## BOOKS RECEIVED AND BOOK ORDER SERVICE

(Continued from page 362)

Study by Electron Spin Resonance. R. H. Taylor. Taylor and Francis, London, and Halsted (Wiley), New York, 1977. viii, 118 pp., illus. \$14. Taylor and Francis Monographs on Physics. To order this book circle No. 429 on Readers' Service Card.

Neblette's Handbook of Photography and Reprography. Materials, Processes and Systems. John M. Sturge, Ed. Van Nostrand Reinhold, New York, ed. 7, 1977. x, 642 pp., illus. \$47.50. To order this book circle No. 430 on Readers' Service Card.

Pain. From Symptom to Treatment. Manuel M. Villaverde and C. Wright MacMillan. Van Nostrand Reinhold, New York, 1977. vi, 346 pp., illus. \$22.50. To order this book circle No. 431 on Readers' Service Card.

**Progress in Allergy.** Vol. 22. Paul Kallós, Byron H. Waksman, and Alain L. de Weck, Eds. Karger, Basel, 1977. xii, 220 pp. \$39.75.

Progress in Behavior Modification. Vol. 4. Michel Hersen, Richard M. Eisler, and Peter M. Miller, Eds. Academic Press, New York, 1977. xvi, 380 pp. \$19.50. To order this book circle No. 432 on Readers' Service Card.

**Progress in Clinical Immunology.** Vol. 3. Grune and Stratton, New York, 1977. x, 208 pp., illus. \$22.50. To order this book circle No. 433 on Readers' Service Card.

Remote-Sensing Applications for Mineral Exploration. William L. Smith, Ed. Dowden, Hutchinson and Ross, Stroudsburg, Pa., 1977 (distributor, Halsted [Wiley], New York). xvi, 392 pp., illus. + plates. \$50. To order this book circle No. 434 on Readers' Service Card.

Social Influence and Social Change. Serge Moscovici. Translated from the French by Carol Sherrard and Greta Heinz. Published for the European Association of Experimental Social Psychology by Academic Press, New York, 1977. x, 240 pp. \$15.25. European Monographs in Social Psychology, No. 10. To order this book circle No. 435 on Readers' Service Card.

Stereo-Differentiating Reactions. The Nature of Asymmetric Reactions. Yoshiharu Izumi and Akira Tai. Kodansha, Tokyo, and Academic Press, New York, 1977. x, 334 pp., illus. \$29.50. To order this book circle No. 436 on Readers' Service Card.

Stochastic Models in Population Genetics. Wen-Hsiung Li, Ed. Dowden, Hutchinson and Ross, Stroudsburg, Pa., 1977 (distributor, Halsted [Wiley], New York). xvi, 474 pp., illus. \$30. Benchmark Papers in Genetics, vol. 7. To order this book circle No. 437 on Readers' Service Card.

The Study of Biology. Jeffrey J. W. Baker and Garland E. Allen. Addison-Wesley, Reading, Mass., ed. 3, 1977. xviii, 1122 pp., illus. + appendices. \$16.95. Addison-Wesley Series in Life Sciences. To order this book circle No. 438 on Readers' Service Card.

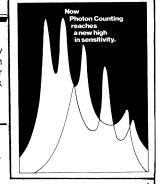
A Technology of Reading and Writing. Vol. 3, The Adaptive Classroom. Donald E. P. Smith. Academic Press, New York, 1977. x, 320 pp., illus. \$14.50. Educational Psychology. To order this book circle No. 439 on Readers' Service Card.

**Topics in Phonological Theory.** Michael Kenstowicz and Charles Kisseberth. Academic Press, New York, 1977. xii, 242 pp. \$17.50. To order this book circle No. 440 on Readers' Service Card.

