#### BOOKS RECEIVED

(Continued from page 1334)

The Personal Experience of Time. Papers from a conference, New York, May 1975. Bernard S. Gorman and Alden E. Wessman, Eds. Plenum, New York, 1978. xiv, 296 pp. \$22.50. Emotions, Personality, and Psychotherapy.

**Perspectives in Coeliac Disease.** Proceedings of a symposium, Galway, Ireland, Sept. 1977. B. McNicholl, C. F. McCarthy, and P. F. Fottrell, Eds. University Park Press, Baltimore, 1978. xx, 504 pp., illus. \$39.50.

The Pesticide Conspiracy. Robert van den Bosch. Doubleday, Garden City, N.Y., 1978. x, 228 pp. \$8.95.

Petroglyphs and Pictographs of Utah. Vol. 1, The East and Northeast. Kenneth B. Castleton. Utah Museum of Natural History, Salt Lake City, 1978. xxiv, 216 pp., illus. Paper, \$15.

Petrology and Geochemistry of Continental Rifts. Volume one of the proceedings of the NATO Advanced Study Institute, Oslo, Norway, July 1977. E.-R. Neumann and I. B. Ramberg, Eds. Reidel, Boston, 1978. xxviii, 296 pp., illus. \$36. NATO Advanced Study Institutes Series C, vol. 36.

**Phosphorus in the Environment**. Its Chemistry and Biochemistry. Papers from a symposium, London, Sept. 1977. Elsevier/Excerpta Medica/North-Holland, New York, 1978. x, 320 pp., illus. \$31.75. Ciba Foundation Symposium 57 (new series).

Physical Change and Aging. A Guide for the Helping Professions. Sue V. Saxon and Mary Jean Etten. Tiresias Press, New York, 1978. 192 pp., illus. Cloth, \$9; paper, \$5.95.

Physics for Applied Biologists. N. C. Hilyard and H. C. Biggin. University Park Press, 1977. viii, 224 pp., illus. Paper, \$13.75.

The Physiology of Growth. Richard J. Goss. Academic Press, New York, 1978. xii, 442 pp., illus. \$29.50.

Piaget's Theory of Intelligence. Charles J. Brainerd. Prentice-Hall, Englewood Cliffs, N.J., 1978. viii, 326 pp. \$11.95.

**The Pineal and Reproduction**. Russel J. Reiter, Ed. Karger, Basel, 1978. vi, 224 pp., illus. \$64.75. Progress in Reproductive Biology, vol. 4.

Plant Disease. An Advanced Treatise. Vol. 2, How Disease Develops in Populations. James G. Horsfall and Ellis B. Cowling, Eds. Academic Press, New York, 1978. xx, 436 pp., illus. \$37.

Plant Pathology. George N. Agrios. Academic Press, New York, ed. 2, 1978. xii, 704 pp., illus. \$22.95.

Policy Implications of the Computed Tomography (CT) Scanner. Office of Technology Assessment, Washington, D.C., 1978 (available from the Superintendent of Documents, Washington, D.C.). x, 196 pp., illus. Paper, \$4.

The Politics of Cancer. Samuel S. Epstein. Sierra Club Books, San Francisco, 1978. viii, 584 pp. \$12.50.

The Politics of Pain. Helen Neal. McGraw-Hill, New York, 1978. xviii, 222 pp. \$9.95.

The Powdery Mildews. D. M. Spencer, Ed. Academic Press, New York, 1978. xx, 566 pp., illus. \$54.75.

The Presidential Election Game. Steven J. Brams. Yale University Press, New Haven, Conn., 1978. xx, 242 pp., illus. Cloth, \$15; paper, \$3.95.

Principles of Mammalian Aging. Robert R. 30 MARCH 1979

Kohn. Prentice-Hall, Englewood Cliffs, N.J., ed. 2, 1978. xvi, 240 pp., illus. \$18.95. Prentice-Hall Foundations of Developmental Biology Series.

Proceedings of the Fourth Annual Conference on Restoration of Coastal Vegetation in Florida. Tampa, Fla., May 1977. Roy R. Lewis, Ill, and Dorothea P. Cole, Eds. Hillsborough Community College, Tampa, Fla. 1977. iv. 166 pp., illus., + appendix. Paper.

Proceedings of the James C. Kimbrough Urological Seminar. Vol. 11. Denver, Nov. 1977. Norwich-Eaton Pharmaceuticals, Norwich, N.Y., 1978. xxxii, 344 pp. Paper, \$10.

The Process of Question Answering. A Computer Simulation of Cognition. Wendy G. Lehnert. Erlbaum, Hillsdale, N.J., 1978 (distributor, Halsted [Wiley], New York). x, 278 pp. \$15.

**Professional Engineer's License Guide.** What You Need to Know and Do to Obtain PE (and EIT) Registration. Joseph D. Eckard, Jr. Herman Publishing, Boston, ed. 3, 1978. xx, 108 pp. Cloth, \$11.95; paper, \$6.95. Herman's Career Management Guides.

Progress in Assessing Technological Innovation. Vol. 2. H. R. Clauser, Ed. Technomic, Westport, Conn., 1978. vi, 164 pp. \$20.

Progress in Behavior Modification. Vol. 6. Michel Hersen, Richard M. Eisler, and Peter M. Miller, Eds. Academic Press, New York, 1978. xvi, 252 pp., illus. \$18.50.

**Progress in Human Nutrition**. Vol. 2. Sheldon Margen and Richard A. Ogar, Eds. AVI Publishing Company, Westport, Conn., 1978. xiv, 314 pp. \$22.

Progress in Inorganic Chemistry. Vol. 24 Stephen J. Lippard, Ed. Interscience (Wiley New York, 1978. viii, 494 pp., illus. \$35.95.

**Progress in Theoretical Biology.** Vol. 5. Robert Rosen and Fred M. Snell, Eds. Academic Press, New York, 1978. xiv, 378 pp., illus. \$39.50.

The Runaway Universe. Paul Davies. Harper and Row, New York, 1978. 206 pp. + plates. \$10.

Science and Technology of Rubber. Frederick R. Eirich, Ed. Academic Press, New York, 1978. xiv, 672 pp., illus. \$42.

The Syntax and Semantics of Complex Nominals. Judith N. Levi. Academic Press, New York, 1978. xxiv, 302 pp., illus. \$22.

Tachyons, Monopoles, and Related Topics. Proceedings of a meeting, Erice, Italy, Sept. 1976. Erasmo Recami, Ed. North-Holland, Amsterdam, 1978 (U.S. distributor, Elsevier, New York). xii, 286 pp., illus. \$37.75.

The Varieties of the Meditative Experience. Daniel Goleman. Irvington, New York, and Halsted (Wiley), New York, 1978. xxviii, 130 pp. \$12.50. Irvington Social Relations Series.

The Visionary Eye. Essays in the Arts. Literature, and Science. J. Bronowski. MIT Press, Cambridge, Mass., 1978. xii, 186 pp., illus. \$10.

Vitamin D. D. E. M. Lawson. Academic Press, New York, 1978. x, 434 pp., illus. \$42.40.

Ways of Worldmaking. Nelson Goodman. Hackett, Indianapolis. 1978. xii, 142 pp., illus. \$9.95.

Wind in the Rock. Ann Zwinger. Harper and Row, New York, 1978. x. 258 pp., illus. \$15.

The Wired Society. James Martin. Prentice-Hall, Englewood Cliffs, N.J., 1978. xii, 300 pp. \$12.95.

**Your Brain and Nerves.** J. Lawrence Pool. Scribner, New York, ed. 2, 1978. xii, 212 pp. Paper, \$3.95.





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#### **POSITIONS WANTED**

**Biochemist** Ph.D. enzymology, molecular virology. Seeks industry-government-academic position in health-related research. Box 80, SCIENCE. X

Environmental/Marine Chemist, Ph.D. 1971. Broad background in multidisciplinary studies of nutrients, heavy metals, and so forth, in marine environments, and engineering. Administration, governmental, and foreign experience, publications. Seeks challenging position in South or on West Coast. Résume on request. Box 98, SCIENCE. X

D.V.M., Ph.D. Experimental Reproductive Physiology. Animal models to determine different influences. Academic or industrial position. Box 108, SCI-ENCE. X

Medical Devices Safety Scientist—Head of Regulatory Compliance with solid background in all phases of product safety evaluation, GLP implementation, upto-date in GMP, IDE, Restricted Devices and Clinical Investigations regulations: seeking responsible position at corporate level with medical device manufacturing company. Degree in medical sciences; 20 years of experience; well established liaison with several government agencies as well as HIMA, ASTM, and AAMI. Box 96, SCIENCE. X

Microbiologist/Microbial Physiologist. Ph.D. 1966. Seeks position in industrial research or quality control. Fifteen years of experience includes environmental microbiology, soils, water pollution, anaerobes, and vaccine production. Publications. Box 109, SCIENCE. X

Toxicologist/Neurophysiologist/Behavior M.S. Two years of experience in primate operant techniques, project management, stereotaxic surgery, and recording and electrode implantation. Additional experience in physiology, abdominal and thoraxic surgery, respiratory physiology, and cardiovascular physiology. Thesis topic: Electrographic Evaluation of the Neurotoxicity of Mirex. Seeks industrial, academic, or government position. R. E. Stevens III, 506 Thistle, Garland, Texas 75043. X

#### POSITIONS WANTED

Scientist, educator/administrator: counselor/psychologist (meteorologist). Personnel analyst (testsmeasures, career GS/12). Instructor research/statistics: personnel selection and training. Published in career planning. Box 654, Chambersburg, Pennsylvania 17201. X

#### POSITIONS OPEN

ASSISTANT, ASSOCIATE, OR FULL PROFES-SOR—The Department of Earth Resources is seeking a Ph.D. in forest hydrology, watershed sciences, or related field for a teaching/research position in snow hydrology. The position is full-time academic faculty. Duties include undergraduate/graduate teaching, advising, and research. Rank and salary commensurate with training and experience. Send complete résumé, three letters of reference, and other supporting materials by 1 June 1979 to: Dr. Stanley L. Ponce, Department of Earth Resources, Colorado State University, Fort Collins, Colorado 80523. Anticipated appointment date: 20 August 1979.

Colorado State University is an Equal Opportunity Employer and complies with Title IX requirements.

ASSISTANT PROFESSOR, DEPARTMENT OF BIOCHEMISTRY, COLLEGE OF MEDICINE. Applicants must have Ph.D. degree and postdoctoral training in molecular or cellular immunology, or biochemical genetics. Preference will be given to individuals whose research deals with immunologically important systems at the molecular level, especially structure, function, or control of lymphocyte genes, lymphocyte cell surface receptors or antigens, or structure-function properties of lymphocyte membranes. Applicants must be well trained in biochemistry and be able to teach medical and graduate students. Send curriculum vitae, summary of present and future research, and names, addresses, and telephone numbers of three people who may be contacted for reference to: F. P. Imman, Chairman, East Tennessee State University, P.O. Box 19930A, Johnson City, Tenn. 37601. East Tennessee State University is an Afirmative Action Equal Opportunity Employer, M/F.

#### ASSISTANT PROFESSOR-BIOCHEMISTRY

Applications are invited for a tenure-track position beginning in fall 1979. Teaching responsibilities will include courses in biochemistry and cell physiology. Candidates will be expected to develop an active research program. Closing date for application is 27 April 1979. Please forward curriculum vitae, reprints, and three letters of reference to:

Gerald W. Esch, Chairman Department of Biology Wake Forest University Winston-Salem, N.C. 27109

An Equal Opportunity/Affirmative Action Employer; minorities, women, and the handicapped are encouraged to apply.

ASSISTANT PROFESSOR OF BIOCHEMISTRY. A 12-month, tenure-track position is anticipated to be available 1 July, depending on funding, for someone in the general area of plant biochemistry. Responsibilities include participation in the undergraduate and graduate teaching program. The individual is expected to develop a vigorous, independent research program in plant biochemistry which would be compatible with a joint appointment in the College of Agriculture and Experiment Station. A Ph.D. in biochemistry with postdoctoral experience is required. Please send résumé, graduate transcripts, summary of research interests, and names of three references to: R. P. Wilson, Head, Department of Biochemistry, P.O. Box BB, Mississippi State University, Mississippi State, Miss. 39762. An Affirmative Action Employer.

ASSISTANT PROFESSOR OF BIOLOGY—Position beginning fall 1979. Candidates must have Ph.D. and demonstrated teaching effectiveness. First year duties include teaching introductory biology and/or human biology for nursing and allied health students and the development of an advanced undergraduate course in one of the following fields: embryology, microbiology, immunology, or endocrinology. Salary open. Send résumé with names of three references to: Dr. Richard H. Moore, Science Division, Coastal Carolina College, Conway, S.C. 29526. Equal Opportunity/Affirmative Action Employer.

#### POSITIONS OPEN

#### THE UNIVERSITY OF CALGARY Faculty of Medicine Division of Pharmacology and Therapeutics

Applications are invited for a position as an assistant professor commencing September 1979. Duties will include teaching in both the undergraduate and graduate educational programme. Successful applicant must be an active researcher. Salary and rank according to qualifications and experience. Nominations and/or applications will be received by:

Dr. S. H. Roth, Acting Head Division of Pharmacology and Therapeutics Faculty of Medicine The University of Calgary Calgary, Alberta, Canada T2N 1N4

Applications are invited for an ASSISTANT PRO-FESSORSHIP in the Department of Neurology at the Johns Hopkins School of Medicine and Hospital. Candidates must be able to conduct independent research and participate in on-going research programs in neuromuscular physiology and diseases, to perform and teach clinical electromyography. Send details of research experience and three letters of reference to: C. Barlow, Department of Neurology, Johns Hopkins School of Medicine, 1721 East Madison Street, 317 Traylor Building, Baltimore, Maryland 21205.

