degree in a scientific discipline relevant to clinical pharmacology will also be considered. Send curriculum vitae to: Andrew M. Michelakis, M.D., Ph.D., Director, Clinical Pharmacology Program, Life Sciences Building, Michigan State University Medical Center, East Lansing, Michigan 48824.

A POSTDOCTORAL FELLOWSHIP IN OCU-LAR MOTILITY is available for a bioengineer seeking an academic career. This is a 2-year appointment with salary based on experience. The starting date is open but July 1978 is preferred. The candidate will have the opportunity to work with an interdisciplinary team combining bioengineering, neurology, and ophthalmology. Applicants should send a curriculum vitae to: L. F. Dell'Osso, Ph.D., Ocular Motor Neurophysiology Laboratory, Neurology Service (127A), Veterans Administration Hospital, Miami, Fla. 33125.

#### A POSTDOCTORAL FELLOWSHIP IN THE GENETICS OF HIGHER CELLS

Immediate opening for Ph.D. with strong background in the genetics and cultivation of animal cell lines to work on the genetics of mammalian fatty acid metabolism. Write to: Dr. Eckhart Schweizer, Professor of Biochemistry, Lehrstuhl für Biochemie der Universität Erlangen-Nürnberg, Egerlandstrasse 7, 8520 Erlangen, West Germany.

#### FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP IN HUMAN BIOCHEMICAL GENETICS. Available for Ph.D. or M.D. with strong laboratory interest to study human lysosomal storage distribution and inborn errors of steroid metabolism. Experience in enzymology, steroid chemistry, or cell culture technique is desirable. Applicants should respond with curriculum vitae by 15 March to: Larry J. Shapiro, M.D., University of California, Los Angeles-Harbor General Hospital, Division of Medical Genetics, 1000 West Carson Street, Torrance, Calif. 90509. Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL FELLOWSHIPS GEOSCIENCES

Applications are invited for postdoctoral research fellowships in geology, geophysics, geochemistry, and planetary science. Six or more openings may be funded in the 1978–1979 academic year. Included, subject to funding, are: (i) seismologist interested in modeling of strong ground motions due to large earthquakes and aftershocks; (ii) fluid dynamicist experienced in numerical methods and interested in atmospheric science or oceanography, who will work on normal modes of planetary atmospheres; and (iii) seismologist interested in seismic coda, travel time refinement, automated focal mechanism determination or time series analyses—all using automated data collected by CEDAR system. Contact: Dr. Robert J. Tait, Dvision of Geological and Planetary Sciences, California Institute of Technology, Pasadena, Calif, 91125. Caltech is an Equal Opportunity/Affirmative Action Employer.

Available to immunologist Ph.D., 2-year POST-DOCTORAL FELLOWSHIP in viral immunology on 1 July 1978 at Jules Stein Eye Institute, University of California, Los Angeles (UCLA). Eligibility limited to U.S. citizens and permanent residents. Position should attract someone wishing to work on cellular immunity in herpes virus infections. Send résumé, statement of research interest, and names of three references to: Dr. Roberta Meyers, Jules Stein Eye Institute, UCLA School of Medicine, Los Angeles, Calif. 90024. Equal Opportunity/Affirmative Action Employer.

Yale University, Department of Biology, seeks applicants for a **POSTDOCTORAL FELLOWSHIP** in the plant sciences, to undertake research in association with a faculty member in the department. For further information on research interests of the faculty and conditions of award of the Forest B. H. and Elizabeth D. W. Brown Fellowship in Botany write by 24 March 1978 to:

Business Manager Department of Biology—102 KBT Yale University New Haven, Conn. 06520

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A 2-year **POSTDOCTORAL FELLOWSHIP** is available for applicant with training in biochemistry or cellular biology, and with experience in electron microscopy preferred, to participate in an interdisciplinary study of cyclic nucleotide metabolism in normal and diseased visual cells of the retina. Fellowship is supported by a grant from the National Retinitis Pigmentosa Foundation to the Jules Stein Eye Institute, University of California, Los Angeles, School of Medicine. Send résumé with three references to: Dr. Richard N. Lolley or Dr. Debora B. Farber, Laboratory of Developmental Neurology, VA Hospital, Sepulveda, Calif. 91343. An Equal Opportunity/ Affirmative Action Employer.

#### TRAVEL GRANTS

#### **IUPHAR TRAVEL GRANT COMPETITION**

Travel support to the 7th International Congress of Pharmacology in Paris, France, 16 to 21 July 1978, will be provided to selected applicants. Selection criteria include research in pharmacology and a submitted abstract. For announcements and applications, which must be returned by 15 March, contact: AMERICAN SOCIETY FOR PHARMACOL-OGY AND EXPERIMENTAL THERAPEUTICS, INC., 9650 Rockville Pike, Bethesda, Md. 20014; telephone: 301-530-7060.



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