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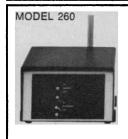
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Biochemist/Chemist. Ph.D. Experience in cell culture, protein isolation and characterization, and organic chemistry. Knowledge of membrane transport, cyclic nucleotides, and tissue culture and perfusion culture methods. Teaching experience in organic, inorganic, and physical chemistry. Publications. Seeks position in research or teaching. Box 292, SCIENCE.

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Biochemist/Electron Microscopist. B.S. with research and teaching experience developing preparative techniques for scanning and transmission electron microscopy. Publications involve cell surface ultrastructure studies. Seeks research position in cell and membrane biology at university or private institution. R. Apkarian, 195 Quinapoxet Lane, Worcester, Mass. 01606. Telephone: 617-853-6303. X

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### DEPARTMENT OF ANATOMY, GEORGETOWN UNIVERSITY MEDICAL CENTER

A faculty position is available at the assistant or associate professor level for a scientist with a record of excellence in research and teaching. Preference will be given to a candidate with an active and funded research program and the capability of participating in departmental teaching. Send curriculum vitae and names of three references by 1 October 1977 to: Search Committee, Department of Anatomy, Georgetown University Schools of Medicine and Dentistry, Washington, D.C. 20007. An Equal Opportunity Employer.

ASSISTANT PROFESSOR, BIOLOGICAL SCIENCES; open positions for scientists with promise of creative and dynamic research programs in: (i) cell biology (plant, microbial, or animal), (ii) neurobiology, and (iii) ecology (population or mathematical). Divisional teaching needs include courses in basic biology, cell biology (especially for NIH predoctoral trainees in cellular and molecular genetics), oppulation ecology, neurobiology, mycology, plant tissue culture, and ultrastructure. Appointee is also expected to develop special course for advanced undergraduate and graduate students. Send résumé to:

A. Eisenstark, Director, Division of Biological Sciences, Tucker Hall, University of Missouri-Columbia, Columbia, Missouri 65201. An Equal Opportunity Institution.

Stanford University-Department of Medicine: AS-SISTANT/ASSOCIATE PROFESSOR OF MEDICINE. Activities will include participation in single-and multifactor programs for risk reduction within the Stanford Heart Disease Prevention Program. Prerequisites: training in clinical medicine and epidemiology. Background or interest in educational or psychosocial aspects of chronic disease cause and prevention preferred. Submit curriculum vitae and names of references to: John W. Farquhar, M.D., Director, Stanford Heart Disease Prevention Program, Room M-027, Stanford University Medical Center, Stanford, Calif. 94305. Stanford University is an Equal Opportunity Employer and welcomes nomination of women and minority group members and applications from them.

ASSISTANT PROFESSOR OF PATHOLOGY. Medical school in Northeast seeks applications from cellular immunologists engaged in research on lymphocyte differentiation. Experience in production of antiserums against lymphocyte surface markers, tissue culture, and murine immune responses essential. Applicant should be willing to work with others on related research programs. Send curriculum vitae and references to:

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ASSISTANT OR ASSOCIATE PROFESSOR OF ZO-OLOGY, PHYSIOLOGICAL ECOLOGIST, Ph.D. Preference will be given to individuals with previous faculty or formal postdoctoral experience. Responsibilities include teaching basic and advanced zoology courses in physiology. The successful candidate will be expected to develop a research and teaching program in physiological ecology and to direct graduate students in this discipline. The person will have the option of affiliating with the graduate program in ecology. The position is available beginning 1 January 1978, or thereafter. Curriculum vitae and three letters of recommendation must be received by 15 September 1977. Reply to: Dr. Arthur C. Echternacht, Department of Zoology, University of Tennessee, Knoxville, Tennessee 37916. An Affirmative Action/Equal Opportunity Employer.

## ASSOCIATE DIRECTOR FOR BIOMETRICS AND EPIDEMIOLOGY

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Applicants must have an M.D. degree, recognition as an authority in epidemiology, and have successfully managed a medical/scientific organization. Experience or training in public health or biometrics is highly desirable. Applicants will be evaluated on the basis of their managerial ability, education, relatedness of experience, and career progression. Salary: \$46,423. (GS-17, subject to U.S. Civil Service Commission approval.) U.S. citizenship required. Location: Rockville, Maryland.