#### SUPPLY ASSISTANT PROFESSOR OF BIOCHEMISTRY

The availability of a nontenure-track position is anticipated in summer 1979. Initial appointment for 2 years, with a maximum of five possible. Responsibilties include research with some teaching. Preference given individuals with experience and research interest in nucleotide regulated phenomenon. Laboratory space and assistance in the synthesis and utilization of proven nucleotide photoaffinity probes will be provided. Send résumé to: Ivan I. Kaiser, Chairman, Department of Biochemistry, Box 3944, University Station, University of Wyoming, Laramie, Wyoming 82071. University of Wyoming is an Equal Opportunity/Affirmative Action Employer.

#### ASSISTANT PROFESSOR OF CELL BIOLOGY

The Department of Cell Biology has two faculty positions available at the assistant professorial level. Formal duties associated with each position include teaching in the cell biology/histology course for medical students. Preference will be given to candidates with 2 years of postdoctoral training, relevant teaching experience, and research accomplishments in cell or reproductive biology. Submit curriculum vitae, list of publications, research plan, and three letters of recommendation by 15 April to:

William B. Neaves, Ph.D. Faculty Search Committee Department of Cell Biology The University of Texas Health Science Center at Dallas Southwestern Medical School 5323 Harry Hines Boulevard Dallas, Texas 75235

The University of Texas Health Science Center is an Equal Opportunity/Affirmative Action Employer.

The Department of Animal Science, University of California, Davis, is seeking an ASSISTANT PROFESSOR in nutrition of simple stomached animals. The position will include teaching 60 percent and research 40 percent (in the Agricultural Experiment Station).

Qualifications: a Ph.D. in nutrition, or equivalent qualification, with emphasis in biochemistry and physiology.

The appointee would be expected to teach courses in both the undergraduate (upper division) and graduate programs in nutrition and develop a nutritional research program in one or more nonruminant species of mammals, particularly, but not restricted to, swine and/or horses.

Applications: applicants should submit curriculum vitae, transcripts, bibliography, and the names and addresses of at least three persons familiar with your work to: J. G. Morris, Chairman, Search Committee, Department of Animal Science, University of California, Davis, Calif. 95616.

Applications should be submitted by 1 May 1979. The position is available 1 July 1979.

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

## ASSISTANT PROFESSOR MICROBIOLOGY AND IMMUNOLOGY

Applications are invited for an appointment as an Applications are invited for an appointment as an assistant professor in the Department/Program of Microbiology and Immunology, the College of Sci-ence and Engineering, and The School of Medicine, Wright State University. Applicants must have a Ph.D. with a minimum of 2 years of postdoctoral ex-perience in the combined areas of microbial genetics and netwogenesis of bacterial toxins. Applicants and pathogenesis of bacterial toxins. Applicants should send curriculum vitae, statements of research and teaching interest, and three letters of recommen-dation by 15 May 1979 to: Search Committee, De-partment of Microbiology and Immunology, 409 Oel-man Hall, Wright State University, Dayton, Ohio 45435 45435.

Equal Opportunity/Affirmative Action Employer

ASSISTANT OR ASSOCIATE PROFESSOR IN RENAL PHYSIOLOGY beginning 1 July 1979. A Ph.D. or M.D. is required with evidence of post-Ph.D. or M.D. is required with evidence of post-doctoral training in broad areas of renal function. Preference will be given to candidates with teaching experience. Responsibilities: (i) assume the major teaching organizational activities in renal physiology for medical students, including the development of integrated educational activities, (ii) conduct inde-pendent research in area of major interest, and (iii) perticipate in graduate advaction in the basic medi pendent research in area of major interest, and (iii) participate in graduate education in the basic medi-cal sciences. Adequate time for research is pro-vided. An office and partially equipped laboratory are available in the new Medical Educational Build-ing. Send applications to: Margaret C. Conrad, Ph.D., Professor and Chairman, Department of Phys-iology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, Va. 23501. An Affirmative Action/ Fauel Opnoctunity Employee Equal Opportunity Employer.

Applications are invited for an ASSISTANT RE-SEARCH BIOLOGIST to study diphtheria toxin up-take in tissue culture cells. Applicant must have experience in tissue culture, toxin resistant mutat se-lection, and toxin biochemistry. Also, person should have demonstrated independent research ability and is expected to carry out an active research program. The beginning salary is \$17,500 per year. Please send résumé and three letters of recommendation by 1 April to:

## Dr. Melvin I. Simon Department of Biology, B-022 University of California, San Diego La Jolla, Calif. 92093

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

ASSOCIATE DEAN FOR GRADUATE STUDIES AND RESEARCH THE UNIVERSITY OF HOUSTON COLLEGE OF OPTOMETRY

We are seeking applications from individuals with we are seeking applications from individuals with proven research and administrative ability. Respon-sibilities will include directing an existing program leading to a Ph.D. in physiological optics, encourag-ing the continued development of clinical and basic science research within the college, as well as orga-nizing and carrying out a sustained personal program of vision research

Faculty rank, tenure, and salary will be awarded commensurate with experience. Interested persons should direct their résumés and/or inquiries to:

James W. Walters, O.D., Ph.D. University of Houston College of Optometry Houston, Texas 77004 Telephone: 713-749-4102

The University of Houston is an Equal Opportu-nity Employer.

## UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

ASSOCIATE PROFESSOR OR PROFESSOR, CHIEF OF RADIOLOGY at Veterans Hospital; po-sition available 1 July 1979. Duties include adminis-tration of the radiology programs in teaching, re-search, and patient care at the Veterans Administrasearch, and patient care at the Veterans Administra-tion Hospital under a contract for professional services with the University of Michigan. Must have previous staff position in academic radiology department with experience in teaching, research, and patient care. Should have record of publications and experiences to qualify for senior professional rank at the Univer-sity of Michigan Medical School. Reply to: **Box 105**, **SCIENCE**. Code 100D0. A nondiscriminatory, Af-firmative Action Employer.

30 MARCH 1979

#### POSITIONS OPEN

#### ASSOCIATE RESEARCH NEUROLOGIST

A scientist is being sought to fill the above position. Applicants need to have a Ph.D. in biochemistry and to hold an academic position equivalent in rank to an assistant research neurologist or assistant professor. Applicants must have demonstrated ability in the discovery of potential biochemical defects in neurodiscovery of potential biochemical defects in neuro-logical disease, in studies on the pathophysiology of neurological disease, and expertise in each of the fol-lowing: protein purification, gel electrophoresis and isoelectric focusing, lipid biochemistry, purification and assay of intermediary metabolites, subcellular fractionation, enzyme kinetics with both spectro-photometric and fluoroactive techniques, tissue cul-ture (including human tissues for studies of disease) ture (including human tissues for studies of disease), electron microscopy, and intracellular electrical recording from muscles.

Please send curriculum vitae and bibliography to: Dr. R. A. Pieter Kark, Reed Neurological Research Center, UCLA School of Medicine, Los Angeles, Calif. 90024. UCLA is an Equal Opportunity Employer.

## ASSOCIATE VICE PRESIDENT FOR GRADUATE STUDIES AND RESEARCH

The Georgia Institute of Technology is seeking qualified candidates for the newly created position of associate vice president for graduate studies and research. Primary responsibility of the position is to exert leadership required to continue development of graduate programs and research at the institute.

of graduate programs and research at the institute. Candidates should have experience with graduate programs of high quality, and with the development and management of research programs. Applications or nominations should include a résumé and the names of references, and should be sent to: Dean William Fash, Chairman, Search Committee, College of Architecture, Georgia Institute of Technology, At-lanta, Georgia 30332, preferably by 1 May 1979. An Equal Education and Employment Opportunity Institution

AVIAN SOCIOBIOLOGIST. Applications are solicited for a half-time assistant professorship in avian sociobiology. Position will be at the assistant profes-sor level and will be available September 1979. Ap-plicants must have Ph.D., postdoctoral research ex-perience, and three or more publications in internationally circulated and refereed journals. Send curriculum vitae, names and addresses of five refer-ences, and one-page summary of current and antici-pated research interests by 15 April 1979 to:

#### Dr. Michael Gilpin Search Committee Department of Biology C-016 University of California, San Diego La Jolla, Calif. 92093

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

#### **BIOCHEMICAL TOXICOLOGIST**

An immediate opening exists for an individual with a Ph.D. in toxicology or pharmacology with back-ground in organic or analytical chemistry. The posi-tion involves disposition, metabolism, and nucleic acid binding of toxic chemicals in vivo and in vitro in mammals. Experience in isolation and identification of metabolites of foreign chemicals is desirable.

The position provides an opportunity for the successful candidate to develop his/her own area of interest.

The Syracuse Research Corporation (SRC) is a mul-tidisciplinary, not-for-profit organization located on the south campus of Syracuse University. SRC of-fers a competitive salary, excellent benefits, and a stimulating research environment.

For confidential consideration, please send résumé including salary history, and three references to:

Personnel Manager Syracuse Research Corporation Merrill Lane Syracuse, New York 13210

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CHEMIST – Development of techniques and design of polymeric reagents for synthesis of proteins and polypeptides for biology and medicine. Minimum of 1 year of experience on enzyme research. Ph.D. in chemistry; 37<sup>1</sup>/<sub>2</sub>-hour week; salary: \$13,000. Con-tact: Dr. John Glass, Department of Physiology and Biophysics, THE MOUNT SINAI SCHOOL OF MEDICINE, One Gustave L. Levy Place, N.Y., N.Y. 10029. An Equal Opportunity Employer.

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## AUSTRALIA MINISTRY FOR THE ARTS NATIONAL MUSEUM OF VICTORIA

The National Museum of Victoria, founded in 1854, is a state government funded museum covering the fields of zoology, mineralogy, palaeontology, and anthropology with a special research interest in Southeastern Australia. The museum is under the control of the National Museum of Victoria Council and staff are employed by the Public Service Board of Victoria. There are 11 curatorial departments with a total scientific staff of 26. Research is supported by one of the largest natural history reference li-braries in Australia. The collections contain significant holdings in most animal groups.

Applications are invited from persons who possess appropriate qualifications for the following position: CURATOR OF CRUSTACEA

## Class "SO-5," Second Division A\$18,251

The appointee will be responsible to the director to carry out appropriate taxonomic research, to main-tain and curate the departmental collection, answer public and professional enquiries, and contribute, as required, to the educational and exhibition pro-grammes of the museum.

The successful applicant will possess an approved The successful applicant will possess an approved higher degree in science with a major in zoology and proven evidence of wide research experience appro-priate to the collections, together with ability to maintain collections and advise on museum exhibits. The successful applicant will, subject to passing a prescribed medical examination, be appointed as permanent officer of the Victorian Public Service. Conditions of service include 4 weeks of annual leave with holiday pay loading, liberal sick leave, sectority and restrictly leave a eligibility for long

maternity and paternity leave, eligibility for long service leave after completion of 10 years of service, a generous contributory and superannuation scheme.

Applications in writing, quoting Position No. L08/ 25/0151/8, and stating qualifications, experience, and date of birth, must reach: the Secretary, Public Ser-vice Board of Victoria, 1 Treasury Place, Melbourne, 3002, Victoria, Australia, by not later than 9:30 a.m. on Wednesday, 16 May 1979.

VICTORIAN PUBLIC SERVICE \*

## DIRECTOR UNIVERSITY OF MINNESOTA ST. PAUL CAMPUS LIBRARIES

Under the general direction of the director of University of Minnesota Libraries, the di-rector of the St. Paul Campus Libraries is responsible for the administration of this de-partment, which includes a Central Library, which is undergoing major expansion, and six physically separate subject libraries. The collections total over 200,000 cataloge volumes as well as substantial holdings in government publications and other materigovernment publications and other materi-als, which support programs in agriculture, biological sciences, and veterinary medi-cine. There is an operating budget of \$770,000, including \$275,000 for acquisition and binding, and a staff of 41 FTE, including 12 professionals. As director of one of the seven major departments in the University liberaries the including rate interiments fully in Libraries, the individual participates fully in University Libraries-wide planning and program development.

Applicants must have demonstrated ex-ceptional skills in leadership, administration, planning, and interpersonal relations. They must possess the M.L.S. or an appropriate equivalent, as well as significant applicable experience in a major university library. An educational background in the agricultural, biological calence or supporting science is biological sciences, or supporting science is desirable. Applicants should be able to meet the requirements of a university libraries fac-ulty appointment with tenure at the rank of associate professor or professor.

The minimum starting salary is \$25,000; this includes an administrative stipend.

Closing date for receipt of applications: 15 May 1979.

The University of Minnesota is an Equal Opportunity Educator and Employer

Send application, detailed résumé, and names of three references to: Clarence Car-ter, Personnel Officer, 499 Wilson Library, University of Minnesota, Minneapolis, Min-nesota 55455.

**BIOLOGY, ASSISTANT PROFESSOR.** The Depart-ment of Biology of Chatham College seeks a Ph.D. with a strong commitment to excellence in teaching. Primary responsibility is in the teaching of general biology with expertise to teach introductory and upper level courses in ecology or marine biology or nu-trition. Other areas will be considered with the exception of botany, microbiology, genetics, and de-velopmental biology. Position open for fall 1979. Interested candidates should send curriculum vitae and three letters of reference to: Dr. Conrad M. Hess, Department of Biology, Chatham College, Pittsburgh, Pa. 15232. Equal Opportunity Employer.