Send curriculum vitae or application for federal employment (SF-171) to FDA, Division of Personnel Management, 5600 Fishers Lane, Room 4B-44, Rockville, Maryland 20857. Attention: Mrs. Davis.

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BIOLOGISTS: two temporary positions, winter semester 1978 (9 January to 13 May). One teaching nature study—applicant must be familiar with Michigan flora and fauna. One teaching animal physiology—environmental physiology preferred. Ph.D. required for each position. Applicants should send résumé, transcripts, and three reference letters by 26 August 1977 to: Dr. L. Koehler, Chairman, Biology Department, Central Michigan University, Mt. Pleasant, Mich. 48859. A Nondiscriminatory Education Institution and Employer.

CELL/ANIMAL PHYSIOLOGY. Temporary position beginning fall 1977. Prefer applicant qualified to teach cell physiology and radiation biology in the biology curriculum and an upper division human physiology course for physical therapists. Send curriculum vitae to: Chairman, Biology Department, University of Wisconsin, La Crosse, Wisconsin 54601. Telephone: 608-784-6050.

CHAIRPERSON—MICROBIOLOGY AND IM-MUNOLOGY. The University of Minnesota—Duluth School of Medicine, seeks a chairperson for the Department of Medical Microbiology and Immunology as the current chairman approaches mandatory university retirement age. Persons qualified by virtue of a terminal degree and teaching experience and research activity in the general area of microbiology and interested in this opportunity in a younger, innovative medical school with small class size should send their résumé to: Chairman, Microbiology Search Committee, Dean's Office, University of Minnesota—Duluth, School of Medicine, 2205 East Fifth Street, Duluth, Minnesota 55812, by 1 September 1977. The university wishes to have the new chairperson assume the duties of the position no later than 1 September 1978. The University of Minnesota is an Affirmative Action/Equal Opportunity Employer.

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#### CYTOGENETICS LABORATORY DIRECTOR Centralized Laboratory for Prenatal Cytogenetic Diagnosis in New York City

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Applicants must have an M.D. or a Ph.D., and at least 4 years of experience in cytogenetics, including 2 years of amniotic fluid cell culture, and they should feel comfortable in handling the administration of the referral system. the referral system.

Those interested should send inquiries and curricu-Those interested should send inquiries and curriculum vitae to: Coordinator, Centralized Laboratory for Prenatal Cytogenetic Diagnosis, Medical and Health Research Association of New York City, Inc., Room 720, 40 Worth Street, New York, N.Y. 1001.3. An Equal Opportunity/Affirmative Action Employer. The deadline for submitting applications is 15 September 1977.

#### **POSITIONS OPEN**

The Division for Study and Research in Education (DSRE). Massachusetts Institute of Technology (MIT) invites applications for a faculty position for a COGNITIVE PSYCHOLOGIST at the assistant or associate level, available in September 1977, or at the latest September 1978.

Candidates should possess a Ph.D. and have both teaching and research experience. Candidates should also be knowledgeable about recent research in developmental psychology, psycholinguistics, and artificial intelligence. Salary is commensurate with qualifications and experience. There is the poswith qualifications and experience. There is the possibility of joint appointment in psychology or another appropriate MIT department. MIT is an Equal Opportunity/Affirmative Action Employer; women and minorities are encouraged to apply.

Address applications to: Dr. Benson R. Snyder, Director, DSRE, MIT, 20C-126, 18 Vassar Street, Cambridge, Mass. 02137.