BOTANIST/PLANT ECOLOGIST — Applications in-vited for position of MARKETING REPRESENTA-TIVE—MANAGEMENT TRAINEE with a major North American grower of flower seeds. Individual, if selected, will work with both garden seed and wild-flower seed customers. Service of accounts and planting recommendations will be major duties. Position will allow involvement in pricing, advertising, market planning, and general management.

Opportunities for North American travel (several 2to 3-week trips per year). Must relocate to Los An-geles area. B.S. in botany or plant ecology required; M.S. desirable. Salary: \$12,000 per year and fringes. Contact: Howard S. Bodger, President, Bodget Seeds, Ltd., Box 5090, El Monte, Calif. 91734.

A position is available in the Department of Mi-A position is available in the Department of Mi-crobiology at the assistant professor level for a CEL-LULAR IMMUNOLOGIST (M.D.). Columbia Uni-versity, College of Physicians and Surgeons, New York. Teaching duties are at graduate and medical student level. Send curriculum vitae and names of three references to: Harold S. Ginsberg, M.D., Chairman, Department of Microbiology, Columbia University, College of Physicians and Surgeons, 701 West 168 Street, New York, N.Y. 10032. Columbia University is an Equal Opportunity/Affirmative Fem-University is an Equal Opportunity/Affirmative Employer.

CHAIRPERSON, ANATOMY, SCHOOL OF MEDI-CINE, KANSAS CITY, KANSAS. Applications in-vited from established scholars with a strong com-mitment to research and teaching. Must have dem-onstrated a strong ongoing research program as well as capability of leading and administrating a depart-ment with a present full-time faculty of 13, 6 sup-porting staff, and 9 teaching assistantships. Send curriculum vitae, bibliography, and three references by 15 April to: Dr. H. Clarke Anderson, Chairman, Anatomy Search Committee, Department of Patholo-gy, University of Kansas School of Medicine, College of Health Sciences and Hospital, Kansas City, Kans. 66103. An Equal Opportunity/Affirmative Action Employer. Employer

CHEMICAL TOXICOLOGIST. Tenure-track assist-ant or associate professor. Available August 1979. Ph.D. required. Previous training and research expe-rience in toxicology is essential. Applicant should have a strong background in chemistry and biochem-istry. The successful applicant will be expected to develop a strong research program in toxicology which would attract continued outside funding in support of our M.S. chemistry and Ph.D. biomedical sciences degree programs. Responsibilities include undergraduate teaching in the individual's specialty as well as graduate courses in toxicology. Send ré-sumé, research project proposals, and three letters of recommendation to: Dr. Frank E. Scully, Jr., Chairman, Search Committee, Department of Chem-ical Sciences, Old Dominion University, Norfok, Va. 23508. Applications must be received no later than 30 April 1979. Applications from all qualified indi-viduals are invited. An Affirmative Action/Equal Op-portunity Employer.

#### BIRZEIT UNIVERSITY

An independent Arab University in the Israeli-occu-pied West Bank of Jordan has the following faculty openings for the academic year 1979–1980: BIOL-OGY-BIOCHEMISTRY, CHEMISTRY (PHYS-ICAL, INORGANIC, ORGANIC), MATHEMATICS (ALGEBRA, ANALYSIS, MATHEMATICAL STA-TISTICS), PHYSICS (EXPERIMENTAL AND THE-ORETICAL). English is the basic language of in-struction and candidates should have a Ph.D. prefer-ably or a master's degree with experience. Starting struction and candidates should have a Ph.D. prefer-ably or a master's degree with experience. Starting annual salary for Ph.D. is 2700 Jordanian Dinars (current exchange 1 J.D. = U.S.3.35). Optional summer teaching extra. Fringe benefits include relo-cation allowance (15 percent of salary). Transporta-tion also provided. All applications should be ad-dressed to: Dean of the Faculty of Science, Birzeit University, Birzeit, West Bank via-Israel.

#### POSITIONS OPEN

DIRECTOR. The Fred Hutchinson Cancer Research Center, one of the 20 comprehensive cancer re-search centers in the United States, seeks a director to serve as its chief executive officer. The director's duties include responsibility for hiring scientific personnel, budget and grant preparation and review and space allocation. The director should be a medi and space alrocation. The director should be a field-cal doctor with cancer research, clinical, administra-tive, and grant experience. Résumés should be sub-mitted no later than 6 April 1979, to: David C. Ly-cette, Co-Chairman, Search Committee, 3800 Rainer Bank Tower, Seattle, Washington 98101. An Equal Opportunity Employer.

A search is announced for a **DIRECTOR**, **PRO-GRAM IN MEDICAL SCIENCES**, Florida State University. This innovative program integrates un-dergraduate curricula at Florida State University and Florida A&M University in Tallahassee, Flor-ida, with the first year medical curriculum after which students transfer to the University of Florida which students transfer to the University of Florida College of Medicine in Gainesville for completion of their M.D. degree. Qualifications desired in the di-rector include an M.D. or Ph.D. degree, experience in medical education, some administrative experi-ence, strong leadership ability, and sufficient evi-dence of scholarship to qualify for an appointment in an appropriate academic department at Florida State University. Salary range up to \$40,000, commensu-rate with qualifications and experience.

Send letters of application or nomination, curricu-lum vitae, and letters of recommendation to: Dr. Lloyd M. Beidler, Chairman, Search Committee for Director, Program in Medical Sciences, Room 239, Biology Unit I, Florida State University, Tallahassee, Florida 32306. Application deadline: 30 April 1979. An Affirmative Action/Equal Opportunity Employer.

## NEW POSITION DIRECTOR OF MARINE SCIENCES PROGRAM University of Houston, Central Campus Houston and Galveston, Texas

Search has commenced for a director of the developing Marine Science Program at the University of Houston. This appointment is a 12-month, full facul-ty appointment at the advanced level on the Central Campus, Houston. Seriously interested applicants should be of high academic stature, national profes-sional reputation, and should possess evidence of consistent success in funded research. Area of exconsistent success in tunded research. Area of ex-pertise is open, rank and salary are negotiable, and research space will be provided either at the Nation-al Marine Fisheries Laboratory (Galveston) or on the Houston Central Campus. Previous administra-tive experience is most desirable. Applicants are to send curriculum vitae, significant reprints, names of five referees, and a statement of future research plans to: plans to:

Search Committee, Director of Marine Science Program c/o Department of Biology Science and Research Building II University of Houston Houston, Texas 77004 Equal Opportunity Employer

**ECOLOGIST**, in undergraduate biology department. Tenure-track position beginning September 1979. Recent Ph.D. required, rank dependent on experi-ence. To teach ecology, participate in team-taught general biology course and an advanced course in own specialty. Primary consideration given to teach-ing excellence; research encouraged. Applications from women particularly welcome. Send curriculum vitae and three letters of recommendation to: Dr. Bruce B. Criley. Head. Biology Department. Illinois Bruce B. Criley, Head, Biology Department, Illinois Wesleyan University, Bloomington, Ill. 61701. Equal Opportunity Employer.

ENVIRONMENTAL PLANNING. Visiting profes-sorship available in University of California, Los Angeles (UCLA), Urban Planning Program for aca-demic year 1979-1980, with possibility of continuing appointment. Should have experience in environ-mental planning and policy formulation. Must be able to teach a course applying scientific (for ex-ample, ecological) principles to environmental is-sues. Background in environmental/life sciences preferred. Doctorate complet vergected shortly. Planning experience desirable. Send curriculum vitae, names of referees, and a brief statement of in-terests/objectives to: Profesor W. D. Conn, UCLA terests/objectives to: Professor W. D. Conn, UCLA School of Architecture and Urban Planning, Los An-geles, Calif. 90024. An Equal Opportunity/Affirnative Action Employer.

#### POSITIONS OPEN

**ENZYMOLOGIST**, experienced in preparation and evaluation of immobilized enzymes for thera-peutic use. Position involves collaborative clinical studies and development of immobilized enzyme de-vices. Send résumé to:

Dr. Joseph D. Shore
Biochemistry
Henry Ford Hospital
2799 West Grand Boulevard
Detroit, Michigan 48202

EVOLUTIONARY BIOLOGIST. The Department of EVOLUTIONARY BIOLOGIST. The Department of Biology, University of California, San Diego, invites applications for a faculty position at the level of as-sistant or associate professor. Applicants must have Ph.D., postdoctoral experience, and three or more publications in internationally circulated and re-fereed journals. Teaching duties include a course in evolution, general population biology, and graduate seminars. Applicants should send curriculum vitae, names and addresses of five references, and three recent reprints. The position will be available Sep-tember 1979 and the level and salary are negotiable. Send applications by 15 April 1979 to: Dr. Leck Bendbury.

## Dr. Jack Bradbury Search Committee Department of Biology C-016 University of California, San Diego La Jolla, Calif. 92093

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

THE DEPARTMENT OF OPHTHALMOLOGY, UNIVERSITY OF MINNESOTA, seeks a full-time faculty member with experience in cornea and ex-ternal diseases and anterior segment surgery. Salary and rank will be commensurate with experience. In-guiries should be made to: Dr. Donald J. Doughman, Donattment of Optichermology. University of Minne quiries should be made to: Dr. Donald J. Dougnman, Department of Ophthalmology, University of Minne-sota, Box 493, Health Sciences Unit C 9-245, 516 Dela-ware Street, SE, Minneapolis, Minn. 55455. The Uni-versity of Minnesota is an Equal Opportunity Employer.

#### FACULTY POSITIONS

Full-time faculty positions are available in the Department of Obstetrics and Gynecology for basic sci-entists with a research interest in reproductive biology and an expertise in biochemistry. A doctorate is required. Academic rank and salary are dependent on qualifications. If interested, please send curricu-lum vitae and bibliography to:

William N. Spellacy, M.D. Professor and Head Department of Obstetrics and Gynecology Abraham Lincoln School of Medicine University of Illinois Medical Center 840 South Wood Street Chicago, Illinois 60612 Affirmative Action/Equal Opportunity Employer

FACULTY POSITION, PEDIATRIC NUTRITION

Department of Pediatrics, University of Arizona College of Medicine, invites applications for faculty position at professor or associate professor level, to position at professor or associate professor level, to develop vigorous research program in pediatric nu-trition. Established investigator sought, M.D. and/or Ph.D. with substantial record in nutrition research. Address inquiries to: Dr. Gail Harrison, Department of Pediatrics, University of Arizona College of Medi-cine, Tucson, Ariz. 85724. The University of Arizona is an Equal Opportunity/Affirmative Action/Title IX/ Section 504 Employer.

#### FACULTY POSITION

Assistant professor needed in Forensic Science Program at the University of New Haven, starting in eptember 1979.

Primary responsibilities: Graduate and undergraduate teaching,

Student advising, Research, and

Possible teaching at extensions.

ualifications: Ph.D. in forensic science or related natural science area, and Laboratory experience.

alary: dependent on training and experience.

Applications must be received by 1 May 1979. Send curriculum vitae to:

Dr. Henry C. Lee Director of Forensic Science University of New Haven 300 Orange Avenue West Haven, Connecticut 06516 Telephone: 203-934-6321, extension 429

An Equal Opportunity/Affirmative Action Employer

Biologist

### **DIVISION DIRECTOR ENVIRONMENTAL** SCIENCE

ESE, a total environmental services consulting firm has a position available for an outstanding individual with a MS or PhD in the life sciences plus several years experience to manage the Environmental Science Division. Background should include development of new business and management of large multi-disciplinary projects preferably in utilities, phosphate or surface coal mining.

Will manage and further develop a major division which includes acquatic biology, terrestrial ecology and environmental planning activities. Excellent starting salary: \$30,000-\$35,000 and the potential for promotion to Vice President.

If you wish to be considered for this position, send your chronological resume with salary history in confidence to Hall A. Acuff.

#### ENVIRONMENTAL SCIENCE AND ENGINEERING, INC. P.O. Box 13454

Gainesville, Florida 32604

An Equal Opportunity Employer M/F

#### GEOPHYSICIST **Marine Science Institute** The University of Texas at Austin

The University of Texas Marine Science Insti-tute's Geophysics Laboratory is seeking a geophy-sicist to conduct forefront research into advanced signal processing techniques for marine multi-channel reflection/refraction profiling and ocean bottom seismonmeter methods. These techniques will include: deep-water deconvolution, source sig-nature enhancement, large aperture array proc-essors, seismic modeling and linear inversion, wave migration depth conversion, and other imag-ing techniques. The research focus will be primar-ily directed toward determining the crustal struc-ture beneath continental margins and deep ocean basins. basins

Candidates must possess a strong theoretical

basins. Candidates must possess a strong theoretical background in wave propagation, array theory, and digital computer signal processing. A Ph.D. degree or equivalent is required. The successful applicant will be expected to play a major lead-ership role in developing seagoing as well as labo-ratory research programs and to participate in the graduate education program. The Geophysics Laboratory's marine facilities include: two ocean-going research vessels equipped with towed, single and multichannel seis-mic streamer arrays, large air gun sound sources, several shipboard minicomputers, digital data ac-quisition systems (DFS IV/III) and other standard marine geophysical instrumentation; sonobuoy re-ceiver systems; OFS IV/III) and other standard marine geophysical instrumentation; sonobuoy re-ceiver systems; OFS IV/III) and other standard marine geophysical instrumentation; sonobuoy re-reciver systems; OFS IV/III) and other standard marine geophysical instrumentation; sonobuoy re-reliver systems; and the Texas Ocean Bottom Seismograph system. At the Galveston campus a TEMPUS multichannel seismic computer and gen-eral purpose IBM 370, PDP 15, and INTERDATA computers are available. A CDC 7600 computer is located on the Austin campus. This position is immediately available. Salary and rank will be commensurate with experience. Interested applicants should submit their resumé stating professional and personal qualifications, publication record, and references to: Director, The University of Texas Marine Science Institute, Geophysics Laboratory, 700 The Strand, Galves-ton, Texas 77550. The University of Texas is an equal opportunity/ affirmative action employer.

### PhD **Biopharmaceutics 3M Biosciences Research Laboratory**

3M, a major R&D organization, has an immediate opening in its central research laboratories for a creative senior scientist experienced in research on drug delivery systems. Qualifications for this position include a PhD in Biopharmaceutics or a related field and at least 2 years additional postdoctoral or industrial experience. Located at 3M Center in St. Paul, Minnesota, we offer a competitive salary, excellent benefits and a challenging opportunity. Send your resume in-cluding salary history requirements in confidence to Dennis L. Nelson.

Staffing & Employee Resources 3M Center St. Paul, Minnesota 55101

We Are An Equal Opportunity Employer M/F





#### RESEARCH ASSOCIATE EAST-WEST CENTER

The East-West Center is a national educational institution founded by the U.S. Congress in 1960 to promote better relations and understanding among nations through cooperative programs of study, research, and training. Applications and nominations for academic staff positions in the Environment and Policy Institute are being sought. The research associate positions are full-time and may be permanent (subject to successful probationary period) or fixed-term. Applications for research fellow appointments in these areas are also sought. All center programs are multinational and multi-disciplinary. Academic staff, visiting scholars, professionals, and graduate degree students form teams which work on problems with significant mutual consequences for the United States and nations of Asia and the Pacific.

Positions are open to candidates with experience in the following areas:

- Policy and management analysis, focusing on transnational marine resource and management issues or on environmental dimensions of sectoral policies, particularly energy,
- Geography and resource management, with emphasis on relating marine resources and activities to jurisdictional patterns or on the management and utilization of terrestrial systems such as forests,
- Economic analysis, focusing on current and evolving approaches of resource and environmental economics related to assessment of development activities or of ocean management policy options,
- Water resources/quality analysis, focusing on quantification and assessment of water resources in economic development and regional planning in Asia, and
- Environmental health analysis, focusing on the direct and indirect effects of environmental factors on human health and welfare particularly in Asia.

Candidates must have a Ph.D. or its academic equivalent, plus at least 2 years of experience in areas relevant to the institute programs of natural resource and environmental assessment in development planning and assistance and of marine resource and environmental management issues in Asia and the Pacific.

Cover letter should give examples of demonstrated ability to: (i) discover knowledge about natural resource and environmental issues, especially at the international level; (ii) develop applications of this knowledge, for example, curricula, educational materials, policy aids; and (iii) design and implement research and education projects and activities in a team context, preferably multinational. Experience in Asia/Pacific region preferred. Working proficiency in the English language required. Experience in natural resource and environmental analysis and assessment processes desirable. Familiarity with computer modelling and simulation desirable.

Salary commensurate with extent of experience and qualifications. Additional current cost-of-living allowance of 15 percent (subject to change). All nominees will be contacted to determine interest. Applications with cover letter stating area of interest, complete curriculum vitae, and names and addresses of three professional references, must be postmarked no later than 1 June 1979. Starting date flexible. Send to: Rebecca Lembeck, Associate Personnel Officer, Personnel, Department 19, East-West Content, 1777 East-West Road, Honolulu, Hawaii 96848.

An Equal Opportunity Employer, M/F

### ENVIRONMENTAL ENGINEERS

We have an immediate opening for three (3) professional staff members within our Environmental Program Department. The openings are:

#### Senior Environmental Engineer or Scientist

BS or MS in an applicable Engineering or Science discipline and six (6) years of environmental related experience. Responsibilities will include: Technical administration of consultant contracts, development and overview of environmentally related programs including cost and schedule, and maintenance of knowledge of regulations dealing with air and water quality and environmental requirements for power plants and associated facilities.

#### **Environmental Scientist (Biologist)**

Advanced degree in aquatic ecology or fisheries biology, and three (3) or more years of related experience. Responsibilities will include: Technical evaluation of ecological monitoring programs, preparation and coordination of environmental documents and other duties to support environmental monitoring and licensing efforts and ecosystem impact analysis for power plants and associated facilities.

#### **Environmental Engineer**

BS in an applicable Engineering or Science discipline and three (3) years of applicable experience. Responsibilities will include: Preparation and coordination of environmental documents, compliance monitoring, and other duties to support environmental licensing efforts for power plants and associated facilities.

We are a major Pacific Northwest utility agency with a construction budget over eight billion dollars. One (1) BWR and four (4) PWR's are presently in full construction. Salary is commensurate with experience. Applicants send a detailed resume with specific work experience and salary history to:

Jerry L. Richie DEPT. RAC **Washington Public Power Supply System** P.O. Box 968 Richland, WA 99352 an affirmative action employer

#### POSITIONS OPEN

FACULTY POSITION GEOCHEMISTRY/CHEM-ICAL OCEANOGRAPHY—Anticipated opening as assistant professor in geochemistry/chemical oceanography for September 1979. Candidate should hold a Ph.D. and will be expected to teach graduate-level courses and to develop his/her own research programs. Candidates should have experience in coastal marine waters. By 11 May 1979 send a complete résumé and have three letters of reference sent directly to: Dr. D. W. Pritchard, Chairman, Search Committee, Marine Sciences Research Center, State University of New York at Stony Brook, Long Island, New York 11794. Equal Opportunity/Affirmative Action Employer.

#### NORTHWESTERN UNIVERSITY MEDICAL CENTER

The Department of Physiology is interviewing candidates for a faculty position in the area of CNS control of cardiovascular function. Research environment includes group of investigators studying CNS control of body functions and behavior, using a variety of contemporary neurophysiological techniques, including microelectrode recording, online computers, and control theory concepts. Applicants should be skilled in these areas. Send curriculum vitae, statement of research goals and past experience, and names of references to: Dr. James Houk, Chairman of Physiology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, Illinois 60611. An Affirmative Action Employer.

#### NORTHEASTERN UNIVERSITY FACULTY POSITIONS

**PROGRAM DIRECTOR** for integrated, cooperative medical laboratory science program. Applicant must be certified medical technologist and should have doctorate (master's with outstanding credentials considered). Experience in clinical laboratory and academic teaching is essential; demonstrated research ability is desirable. Rank and salary commensurate with qualifications and experience. Position available 1 July 1979.

**CLINICAL CHEMIST AND CLINICAL MICRO-BIOLOGIST** for integrated, cooperative, medical laboratory science program. Applicants should have doctorate (master's with outstanding credentials considered) and must be certified or eligible for certification as medical technologist or clinical chemist/ microbiologist. Experience in clinical laboratory and academic teaching is essential; demonstrated research ability is desirable. Rank and salary commensurate with qualifications and experience. Applicant may also be considered for position as program director. Position available summer 1979.

If interested, submit curriculum vitae by 15 April 1979 to: Dr. John Klaas, Northeastern University, 206 Mugar Building, Boston, Mass. 02115.

Northeastern University is an Equal Opportunity/ Affirmative Action/Title IX Employer.

#### FACULTY POSITION IN PHYSICS

Applications are invited from qualified candidates for one faculty position in physics at Rust College. Rank and salary are open, and will depend on qualification and experience. Applicants must hold the Ph.D. degree in physics. Research specialization should have biomedical relevance. Ability to acquire funds from external funding agencies is highly desirable. Successful candidate will teach undergraduate physics courses, conduct and direct research in area of specialization, and assist in coordinating undergraduate pre-engineering training program. Send curriculum vitae (including bibliography), detailed statement of teaching/research experience and interests, and three letters of recommendation to: Dr. Emmanuel C. Igobwe, Acting Chairman, Division of Science and Mathematics, Rust College, Holly Springs, Mississipj 38635. Applications and supporting materials must be received no later than 15 May 1979.

Rust College is an Equal Opportunity Employer

FACULTY POSITION in growing group in the BIO-LOGICAL SCIENCES to teach biology and conduct research in related area. Ph.D. and evidence of research activity required. Send résumé and three letters of recommendation no later than 20 April 1979 to:

#### Biology Search Committee Department of Chemistry and Chemical Engineering Stevens Institute of Technology Hoboken, N.J. 07030

An Equal Opportunity/Affirmative Action Employer

SCIENCE, VOL. 203

engineers

### FACULTY POSITION AVAILABLE IN RETINAL HEMODYNAMICS AN BLOOD FLOW STUDIES AND

BLOOD FLOW STUDIES University of Illinois Eye and Ear Infirmary and Abraham Lincoln School of Medicine, The Univer-sity of Illinois at the Medical Center, Chicago. Applications are invited for a faculty position at the assistant or associate professor level. The major responsibility will be supervision of research on vas-cular flow in the retina, utilizing a unique nonin-vasive computerized ophthalpeocenv sustem Applied vasive computerized ophthalmoscopy system. Ac-tive interchange with engineers and clinical ophthal-mologists will be fostered. An advanced degree (Ph.D. or M.D.) is a prerequisite. Those interested should direct inquiries, together

with curriculum vitae and bibliography, to: Morton F. Goldberg, M.D., Professor and Head, Department of Ophthalmology, University of Illinois Eye and Ear Infirmary, 1855 West Taylor Street, Chicago, Illinois 60612; telephone: 312-996-6590.

Equal Opportunity/Affirmative Action Employer

**GENERAL ZOOLOGIST.** The Department of Biology, University of California, San Diego, invites applications for a temporary position of lecturer. The starting 9-month salary is \$13,944 to be paid in 12 equal installments. This appointment is for 1 year beginning in September 1979 and possibly renewable at the end of the first year. Applicant must have Ph.D., and university teaching experience is desirable. Teaching duties include a lecture course to be taught fall quarter and reneated winter course to be taught fall quarter and repeated winter quarter and a laboratory course to be taught winter quarter and repeated spring quarter. Applicants should send curriculum vitae and the names and ad-dresses of five references. Send applications by 15 April 1979 to:

Dr. Darwin Berg Search Committee Department of Biology B-022 University of California, San Diego La Jolla, Calif. 92093

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

### GENETICS, BIOCHEMISTRY, MICROBIOLOGY

Applications are being invited to fill a position at the assistant professor level effective 1 September 1979. Salary negotiable. The successful candidate will be expected to show competence in teaching ge-netics, biochemistry, and microbiology at the under-graduate level. Ph.D. required. Applicants should send curriculum vitae, transcripts, and names of three references by 1 April 1979 to: Dr. Aubrey Thomas, Chairman, Biology Department, Merrimack College, North Andover, Mass. 01845.

Equal Opportunity Employer

#### GENETIC COUNSELOR

The University of Kansas College of Health Sciences and Hospital is seeking a trained genetic cour-selor to coordinate genetics unit activities and to asselor to coordinate genetics unit activities and to as-sist in the development of a satellite program. Quali-fications include an M.S. degree and at least 500 hours in direct contact with patients in supervised medical genetics clinic and laboratories. Salary is negotiable. Send résumé to: Neil Schimke, M.D., De-partment of Medicine, Kansas University Medical Center, 39th and Rainbow Boulevard, Kansas City, Kans. 66103. Closing date for application is 15 April 1979. An Affirmative Action/Equal Opportunity Em-plover. plover.

IMMUNOLOGIST (ASSISTANT PROFESSOR). Applications are solicited for a 9-month, tenure-track faculty position in immunology. The appointment will be at the assistant professor level and will be available autumn 1979. Applicants must have a hen will be at the assistant professor level and will be available autumn 1979. Applicants must have a Ph.D. degree and postdoctoral or equivalent experi-ence. The applicants should provide evidence of their ability to develop and direct a quality research program in immunology. Responsibilities of the suc-cessful candidate will include developing a research program, advising graduate students, development of a graduate-level course in his or her specialty in immunology, and teaching immunology to under-graduate microbiology majors. Complete curriculum vitae and a list of three references should be sent to: Immunology Search Committee, Department of Mi-crobiology, The Ohio State University, 484 West 12 Avenue, Columbus, Ohio 43210. Applications will be accepted until 15 May 1979. The Ohio State Univer-sity is an Equal Opportunity/Affirmative Action Em-ployer. All qualified persons, including women, members of minority groups, and the handicapped, are encouraged to apply.

30 MARCH 1979

#### POSITIONS OPEN

IMMUNOLOGIST OR VIROLOGIST. Available IMMUNOLOGIST OR VIROLOGIST. Available summer 1979. Requirements: Ph.D. in animal virol-ogy or immunology and demonstrated ability to con-duct a high-quality research program. Preference will be given to candidates with postdoctoral experi-ence. Duties include shared participation in instruc-tion of medical students, instruction of graduate stu-dents, and conduct of independent research. Ap-pointment will be a consistent or prospite professor dents, and conduct of independent research. Appointment will be at assistant or associate professor level. Salary will be commensurate with experience. Send curriculum vitae and names of three references to: Dr. Mark Hall, Department of Microbiology, Uni-versity of Nevada, Reno, Nevada 89557. Application deadline is 1 May 1979 or whenever a suitable can-didate is found. The University of Nevada is an Equal Opportunity Employer and does not discrimi-nate on the basis of sex, race, color, religion, handi-caps, or national origin in the educational programs or activities it operates.