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Dr. Myer Horowitz
Vice-President (Academic)
The University of Alberta
Edmonton, Alberta, Canada T6G 2J9

#### DEAN, COLLEGE OF NATURAL RESOURCES

The University of California, Berkeley, invites immediate application for the position of dean of the College of Natural Resources. This college includes the departments of Agriculture and Resource Economics, Cell Physiology, Entomological Sciences, Forest and Resource Management, Genetics, Nutritional Sciences, Plant Pathology, Soils and Plant Nutrition and an interdisciplinary department with curricula in conservation of natural resources and political economy of natural resources. The dean will have responsibility for the undergraduate and graduhave responsibility for the undergraduate and graduate programs. The dean will also serve as associate director at Berkeley of the Agricultural Experiment

Applicants should submit by 15 September full résumés of educational and administrative experience, together with a list of three references to: Search Committee, Office of the Provost, Professional Schools and Colleges, 200 California Hall, University of California, Berkeley 94720.

The University is an Equal Opportunity/Affirmative Action Employer, Minorities and women are urged to apply.

#### DIRECTOR

The Marine Biological Laboratory, Woods Hole, Mass., invites applications for the position of director or director-president, which will become open on I July 1978. Qualified applicants are invited to submit a curriculum vitae, summary of experience, and at least three references to: Chairman of Search Committee, Marine Biological Laboratory, Woods Hole, Mass. 02543. An Equal Opportunity Employer.

Resources for the Future, Inc. (RFF), a private non-profit research organization, seeks a **DIRECTOR** of a newly created Division of Renewable Resources. The new division, one of three research units at RFF, will have responsibility for analysis and policy research on food, forestry, land use and settlement economics, population, water resources, the oceans, and the atmosphere.

The director should have an established research reputation in some field of natural resources policy and analysis.

Applications and nominations, as well as requests for additional information, should be sent to Charles 17. Hitch, President, Resources for the Future, Inc., 1755 Massachusetts Avenue, NW, Washington, D.C. 20036, prior to 1 September 1977.

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CHAIRPERSON with active research interests, for Biochemistry Department, Dalhousie University, Halifax, Nova Scotia. Excellent laboratory facilities in modern medical complex. Active teaching program in undergraduate, graduate, and medical faculties. Please contact J. D. Hatcher, M.D., Ph.D., Dean, Esculty of Medicine Faculty of Medicine.

## CHAIRPERSON DEPARTMENT OF MICROBIOLOGY

We are seeking a person with administrative ability and firm commitments to medical and graduate education and research to fill the position of chairman of the Department of Microbiology, Emory University School of Medicine. Please send applications or nominations with curriculum vitae and bibliography to: Dr. Neil C. Moran, Chairman, Microbiology Search Committee, Department of Pharmacology, Emory University School of Medicine, Atlanta, Ga. 30322. Equal Opportunity/Affirmative Action Employer.

## DIRECTOR DEPARTMENT OF MICROBIOLOGY COLLEGE OF MEDICINE UNIVERSITY OF CINCINNATI MEDICAL CENTER

Applications are invited from persons with the Ph.D. and/or M.D. degree who have demonstrated research accomplishment and leadership in microresearch accomplishment and leadership in micro-biology, and who have an interest or experience in administration. The applicant will have responsibili-ty for the direction of the medical student teaching, research, and graduate student education (M.S. and Ph.D. programs) of the department which presently consists of 11 full-time and 6 adjunct faculty mem-bers who conduct active research programs at the fundamental and applied levels.

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Interested persons are invited to submit curricu-lum vitae or direct inquiries to: Dr. Harry Rudney, Professor and Director, Department of Biological Chemistry, College of Medicine, University of Cincin-nati, Cincinnati, Ohio 45267.

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ECOLOGIST-Assistant professor, Ph.D., to teach undergraduate ecology course to biology majors and to participate in undergraduate and graduate program. Strong research commitment essential. Prefer physiological or field ecologist, with research interty, 1983 East 24 Street, Box C104, Cleveland, Ohio 44115. An Equal Opportunity/Affirmative Action Employer, M/F.