#### POSITIONS OPEN

#### **MOLECULAR BIOLOGY OF** ONCOGENIC VIRUSES ASSISTANT OR ASSOCIATE MEMBER

The Division of Virology, St. Jude Children's Re-The Division of Virology, St. Jude Children's Re-search Hospital, invites applications from individ-uals with promise (assistant) or evidence (associate) of outstanding research abilities. We favor can-didates with interests in nuclear DNA viruses (pa-pova-, adeno-, herpes-) and experience in recombi-nant DNA technology. However, exceptional can-didates with other research interests will be considered. This is a full-time research position with no teaching or service responsibilities. St. Jude Hos-pital is an Equal Opportunity Employer. Please sub-mit curriculum vitae, summary of research plans, and names of three referees to: Dr. Allan Granoff, Chairman, Division of Virology, St. Jude Children's Research Hospital, Memphis, Tenn. 38101.



#### **GROSS ANATOMIST**

Anatomist needed to teach gross anatomy. Appli-cant should have 5 to 8 years of experience, hold M.D. or Ph.D. degree, and have demonstrated com-petence in both teaching and research. Prefer indi-vidual with secondary interest in microscopic anato-my. Position available at assistant/associate level; salary commensurate with qualifications. Send complete curriculum vitae, including names of three professional references, to: Dr. J. W. Wag-ner, Head, Department of Anatomy, Texas A & M University, College of Medicine, Olin E. Teague Re-search Building, College Station, Texas 77843. Texas A & M University is an Equal Opportunity/ Affirmative Action Employer.

## UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

INSTRUCTOR, ASSISTANT PROFESSOR, ASSO-CIATE PROFESSOR, OR PROFESSOR position available 1 July 1979. The physician will take part in the program of patient care, teaching, and research carried on in the Department of Radiology. He or she will supervise the activities of the resident staff and aid in the teaching of residents and medical stu-dents. Must be Board-eligible or Board-certified. Entering level commensurate with qualifications and experience. Reply to: Box 106, SCIENCE. Code 500H0. A nondiscriminatory, Affirmative Action Employeer. Employer.

INSTRUCTOR/ASSISTANT PROFESSOR for non-tenure-track position teaching anatomy-physiology and human anatomy laboratories to prehealth sci-ence students. M.A./M.S. is the minimum require-ment. Teaching experience desirable. Closing date for applications 6 April 1979. Send résumé and names of three references to: Dr. Peter Giebel, De-partment of Biology, Virginia Commonwealth Univer-sity, Richmond, Virginia 23284. An Equal Opportu-nity/Affirmative Action Employer.

## UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

Four positions available 1 July 1979 for INSTRUC-TOR THRU PROFESSOR at the University of Mich-igan, Department of Radiology. The physician will take part in the program of patient care, teaching, and research carried on in the Department of Radiol-ogy. He or she will supervise the activities of the resident staff and aid in the teaching of residents and medical students. Must be Board-eligible or Board-certified Entering level commensurate with qualify certified. Entering level commensurate with qualifications and experience. Reply to: Box 107, SCI-ENCE. Code 1500F0, 700F0, 900F0, 1200H0. A non-discriminatory, Affirmative Action Employer.

LABORATORY CHIEF: CLINICAL PHARMA-COLOGY. Individual needed to develop and super-vise performance drug assays for research and spe-Vise performance drug assays for research and spe-cial patient care projects. Individual will participate in originating, conducting, and reporting clinical pharmacology research studies. Ph.D. in a scientific discipline relevant to clinical pharmacology re-quired; 3 to 5 years of experience in performing and/ or supervising drug assay work, and analysis experi-ence (fluorometry, gas chromatography, radioimmu-noassay, and so forth) preferred. Salary is commen-surate with experience. Excellent employee benefit program. Send detailed résumé with salary require-ment to: Dr. Roger K Ferenson M D. Director of ment to: Dr. Roger K. Ferguson, M.D., Director of Clinical Pharmacology, Thomas Jefferson University Hospital, Room 502, Main Building, 10th and Walnut Streets, Philadelphia, Pa. 19107. Affirmative Action/ Equal Opportunity Employer

#### MARINE CHEMIST

The Department of Oceanography, University of Hawaii, anticipates an opening for a marine chemist at the assistant researcher level, starting 1 Septem-ber 1979 pending availability of tenure-track position and funds. The position will be equally split between the Department of Oceanography for graduate teaching and the Hawaii Institute of Geophysics, where research is emphasized. The anonite will be where research is emphasized. The appointee will be expected to explore his/her own field of special-ization and to interact extensively with faculty and ization and to interact extensively with faculty and students in other fields. Applicants should solicit three letters of reference, and submit curriculum vitae and a brief description of their future research plans to: Dr. Keith E. Chave, Department of Ocean-ography, University of Hawaii, Honolulu, Hawaii 96822. All materials must be received by 1 May 1070

The University of Hawaii is an Equal Opportunity/ Affirmative Action Employer

#### POSITIONS OPEN

**MEDICAL MICROBIOLOGY.** Applications are invited from individuals interested in a position as assistant or associate professor at Ohio University in the College of Osteopathic Medicine and the Department of Zoology and Microbiology. This teaching-research position involves the instruction of osteopathic medical students in gradient microbiology and research position involves the instruction of osteo-pathic medical students in medical microbiology and graduate students at the M.S. and Ph.D. levels in the area of the candidate's specialty. The successful candidate will be expected to develop a strong inde-pendent research program. Research area is open, but preference will be given to candidates special-izing in pathogenic microbiology. Minimum qualifi-cations include a Ph.D. degree or equivalent; post-doctoral experience and prior medical or dental school teaching are highly desirable.

Interested individuals should submit curriculum vitae, names of three individuals to serve as refer-ences, and a summary of research plans by 15 May 1979 to:

## Biomedical Science Search Committee Ohio University College of Osteopathic Medicine Grosvenor Hall Athens, Ohio 45701

Ohio University is an Affirmative Action/Equal Opportunity Employer.

**NEUROPHYSIOLOGY.** Applications are invited from individuals interested in a position as assistant or associate professor at Ohio University in the Col-lege of Osteopathic Medicine and the Department of Zoology and Microbiology. This teaching-research position involves the instruction of osteopathic med-cal students in neurophysiology, the coordination of position involves the instruction of osteopathic med-ical students in neurophysiology, the coordination of a neuromuscular systems biology course for medical students, and the instruction of graduate students at the M.S. and Ph.D. levels in the area of the can-didate's specialty. The successful candidate will be expected to develop a strong independent research program. Research area is open. Minimum qualifica-tions include a Ph.D. degree or equivalent; prior postdoctoral experience and medical or dental school teaching is highly desirable.

Interested individuals should submit curriculum vitae, names of three individuals to serve as refer-ences, and a summary of research plans by 15 May 1979 to:

## Biomedical Science Search Committee Ohio University College of Osteopathic Medicine Grosvenor Hall Athens, Ohio 45701

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**OCEANOGRAPHER**—Position beginning fall 1979. Candidates must have a Ph.D. in chemical, physical, or geological oceanography and demonstrated teaching effectiveness. First-year duties include teaching beginning and advanced undergraduate courses in beginning and advanced undergraduate courses in nonbiological marine sciences and developing an ac-tive research program. Rank and salary depend on qualifications. Send résumé with names of three ref-erences to: Dr. Richard H. Moore, Science Division, Coastal Carolina College, Conway, South Carolina 29526. Equal Opportunity/Affirmative Action Em-loyer plover.

**PLANT BIOCHEMIST.** Staff position as assistant scientist is anticipated 1 September 1979. Full-time research on regulation of photorespiration including cooperative work on obtaining and analyzing mu-tants on plant tissue cultures to regulate photorespiration and obtain crop mutants with superior net photosynthesis. Ph.D. required with training and interests in research in plant physiology and genetics. Send curriculum vitae and names of three references to: I. Zelitch, Head, Department of Biochemistry, Connecticut Agricultural Experiment Station, P.O. Box 1106, New Haven, Conn. 06504. Equal Opportu-nity/Affirmative Action Employer.

Two **POSTDOCTORAL POSITIONS** available June 1979 to study various aspects of comparative muscle structure, physiology, or biochemistry. Individuals to work with group examining the phenomenon of thick filament shortening seen in several inver-tebrate muscles. Position requires Ph.D. preferably with experience in some aspect of muscle re-search. Salary: \$13,000 to \$16,000, depending on ex-perience. Please send curriculum vitae and names of three references no later than 1 May 1979 to: Dr. B. Walcott or Dr. M. M. Dewey, Anatomical Sciences, Health Sciences Center, State University of New York at Stony Brook, Long Island, N.Y. 11794. An Equal Opportunity/Affirmative Action Employer.

#### POSITIONS OPEN

MOLECULAR BIOLOGIST. The Department of Biology, University of California, San Diego, invites applications for a ladder-rank faculty position in moapplications for a ladder-rank faculty position in mo-lecular biology at a level (up to professor) and salary appropriate to the experience of the applicant cho-sen. The appointee must have had postdoctoral training and is expected to conduct a vigorous re-search program and to participate in undergraduate and graduate teaching. Applicants should send cur-riculum vitae, including a list of publications, and the names and addresses of five references. The po-sition will be available beginning September 1979. Send applications by 15 April 1979 to:

## Dr. Dan L. Lindsley Search Committee Department of Biology B-022 University of California, San Diego La Jolla, Calif. 92093

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

NEPHROLOGIST—The Division of Nephrology in the Department of Medicine at the University of Alabama in Birmingham has available two positions at the associate or assistant professor levels. These positions are open to qualified individuals at a senior level who fulfilled three criteria. First, the individual must have expertise in the care and management of patients with renal disease and in the operation and administration of a hemodialysis unit. Second, the individual must have a firm commitment to teaching programs oriented to medical students, graduate stu-dents, house officers, and fellows. Finally, the indi-vidual should have a research background and be able to carry out independent research. Apply to: J. Terry Holloway, 305 Zeigler, University Station, Bir-mingham, Alabama 35294. An Equal Opportunity/ Affirmative Action Employer.

NEUROBIOLOGY POSTDOCTORAL POSITION. NEUROBIOLOGY POSTDOCTORAL POSITION. Tenable at once, to investigate the synaptic organi-ization of the stomatogastric ganglion and the swim-meret system of crustaceans. This is an opportunity to study the significance of neuronal structure, ionic currents, and synaptic dynamics for the generation of behaviorally significant motor patterns. Salary is comparable to an NIH fellowship. Send curriculum vitae and the names of references to: Brian Mulloney, Zoology Department, University of California, Davis, Calif. 95616; telephone: 916-752-1562.

#### NEUROLOGIST WANTED

Opening for neurologist with Ataxia and Neuro-Opening for neurologist with Ataxia and Neuro-muscular Consultation Unit, Department of Neurol-ogy, University of California, Los Angeles (UCLA) School of Medicine. Collaborative research on bio-chemical aspects of relevant diseases and on clinical pharmacology of inherited ataxias. Junior faculty rank: salary and research details/space to be negoti-ated. Contact: Dr. R. A. Pieter Kark, Reed Neurolog-ical Research Center, UCLA School of Medicine, Los Angeles, Calif. 90024. UCLA is an Affirmative Ac-tion/Eaual Opportunity Employer. tion/Equal Opportunity Employer.

#### PATHOLOGY/IMMUNOBIOLOGY

Applications are invited for the position of assistant Applications are invited for the position of assistant professor in the Immunobiology Unit of the Depart-ment of Pathology, University of Pennsylvania. Minimum qualifications are M.D. and/or Ph.D. de-grees. Preferred candidates will have strong re-search background and current interest in immuno-logical aspects of membrane biochemistry, molecu-lar immunochemistry, and immunogenetics. Send curriculum vitae to: curriculum vitae to:

Dr. Darcy B. Wilson Director, Research Immunology 252 Medical Laboratories/G3 University of Pennsylvania School of Medicine Philadelphia, Pennsylvania 19104 Equal Opportunity/Affirmative Action Employer

The Division of Neuropathology of the University of Pennsylvania invites applications for the position of **RESEARCH ASSISTANT PROFESSOR OR POST DOCTORAL FELLOW.** Candidates must have background in neurochemistry and interests in neuronal plasma membranes. Interested persons should contact:

Dr. Nicholas K. Gonatas Director, Division of Neuropathology 447 Johnson Pavilion/G2 University of Pennsylvania School of Medicine Philadelphia, Pennsylvania 19104 Equal Opportunity/Affirmative Action Employer

## RESEARCH SCIENTIST Endocrinology & Metabolism

An excellent opportunity exists for the individual with a PhD in Biochemistry, Endocrinology, or Nutrition plus 1 to 3 years post doctoral experience to join a team of researchers studying diabetes and obesity. The successful candidate should have demonstrated capability to perform independent research as well as the enthusiasm for and interest in developing a new research program. Preference will be given to candidates with experience in performing metabolic, endocrine or nutritional research related to problems of carbohydrate and lipid metabolism

We're a leading pharmaceutical manufacturer, a Johnson & Johnson Company, with an ultra modern headquarters facility conveniently located in a beautiful rural setting just outside Philadelphia, Pa. We provide an excellent starting salary, a very comprehensive package of benefits and the opportunity to move forward in a totally professional environment. Forward your resume, including salary requirements, to S. Hackman.

McNeil Laboratories, Inc. Fort Washington, Pa. 19034.



An Equal Opportunity Employer, M/F/H/V

Pioneering New Technologies

# STAFF SCIENTIST

## San Francisco Peninsula

Rare opportunity for a creative technical professional to conduct and direct research on dielectric/electrical properties of special materials. You will evaluate new materials and product concepts. MS or PhD in EE, Applied Physics, Material Science or related field and 2-5 yrs. experience in the area of electrical/electronic component design or the physics of materials is required, as well as practical electronic design ability. Polymer experience useful. (Job #037)

Raychem is an extremely successful rapidly growing Multinational Corporation . . . the World Leader in radiation chemistry of polymers! Our 25% annual compounded growth rate since our inception in 1957 is indicative of our commitment to maintain and improve our leadership in the industry. We offer excellent benefits, above average salaries and a healthy, stimulating environment. Please send your resume, including salary history, to Peter Ligeti, Human Resources Department, Raychem, 300 Constitution Drive, Menlo Park, CA 94025. (415) 329-3128. An equal opportunity employer.



## DIRECTOR INSTITUTE FOR ENERGY ANALYSIS

Oak Ridge Associated Universities (ORAU) is seeking a director for the Institute for Energy Analysis. The institute was established in 1974 to address broad questions of energy policy such as energy supply and demand projections, nuclear siting, biological risks of various energy technologies, and the consequences of alternative energy systems. The multidisciplinary staff, about 30, has been recruited from universities and scientific institutions throughout the world. The position requires an individual of recognized scientific distinction. Although responsible for the operation and management of the institute, the director's key role is to provide scientific leadership, coordinate multidisciplinary research studies, and develop major staff projects. Candidates should possess a Ph.D. in a relevant field of science; have a broad understanding of, and commitment to, energy analyses; be experienced in directing multidisciplinary team projects and knowledgeable of federal funding procedures.

Send curriculum vitae and bibliography to: Dr. Philip L. Johnson, Executive Director, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, Tenn. 37830.

ORAU is a private, not-for-profit association of 45 colleges and universities, conducting programs of research, education, and training for government and private organizations. It has particular interest in the fields of energy, health, and the environment. ORAU is noted for its cooperative programs and for its contributions to the development of science and human resources in the South.

An Equal Opportunity Employer

### POSTDOCTORAL TRAINING PROGRAM

Applications are invited for the Institute's program of postdoctoral traineeships in basic sciences relevant to cancer research. These appointments are open to U.S. citizens, U.S. nationals, or persons who have been lawfully admitted to the United States for permanent residence and have in their possession a permanent visa at the time of appointment. Before appointment, an applicant must hold a Ph.D. or its equivalent in a field of training like physics, chemistry, biochemistry, immunology, microbiology, virology, pathology, genetics, molecular biology, development biology or cellular biology and must also have had no more than three years of postdoctoral experience. Appointments will be for one year, renewable for a second year. Stipends are from \$10,000 per year plus fringe benefits and certain travel and relocation allowances. The appointments are funded by the NIH and are subject to the National Research Service Act (Public Law 93-348).

The traineeship program is organized around research in one or more of the laboratories of the participating staff members, and will include participation by trainees in special seminars and colloquia focusing on fundamental problems of cancer research. Application forms can be obtained from:

Dr. Thomas F. Anderson, Coordinator Postdoctoral Training Program The Institute for Cancer Research 7701 Burholme Avenue Philadelphia, PA. 19111

A completed application will also include undergraduate and graduate transcripts, list of publications, abstract of doctoral thesis (ca. 500 words), and letter of recommendation from three persons acquainted with your scientific work.

The Institute for Cancer Research is an equal opportunity/affirmative action employer

## DEPARTMENT OF PHARMACOLOGY SCHOOL OF MEDICINE ST. LOUIS UNIVERSITY MEDICAL CENTER

Applications are invited for faculty positions at the assistant and associate professor level in the Depart-ment of Pharmacology, St. Louis University School of Medicine. Candidates should be dedicated to independent research and are expected to participate in graduate and medical school teaching programs in the department. Nominations or curriculum vitae, selected reprints, statement of teaching and research goals, and the names of three references should be sent to:

Dr. Thomas C. Westfall Department of Pharmacology University of Virginia School of Medicine Charlottesville, Va. 22908

An Equal Opportunity/Affirmative Action Employer, M/F/H

PHARMACOLOGIST—Department of Medicine— Position for research on the biochemical and molecular basis of autonomic and cardiovascular drug ac-tion. Position offers opportunities to supervise laboratory with active pre- and postdoctoral training program and collaboration with senior investigators. Applicant should be accomplished in research in basic pharmacology, for example, molecular, bio-homical or participation in the provide the provide the providence of the providen chemical, or cardiovascular pharmacology; minimum chemical, or cardiovascular pharmacology; minimum of 2 years in appropriate postdoctoral research re-quired. Salary related to rank and step of appoint-ment within the established salary schedule of the University of California, San Diego, School of Medi-cine. Address inquiries to: Dr. Steven Mayer, Divi-sion of Pharmacology, M-013, University of Califor-nia-San Diego, La Jolla, California 92093. The Uni-versity of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.

Pharmacologist—Toxicologist—Assistant Professor; doctoral level with at least 2 years of postdoctoral experience; qualified for membership in the Society experience; qualified for membership in the Society of Toxicology; strong interest in analytical tech-niques used in drug metabolism. Salary com-mensurate with credentials. Send application and curriculum vitae to: Chairman, Department of Pharmacology, Wright State University School of Medicine, P.O. Box 927, Dayton, Ohio 45401. An Equal Opportunity/Affirmative Action Employer.

State University of New York (SUNY) at Purchase. **PHYSIOLOGICAL PSYCHOLOGIST**. Assistant professor with postdoctoral teaching and/or research experience, or associate professor for position to be-gin September 1979. Competence in basic animal gin September 1979. Competence in basic animal physiological techniques and desire to supervise in-dependent tutorials and senior thesis research are necessary. Excellent animal laboratory facilities available. The successful candidate will be expected to teach courses in introductory, physiological, and experimental psychology, in addition to more ad-vanced courses in his/her area of specialization and to be proficient in the operation of digital logic programming equipment.

By 15 April send detailed letter describing interests By 15 April send detailed letter describing interests and qualifications as well as curriculum vitae and list of three references to: Dr. Richard J. Davidson, Chairperson, Psychology Search Committee, SUNY College at Purchase, Purchase, New York 10577.

POSTDOCTORAL POSITION in behavioral elec-POSTDOCTORAL POSITION in behavioral elec-trophysiology. Position which provides stipend of \$10,000 now available for 3-year period to study unit electrophysiology of taste in acute and awake behav-ing preparations. Research will focus on taste processing in amygdala and related veniral forebrain structures to analyze how such input is elaborated into appatitive and hedgoing modes of reaction. Backstructures to analyze mow such input is chaofaced into appetitive and hedonic modes of reaction. Back-ground in electrophysiology is desirable but not es-sential. Send inquiries to: Dr. J. S. Schwartzbaum, Department of Psychology, University of Rochester, Rochester, New York 14627.

Equal Opportunity Employer, M/F

Two POSTDOCTORAL POSITIONS available on or Two POSTDOCTORAL POSITIONS available on or after 1 July. One position is to study the metabolism of glycolipids in membranes of cells grown in tissue culture (see J. B.C. 252, 5815, 1977 and Exptl. Cell Res. 110, 355, 1977); the other is to study glycosyla-tion of proteins in mamnals with emphasis on sugar nucleotides (see Fed. Proc. 37, 1141, 1978). Send curriculum vitae and names of three references to: Dr. C. B. Hirschberg, E. A. Doisy Department of Bio-chemistry, St. Louis University School of Medicine, 1402 South Grand Boulevard, St. Louis, Mo. 63104.

#### POSITIONS OPEN

PHYSIOLOGISTS with appropriate training in air-way epithelial transport are invited to apply for the position of assistant research physiologist (salary range: \$18,550 to \$19,292) in the Cardiovascular Re-search Institute beginning 1 July 1979. Applicants should be investigating active ion transport and wa-ter movement in epithelium. Special consideration will be given to transport physiologists with experi-ence working in lungs and airways. The applicant chosen will be expected to collaborate full-time in interdisciplinary research on regulation of water and ion movement in airways. Send curriculum vitae to: Dr. J. A. Nadel, Cardiovascular Research Institute, University of California, San Francisco, San Fran-cisco, Calif. 94143. The University of California, San Francisco, is an Equal Opportunity/Affirmative Ac-tion Employer. Women and minorities are encour-aged to apply.

**POSTDOCTORAL POSITION.** Available spring 1979 for work on the molecular basis of cellular control mechanisms. Experience in microbial genetics (*E. coli*) and/or protein biochemistry preferred. An initial appointment of 1 year is anticipated with the possibility of renewal. Send curriculum vitae and two letters of recommendation to: **Dr. E. R. Kan**trowitz, Department of Chemistry, Boston College, Chestnut Hill, Mass. 02167.

POSTDOCTORAL POSITION for studies in lipopro-tein structure and metabolism. Background in pro-tein, chemistry, immunochemistry, or physical bio-chemistry. Send curriculum vitae to: John Albers, Department of Medicine, Harborview Medical Cen-ter, Seattle, Wash. 98104. The University of Wash-ington is an Affirmative Action/Equal Opportunity Femployee. Employer.

PRINCETON UNIVERSITY, Department of Geogical and Geophysical Sciences, has an opening for POSTDOCTORAL POSITION as a research asso-

a POSTDOCTORAL POSITION as a research asso-ciate beginning 1 July or 1 September 1979. Research will be directed towards experimental and theoretical study of the nature, distribution, and origin of maghemite,  $\gamma Fe_2O_3$ , and will bear on weathering processes on Mars, the origin of magnet-ic particles detected in the Viking Mission, and rock and paleomagnetic problems on earth. Send résumés to: R. B. Hargraves, Department of Geological and Geophysical Sciences, Princeton University is an Equil Opportunity(Affmather Action Employ-

is an Equal Opportunity/Affirmative Action Employ-

POSTDOCTORAL POSITIONS available in respira tory physiology and pathophysiology, with special emphasis on gas exchange in lung and tissues. Ap-pointments are normally made for 2 years. Address

inquiries and applications to: Dr. Leon E. Farhi Department of Physiology, Farber Hall State University of New York at Buffalo Buffalo, N.Y. 14214 Telephone: 716-831-2739

**POSTDOCTORAL POSITION** available July 1979 for research on the molecular biology of herpes sim-plex virus gene expression. Research focuses on the biogenesis, structure, and genome magning of the plex virus gene expression. Research focuses on the biogenesis, structure, and genome mapping of viral mRNA. Strong background in biochemistry, espe-cially proteins and nucleic acids, preferred. Send curriculum vitae with names of three references to: Dr. Robert Millette, Department of Immunology and Microbiology, Wayne State University School of Med-icine, 540 East Canfield, Detroit, Mich. 48201. An Equal Opportunity Employer

## PUBLISHER'S REPRESENTATIVE MEDICAL BOOKS

Year Book Medical Publishers, Inc., is seeking edu-cational representative to travel to extensive terri-tories. Position requires calling on professors and in-structors in schools of medicine, dentistry, pharma-cy, and allied health. Prefer science background, but not essential. The ability to meet and communicate with persons in medical education and allied areas is of prime importance. Excellent starting salary for qualified person plus full travel expenses and fringe benefits. All replies held in strict confidence. Send résumé and salary requirements to: résumé and salary requirements to:

Stan Clark Vice President, Marketing Year Book Medical Publishers, Inc. 35 East Wacker Drive Chicago, Illinois 60601 An Equal Opportunity Employer

#### POSITIONS OPEN

#### THE MAX-PLANCK-INSTITUTE OF BIOCHEMISTRY 8033 MARTINSRIED/MUNICH

Offers a **POSTDOCTORAL POSITION** for a biochemist preferably with cell biological experience in the field of membrane proteins. Payment as research assistant (approximately DM-3000 monthly)

Applications to: Professor E. Neumann, Max-Planck-Institut für Biochemie, D-8033 Martinsried bei München, Germany.

Two POSTDOCTORAL POSITIONS available immediately. (i) Investigate effects of insulin and gluca-gon on phosphoprotein phosphatases and phospha-tases inhibitors in isolated hepatocytes and (ii) in-vestigate mechanisms of action of new hypo-glycemic agents and regulation of metabolism with glycemic agents and regulation of metabolism with isolated hepatocytes and perfused heart. Salary range: \$12,000 to \$14,000 per year. Two years of support available. Submit curriculum vitae and ref-erences to: Robert A. Harris, Ph.D., Department of Biochemistry, Indiana University School of Medicine, Indianapolis, Indiana 46223. An Equal Opportunity/ Affirmative Action Employer, M/F.

#### POSTDOCTORAL POSITION

Pharmacologist with broad classical training to char-Pharmacologist with broad classical training to char-acterize the biological activities of novel com-pounds. Cardiovascular experience desired but not essential. \$13,500 per year with renewal possi-bilities. Send résumé and three letters of recommen-dation to: Professor Allan M. Burkman, Division of Pharmacology, College of Pharmacy, The Ohio State University, Columbus, Ohio 43210.

POSTDOCTORAL POSITION available for Ph.D. in analytical or pharmaceutical chemistry, pharma-ceutics, or related fields, to participate in drug bioavailability and pharmacokinetic studies in humans. Applicants will be invited to participate in areas of assay development, study design, and phar-macokinetic and statistical analysis of data. Please send résumé and names of three referees to: Dr. P. G. Welling, School of Pharmacy, University of Wis-consin, Madison, Wisconsin 53706. An Equal Opportunity Employer

## POSTDOCTORAL SENIOR RESEARCH ASSOCIATE

An immediate opening is available for a Ph.D. immu-nochemist or biochemist with experience in radio-nuclide labeling of immunoglobulins, in addition to protein fractionation. Responsible for the develop-ment of radiolabeled antibodies for use in clinical and experimental studies of radioimmunodetection of human tumors. Salary negotiable in the range of \$14,000 to \$18,000 per annum. Send résumé, list of publications, and names of three references to:

Dr. David M. Goldenberg, Director Division of Experimental Pathology MS 409 University of Kentucky Medical Center Lexington, Kentucky 40536

Equal Opportunity/Affirmative Action Employer

## PROJECT ASSOCIATE (LIMNOLOGY/OCEANOGRAPHY)

(LIMNOLOGY/OCEANOGRAPHY) This position is for the front line coordinator of a multidisciplinary research program on water quality and sewage effluent disposal in Milwaukee Harbor and adjacent Lake Michigan. Duties include partici-pation, direction, and supervision of both the field and laboratory research. A doctoral degree or re-search experience in physical, chemical, or biologi-cal aspects of limnology or oceanography is re-quired. Salary commensurate with qualifications. Send résumé to: Dr. K. K. Lee, Center for Great Lakes Studies, University of Wisconsin-Milwaukee, Box 413, Milwaukee, Wisconsin 53201. Deadline: 15 April 1979. An Equal Opportunity/Affirmative Ac-tion Employer.

RESEARCH ASSISTANT PROFESSOR. Position available for vestibular neurophysiologist with post-doctoral experience to pursue basic research inter-ests in peripheral and/or central vestibular elec-trophysiology. Present research facilities include ro-tating stimulators, PDP-11 computers and data analysis libraries, and collaborative interaction with anatomical and clinical vestibular research laborato-ries. Knowledge of computers, electrophysiology, and engineering signal processing is desirable. Send curriculum vitae and names of three references to: Dr. Dennis P. O'Leary, Department of Otolaryngolo-gy, University of Pittsburgh, Eye and Ear Hospital, Pittsburgh, Pa. 15213. An Equal Opportunity/Affir-mative Action Employer.

## **KUWAIT UNIVERSITY** Faculty of Medicine

## MEDICAL SCIENCE AND CLINICAL APPOINTMENTS

Applications are invited for the following appointments in the Faculty of Medicine.

**ANATOMY**—Associate Professor. Candidates should have areas of specialisation in electron microscopy. The successful applicant's responsibilities will include directorship of the E.M. Unit, which is equipped with scanning and transmission microscopes.

Assistant or Associate Professor. Preference will be given to candidates who have experience of teaching the anatomical disciplines to allied health students. The successful candidate will be responsible for coordinating allied health teaching in the Department of Anatomy.

COMMUNITY MEDICINE—Professor or Associate Professor in Epidemiology.

Professor or Associate Professor in Public Health.

**MEDICINE**—Associate Professor. Candidates should be general physicians with a special interest in renal medicine and experience in haemodialysis, peritoneal dialysis and renal transplantation. Experience of renal morphology by light microscope would be an advantage.

MICROBIOLOGY—Professor or Associate Professor in Medical Bacteriology.

Professor or Associate Professor in Clinical Bacteriology.

**PATHOLOGY**—Associate and Assistant Professors. Candidates should have experience in academic pathology, particularly in anatomic and histopathology. The successful candidates will have responsibilities in diagnostic pathology at the teaching hospital.

PHYSIOLOGY—Professor or Associate Professor in Neurophysiology.

Professor or Associate Professor in Endocrinology.

Professor or Associate Professor with specialisation in one of the following areas: Haematology, Gastrointestinal, Muscle or Cardiovascular.

SURGERY—Professor or Associate Professor in Urological Surgery.

Associate Professor in Traumatology and Burns.

Assistant Professor in Orthopaedics.

Applicants should possess a Ph.D. or equivalent higher medical qualification, and have conducted and published research in their field. Professors should have 14 years' experience, 4 as an associate professor or its equivalent, i.e. senior lecturer or reader. Associate professors should have 9 years' experience, 4 as an assistant professor or its equivalent i.e. lecturer.

#### CONDITIONS OF APPOINTMENT

**Salaries:** Total monthly salaries will be within the following scales according to qualifications and experience.  $(1KD = \pounds 1.80; US\$ 3.6 \text{ approx.})$ 

Professors with clincial appointments: KD 755-860 (6 increments)

Professors medically or non-medically qualified with medical science appointments: KD 701-797 (6 increments) Associate Professors with clinical appointments: KD 650-755 (6 increments)

Associate Professors medically qualified with medical science appointments: KD 605-701 (6 increments) Associate Professors non-medically qualified: KD 575-665 (6 increments)

Assistant Professors with clinical appointments: KD 520-625 (6 increments)

Assistant Professors medically qualified with medical science appointments: KD 484-580 (6 increments) Assistant Professors non-medically qualified: KD 460-550 (6 increments)

**Clinical supplements:** In addition to the above university salaries there will be a monthly clinical supplement paid by the Ministry of Public Health for medical school staff with clinical service commitments. These will be within the following scales:

Professor and Chairman KD 200-250 (5 increments) Professor KD 150-200 (5 increments)

Associate Professor Assistant Professor

Gratuity: There is a gratuity of one month's basic salary for each year employed which is payable on termination of contract.

**Housing:** Suitably furnished, air-conditioned accommodation, electricity and water are provided free of charge. **Medical Care:** Free, comprehensive treatment is available in Kuwait under the State Health Service.

**Travel:** Airline tickets are provided from the country of recruitment for the appointee, spouse and up to 3 dependent children under 20 years. Thereafter return tickets are issued annually to the country of origin. On termination of contract, tickets are provided to the country of recruitment. A baggage and freight allowance is also provided. In addition, travel expenses for attending one scientific meeting a year are paid by the University. **Vacation:** Sixty days paid annual leave as well as various official holidays.

**Education:** This is provided free in state schools where the instruction is in Arabic. Staff who have to send

their children to non-Arabic schools in Kuwait will have the cost of up to a maximum of three met by the University. **Taxation:** There is no income tax in Kuwait. Currency is freely transferable without restrictions. *Further details about these appointments and the method of application can be obtained from:* 

The Dean, Faculty of Medicine, University of Kuwait, P.O. Box 5969, Kuwait.

KD 100-150 (5 increments)

KD 75.

POSTDOCTORAL/BIOCHEMISTRY. Available summer 1979. Research in isolation and characterization of nucleic acid helix-destabilizing (unwinding) proteins; chemical modification, physical, genetic, and immunological studies on these proteins; cationic metal and dye interactions with nucleic acids and polysaccharides. Metropolitan Baltimore-Washington, D.C., location. Send résumé and three letters of recommendation to: Dr. Richard L. Karpel, Department of Chemistry, University of Maryland Baltimore County, Catonsville, Md. 21228. Equal Opportrunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Position available immediately for recent Ph.D. to conduct research on the behavioral pharmacology and discriminative stimulus properties of abused drugs. Send résumé with names of two references to: Dr. Stephen G. Holtzman, Department of Pharmacology, Emory University School of Medicine, Atlanta, Georgia 30322. An Equal Opportunity/Affirmative Action Employer.

**RESEARCH ASSOCIATES.** Ph.D. biochemistry or cell biology are immediately available for a minimum of 3 years. The research will involve studies of multienzyme systems in respiratory and tumor tissues which regulate the composition, synthesis, and secretion of cell surface antigens and mucin glycoproteins in these tissues. A second position is available to study the role of phosphorylation of soluble enzymes and membrane proteins in the mechanism of hormone action in kidney. Salaries for these positions ranges from \$12,500 to \$15,000, commensurate with experience. Send résumé and names of references to:

Dr. Joseph Mendicino Department of Biochemistry University of Georgia Athens, Georgia 30602

MIT RESEARCH ASSOCIATE to conduct research in wound healing. Available immediately. Duties include monitoring of animal experiments leading to development and clinical evaluation of membranes for connective-tissue replacement. Previous experience in connective-tissue biochemistry or histopathology is required. Experience in bacteriology and in electron microscopic study of tissue morphology is desired. Ph.D. in biochemistry, biological chemistry, biomaterials science, bioengineering, or equivalent is required. Good interpersonal and writing skills also required. Starting salary: \$16,000 or higher, depending on qualifications. Those interested should send their résumés to: Professor Ioannis V. Yannas, Fibers and Polymers Laboratory, Massachusetts Institute of Technology, Room 3-334, Cambridge, Mass. 02139, and should have three letters on their behalf sent to the above address.

## SENIOR/ASSOCIATE SCIENTISTS in experimental cell morphology and cytogenetics

The W. Alton Jones Cell Science Center is interested in expanding its research program by the recruitment of two new staff members at the level of SENIOR or ASSOCIATE SCIENTIST (FULL OR ASSOCIATE PROFESSOR EQUIVALENT). The center is an operational unit of the Tissue Culture Association and has an active program of research on a variety of topics. It is concerned, as well, with advanced training and education involving cell tissue and organ cultures. The laboratories are modern, spacious, and well equipped. The center has affiliations with the University of Vermont, State University of New York at Plattsburgh, and the University of Rhode Island.

Suitable candidates will have a Ph.D. or M.D. and have made significant contributions to their chosen field. They should currently hold positions of not less than assistant professor or equivalent. It is expected that the candidates' research will involve the use of cell tissue or organ culture. It is expected as well that the candidates will have an established track record in obtaining research support from the funding agencies.

For further information on the center and its programs, contact the office of the director, W. Alton Jones Cell Science Center. Résumés and names of four references should be sent to: Chairperson, Search Committee, W. Alton Jones Cell Science Center, Old Barn Road, Lake Placid, New York 12946.

The W. Alton Jones Cell Science Center is an Affirmative Action/Equal Opportunity Employer. Applications from women and minority groups are encouraged.

## Laboratory Immunologist

Are you ready for a career with Bio-Science Laboratories? You may be if you meet the requirements for certification by the <u>American Board of Medical Laboratory</u> <u>Immunology</u>, have or can acquire managerial and leadership skills, and would be comfortable in a pay-for-performance/ people oriented environment. Send your CV, career goals, and salary history in confidence to:

I. Olitzky, Ph.D. Manager of Training BIO—SCIENCE ENTERPRISES 7600 Tyrone Avenue Van Nuys, CA 91405

We are an Equal Opportunity Employed

RESEARCH ASSOCIATE for project of immunology of human tumors. Previous experience in humoral immunity desirable. Position presently open. Send curriculum vitae to: Harry L. Ioachim, M.D., Department of Pathology, Lenox Hill Hospital, New York, N.Y. 10021.

RESEARCH ASSOCIATE—Immediate opening for Ph.D. with strong background in virology and cell culture for research on inflammatory bowel disease. Salary up to \$25,000 (negotiable), depending on experience. Send curriculum vitae and names of three references to: Dr. E. D. Kilbourne, Chairman, Department of Microbiology, THE MOUNT SINAI SCHOOL OF MEDICINE, One Gustave L. Levy Place, New York, N.Y. 10029. An Equal Opportunity Employer.

#### **RESEARCH POSITION AVAILABLE**

Postdoctoral research training position available for M.D. or Ph.D. with immunologic background to participate in ongoing research involving the immunological characterization of cell surface antigens and receptors on somatic cell hybrids and the characterization of monoclonal antibodies to human enzymes produced by the hybridoma technique. Send curriculum vitae and two letters of reference to: Dr. R. J. Desnick, Division of Medical Genetics, Mount Sinai School of Medicine, Fifth Avenue and 100th Street, New York, N.Y. 10029.

#### SENIOR SCIENTIST PLANT SCIENCES

The Solar Energy Research Institute, located in Golden, Colorado, has an immediate requirement for a senior scientist with a Ph.D. or equivalent in plant sciences, to conduct national resources assessment of biomass available for conversion to energy. Candidate should have three or more years of experience related to energy resource evaluation of biomass, especially evaluation of forest biomass and forest sciences. A working knowledge of national programs, objectives, and participants is desired. Responsibilities to include monitoring subcontracts and budgets, interface with users of biomass resource data, interface with Department of Energy to establish programs and schedules, establishing and improving data bases.

Energy to establish programs and schedules, establishing and improving data bases. Qualified applicants are invited to submit a detailed résumé including salary history and professional references (no phone calls) to: Personnel Services, Department R-1S ERAB, Solar Energy Research Institute, Division of Midwest Research Institute, Jivision of Midwest Research Institute, 1536 Cole Boulevard, Golden, Colo. 80401. Equal Opportunity Employer, M/F/H/V. A Department of Energy contractor.

#### POSITIONS OPEN

ARECIBO OBSERVATORY: Scientific staff positions at the level of research associate or senior research associate are available at the National Astronomy and Ionosphere Center's Arecibo Observatory for work in atmospheric science. Candidates are particularly sought with experience relevant to the following areas of research: radar study of dynamical processes in the stratosphere and mesosphere, airglow studies of dynamical and chemical processes in the mesosphere and thermosphere, active experimentation in the ionospheric plasma utilizing radio waves, and study by means of incoherent scatter radar of the dynamics of the thermosphere and ionosphere. Curriculum vitae, publication lists, and the names and addresses of three references should be sent to: Dr. H. D. Craft, Jr., Director, Arecibo Observatory, P.O. Box 995, Arecibo, Puerto Rico 00612. Cornell University is an Equal Opportunity/Affirmative Action Employer.

Applications from Ph.D.'s are invited for **TEACHING POSITIONS** in the following courses:

> Biochemistry Histology Laboratory Physiology Pathology Pharmacology Neuroanatomy Laboratory

The university is located in the West Indies. Please send curriculum vitae to:

St. George's University c/o The Foreign Medical School Service Corporation One East Main Street Bay Shore, New York 11706

**RESEARCH ASSOCIATE.** Ph.D. in biochemistry or pharmacology with experience, capabilities, and/or interest in cancer chemotherapy, enzymology, and nucleotide metabolism to work on pyrimidine nucleotides. Position available immediately. Send résumé with reprints and/or preprints of publications and two letters of recommendation within a month to: Sungman Cha, M.D., Ph.D., Professor and Chairman, Section of Biochemical Pharmacology, Box G, Brown University, Providence, P.I. 02912. Telephone: 401-863-3114. An Equal Opportunity/Affirmative Action Employer.

WILDLIFE ECOLOGIST, Michigan State University, assistant professor, 12-month, tenure-track. Major responsibilities include undergraduate advising, teaching two senior-level courses in wildlife habitat analysis and wildlife biology and management each year, and alternating between years with an introductory service course and a graduate specialty course. The applicant will be expected to conduct research and publish results and to participate in work with graduate students. Candidate must possess a Ph D in a biological sci-

Candidate must possess a Ph.D. in a biological science with major training in wildlife ecology/management. Experience with a management agency or private consulting firm desirable. The applicant must have a commitment to teaching, research, and public service.

Submit curriculum vitae, undergraduate and graduate transcripts, publications, three letters of recommendation, and statement of research and teaching interests by 30 April 1979 to: Dr. Harold H. Prince, Search Committee Chairman, Department of Fisheries and Wildlife, Michigan State University, East Lansing, Michigan 48824. Equal Opportunity/Affirmative Action Employer.

An X-RAY CRYSTALLOGRAPHER or ELEC-TRON MICROSCOPIST is sought to take part in a structural study of crystals of SV-40 virus. This postdoctoral position begins I May 1979. For a crystallographer, experience with proteins is desirable, but not essential. For an electron microscopist, interest in three-dimensional reconstruction or in twodimensional arrays is preferred. Send a résumé and two letters of recommendation to: Eaton Lattman, Department of Biophysics, Johns Hopkins School of Medicine, Baltimore, Md. 21205; telephone: 301-955-8715. Johns Hopkins is an Equal Opportunity/Affirmative Action Employer.

NEUROPHARMACOLOGIST SmithKline Corporation, a diversified multinational pharmaceutical firm located in Philadelphia, Pennsylvania, offers a career opportunity for a Pharmacologist to participate in a drug discovery program directed at finding novel agents for the treatment of mental, emotional and neurological disorders.

We require a PhD in Pharmacology and at least 1 to 2 years of post doctoral research experience. We are seeking a candidate with a strong background in classical pharmacology and research experience in CNS Pharmacology, including the use of IN-VIVO techniques. The candidates should be capable of conducting and supervising innovative research and have strong leadership potential.

SmithKline offers an excellent compensation program and opportunity for professional growth. Please send resume with salary history to: Mr. William Groves, SMITHKLINE CORPORATION, 1534 Spring Garden Street, P.O. Box 7929, Philadelphia, Pennsylvania 19101. We are an Equal Opportunity Employer, Male/Female/Handicapped/ Veteran.

# PHARMACOLOGIST PhD

Major pharmacutical company has excellent opportunity for PhD with at least 3 years post doctoral experience in expanding development/scientific support operations to compile, interpret and present pre-clinical and clinical data and development of new drug products. Individual will also participate in planning clinical studies and in preparation, submission and overall strategy of both IND and NDA. Excellent interpersonal and communication skills required.

Merrell-National Laboratories offers an excellent compensation/benefit program and opportunity for professional growth. Please send resume with salary history to:

Robert W. Moberg, Director Placement & Development



## Biozentrum University of Basle Department of Cell Biology

Applications are invited for a

### Professorship in Cell Biology from fall 1979

Duties include teaching in general Cell Biology (eight hours per week) and research in Cell Biology with emphasis on membrane phenomena.

Applications stating publications, teaching experience, curriculum vitae etc. should be submitted before May 31, 1979 to the Dean of the Faculty of Science.

Address: Dekanat der

Philosophisch-Naturwissenschaftlichen Fakultät der Universitaät Basel Klingelbergstrasse 70 CH-4056 Basel (Switzerland)

## CNS Pharmacologist

**Pharmaceutical Research** 

The Research and Development Division of G.D. Searle & Co. has an immediate opportunity in CNS Research.

This position requires a PhD with a strong background in neurochemistry and/or neuropharmacology, and 2-5 years experience in drug development. The successful candidate will have an interest in development of new CNS methodology, including receptor mechanisms. Research emphasis will be directed toward biochemical procedures useful for detection of drug action or definition of mechanisms of action.

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G. D. Searle & Co. Research & Development Div. P.O. Box 5110 Chicago, IL 60680

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ZOOLOGIST/GENETICIST—A tenure-track va-cancy is anticipated for September 1979 in the De-partment of Zoology. The appointment will be at the instructor level with a salary of \$12,200. Ph.D. re-quired. The Department of Zoology is particularly interested in securing an individual who can teach introductory zoology and advanced genetic courses including human cytogenetics. A broad background in general zoology with emphasis in physiology is re-quired. Independent study and advisement of under-graduate students is expected. By 1 May 1979 appli-cants should send official undergraduate and gradu-ate transcripts, résumé, and three letters of ref-erence to: Dr. Sigurd Nelson, Jr., Chairman, De-partment of Zoology, State University College, Os-wego, New York 13126. An Equal Opportunity/Af-firmative Action Employer.

#### **WORKSHOPS**

STATE-OF-THE-ART METHODOLOGY WORKSHOPS

LOG-LINEAR MODELS FOR LOG-LINEAR MODELS FOR QUALITATIVE/CATEGORICAL DATA Leo A. Goodman, University of Chicago, and James A. Davis, Harvard University, 21 to 23 June STRUCTURAL EQUATION MODELS Karl G. Jöreskog and Dag Sörbom, University of Uppsala, Sweden, 28 June to 1 July

Tuition is \$425 for one workshop, \$750 for both, and Tuition 15 \$423 for one workshop, 5/30 for both, and includes recently published texts by the staff. For information, contact: Claudia Kelly, Workshop Coordinator, or Jay Magidson, Director, IAS Work-shop Series, Abt Associates Inc., 55 Wheeler Street, Cambridge, Mass. 02138; telephone: 617-492-7100.

#### COURSE

ELECTRON MICROSCOPY. For those desiring to use TEM in biological research, the course will pro-vide practical training in preparation of biological vide practical training in preparation of biological specimens, use and maintenance of Zeiss 9S-2 EM, darkroom procedures, and micrograph interpreta-tion. Certificate or graduate credit awarded. Tuition: \$475; 11 to 29 June. For information and brochure contact: Dr. Dan Scheirer, Department of Biology, Northeastern University, Boston, Mass. 02115; tele-phone: 617-437-2260.

#### PROGRAM

PHARMACOLOGY Ph.D. at University of Health Sciences/Chicago Medical School (UHS/CMS). A Ph.D. program, emphasizing neuropharmacology and supported by more than a dozen faculty with wide-ranging interests in neuroscience, is offered. Stipends and tuition remission are available on a competitive basis. Telephone 312-942-2876 or write: Seymour Ehrenpreis, Ph.D., Department of Pharma-cology, UHS/CMS, 2020 West Ogden Avenue, Chi-cago, Ill. 60612. An Equal Opportunity Employer.

#### ASSISTANTSHIPS

ARECIBO OBSERVATORY. A visiting GRAD-UATE RESEARCH ASSISTANTSHIP is available for a student at the National Astronomy and Ionosphere Center's Arecibo Observatory who is Ion osphere Center's Arecibo Observatory who is interested in carrying out research utilizing radar techniques for the study of dynamical processes in the stratosphere and mesosphere. The student will work with Dr. R. F. Woodman of the ob-servatory's staff, while, if it is appropriate, main-taining close contact with the relevant faculty member at his or home institution. The appointment will be for up to 1 year and will carry a stipend of \$5000 for the academic year with additional support for the summer. One round-trip air fare and moving expenses will be provided for the student and immediate family. A letter of application describing experience and interests, a transcript of grades, and letters of sup-port from at least the chairman of the student's grad-uate committee or equivalent should be sent by 10 April 1979 to: Dr. H. D. Craft, Jr., Director, Arecibo Observatory, P.O. Box 995, Arecibo, Puerto Rico 00612. Cornell University is an Equal Opportunity/ Affirmative Action Employer.

#### ASSISTANTSHIPS

## GRADUATE TEACHING ASSISTANTSHIPS IN BIOLOGY

Predoctoral teaching assistantships available for graduate study leading to the Ph.D. degree in biol-ogy. The Biology Department at Wayne State Uni-versity consists of three divisions: (i) Environmenversity consists of three divisions: (i) Environmen-tal, Evolutionary, and Systematic Biology; (ii) Mo-lecular and Developmental Biology; and (iii) Regulatory Biology and Biophysics. Stipends are \$3650 per 9 months, plus tuition waiver and a pos-sible housing allowance of \$140 per month. Summer support is also available. The teaching assistantships are awarded on a competitive basis. For applications write: Dr. V. Hari, Graduate Committee, Depart-ment of Biology, Wayne State University, Detroit, Michigan 48202. Telephone: 313-577-2754. Wayne State University is an Equal Opportunity/Affir-mative Action Employer.

#### GRADUATE STUDY

We are now accepting applicants for **GRADUATE STUDY** leading to the M.S. and Ph.D. degrees. The masters' degree in chemistry related to the health sciences encompasses physical, inorganic, and or-ganic chemistry in addition to biochemistry. The Ph.D. degree in biochemistry is a joint program be-tween University of Maryland Baltimore County (UMBC) and the Department of Biochemistry (School of Dentistry) and Department of Biological Chemistry (School of Medicine). Areas or research for the Ph.D. degree include membrane transport processes, nucleic acid structure and function, physocesses, nucleic acid structure and function, physical chemistry of proteins, biorganic chemistry, bio-inorganic chemistry, and enzymology.

For further information as well as applications please write

please write: V. P. Vitullo Department of Chemistry University of Maryland Baltimore County Baltimore, Maryland 21228 In addition, please indicate your expected area of interest. UMBC is an Equal Opportunity Employer.

**Teaching assistantships** are available for graduate students in the Department of Chemistry at the University of Maryland Baltimore County.

#### TRAINEESHIPS

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

**POSTDOCTORAL TRAINEESHIP.** Cardiovascular Science Postdoctoral Research Training Program sponsored by NIH. Designed to provide postgradu-ate research training to individuals with M.D., Ph.D. degrees. Emphasizes neural control of circulation, south mycardial information and the resulting of acute myocardial inflammation, and the regulation of cardiac performance in normal and diseased states. Write to: Robert O'Rourke, M.D., Department of Medicine Director, Cardiology Division, The Univer-sity of Texas Health Science Center, San Antonio, Texas 78284. An Equal Opportunity Émployer

#### **FELLOWSHIPS**

## CARDIOVASCULAR PATHOLOGY FELLOWSHIP

Position available July 1979 for an individual who has completed 2 years of anatomic pathology resi-dency and who is interested in 1 or 2 years of cardiovascular pathology training, research, and teaching experience. Pathological material from the Universi-ty of Washington Affiliated Hospitals as well as ma-terial from the VA Cooperative Study on Heart Valve Replacement will be utilized. Research will vaive repracement will be utilized. Research will emphasize morphometric evaluation of human coro-nary and myocardial lesions. Write to: Dr. Dennis D. Reichenbach, Department of Pathology, SM-30, Uni-versity of Washington, Seattle, Wash. 98195. The University of Washington is an Affirmative Action/ Evand Omorphic Evancement Equal Opportunity Employer.

#### **FELLOWSHIPS**

**POSTDOCTORAL FELLOWSHIPS** beginning 1 July 1979, at the University of Southern California, are available for qualified applicants interested in a unique research program in the developmental biol-ogy of oral-facial-cranial processes and the etiology, ogy of oral-facial-cranial processes and the etiology, genetics, pathogenesis, and treatment of craniofacial malformations. Applicants with D.D.S., M.D., or a Ph.D. in biological sciences are invited. Send com-plete curriculum vitae to: Professor Harold C. Slav-kin, Director, Graduate Program in Craniofacial Bi-ology, University of Southern California-GER 317, Los Angeles, California 90007.

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Openings for biochemists, neurologists, neuro-pathologists, and pharmacologists in NIH-sponsored multidisciplinary postdoctoral training program in BIOCHEMICAL NEUROPATHOLOGY. Trainees will participate in graduate courses and seminars and will pursue individual research projects in one of the following areas: brain tumor metabolism, biochemisfollowing areas: brain tumor metabolism, biochemis-try of spinal cord injury, disorders of lipid metabo-lism and experimental demyelinating conditions, pe-ripheral nerve disorders, muscle histochemistry, and experimental neurology of the nervous system. Send inquiries to: Dr. J. Norman Allen, Division of Neurol-ogy, Ohio State University, 466 West 10 Avenue, Co-lumbus, Ohio 43210.

HARVARD SCHOOL OF PUBLIC HEALTH POSTDOCTORAL FELLOWSHIPS



Interdisciplinary Programs in Health (IPH) invites Interdisciplinary Programs in Health (IPH) invites applications from promising graduates of advanced degree programs in the natural or social sciences in-terested in turning to research and training in envi-ronmental health problems, particularly chemicals in the environment. The program focuses on both sci-entific and public policy questions.

Fellows will be appointed for terms of 1 or 2 years, possibly renewable. Stipends will be \$16,000 the first vear.

Expression of interest is particularly invited from qualified women and minority candidates. For information. write to:

Professor Donald Hornig Director, IPH Harvard School of Public Health 665 Huntington Avenue Boston, Massachusetts 02115

POSTDOCTORAL FELLOWSHIP IN BIOCHEMIS-POSTDOCTORAL FELLOWSHIP IN BIOCHEMIS-TRY is available for a recent graduate at a salary of \$12,200 (first year), \$13,350 (second year), to do re-search on the biological control of glycogen metabo-lism and/or structure-function relationships in phos-phorylase. Write: Dr. N. B. Madsen, Department of Biochemistry, University of Alberta, Edmonton, Can-ada T6G 2H7.

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