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For fall 1978: HISTORY OF WESTERN TECH-For fall 1978: HISTORY OF WESTERN TECHNOLOGY, early modern and/or modern periods, with complementary research and teaching interests in technology assessment and decision-making, technology and values, or related interdisciplinary fields. Level: assistant professor. Ph.D. by summer 1978. Status: a regular, tenure-track appointment within the Department of Humanities. Send curriculum vitae to: J. C. Mathes, Chairman, Department of Humanities, College of Engineering, University of Michigan, Ann Arbor, Mich. 48109. A Nondiscriminatory, Affirmative Action Employer.

#### **POSITIONS OPEN**

The Department of Pharmacology at Stanford Medical School has THREE FACULTY University Medical School has THREE FACULTY POSITIONS open. Appointments at the assistant or associate professor level will be on the basis of accomplishments in teaching and research. The department is particularly interested in candidates who have demonstrated competence in the areas of molecular or biochemical pharmacology, for example, neuropharmacology, membrane-drug interactions, drug or hormone receptors, chemotaxis, teratogenesis drug effects on cellular control mechanisms. drug or hormone receptors, chemotaxis, teratogenesis, drug effects on cellular control mechanisms, and drug metabolism. Successful candidates would be expected to establish active research groups and participate fully in teaching programs for medical and graduate students. Stanford University is an Equal Opportunity Employer and welcomes nominations of women and minority group members and applications from them. Persons interested in applying for these positions should send a curriculum vitae, bibliography, a brief description of research and teaching experience, and a statement of career objectives. Include the names of those persons who can furnish letters of reference. Send materials to:

Dr. Tag E. Mansour, Chairman, Department of Pharmacology, Stanford University School of Medicine, Stanford, Calif. 94305.

#### FACULTY POSITION IN BIOCHEMISTRY

Faculty position on tenure track to begin September 1977 or January 1978. Candidates should hold Ph.D. degree and have both teaching and research expertise. Duties include teaching undergraduate and graduate biochemistry courses, directing graduate students, and conducting a research program. Research field is not critical, but preference will be Research field is not critical, but preference will be given to a basic research having implications in agriculture or human nutrition. Salary will be commensurate with qualifications and experience. Send applications including biographical data, publication list, research résumé with funding sources, and names of three references to: W. A. Landmann, Department of Biochemistry and Biophysics, Texas A&M University, College Station, Texas 77834.

An Affirmative Action/Equal Opportunity Employ-er, Texas A&M University especially solicits appli-cations from women and minority groups.

## FACULTY POSITIONS: DEPARTMENT OF PATHOLOGY, CASE WESTERN RESERVE UNIVERSITY AND UNIVERSITY HOSPITAL OF CLEVELAND

Director of Clinical Laboratories to assume professional, managerial, and leadership responsibilities of large academically and service oriented hospital laboratories. Must be experienced in inspection, academically and service oriented hospital laboratories. creditation, proficiency testing and legislative programs relating to clinical laboratories.

Director of Hematopathology to assume professional and administrative responsibilities of large academi-cally and service oriented automated hematology laboratory. Must have experience in lymph node diagnoses

Immunopathologist to serve as director of large developing clinical immunology laboratory.

Additional Pediatric Pathologist to assume responsibilities in the teaching, research, and service programs of the division.

All positions afford ample opportunities for teaching and research and entail full academic privileges and responsibilities with rank and salary dependent on experience, scholarly achievement, and potential. Send curriculum vitae, bibliography, and the names and addresses of three referees to: John R. Carter, M.D., Director, Institute of Pathology, Case Western Reserve University, 2085 Adelbert Road, Cleveland, Obj. 4416. Ohio 44106.

Equal Opportunity/Affirmative Action Employers, M/F.

#### IMMUNOLOGIST-CELL BIOLOGIST

Full-time position for Ph.D. in biochemistry, pharmacology, or biology with experience in immunology on the cellular level. Opportunity for established investigator to develop programs in cell immunology in conjunction with research team carrying out ongoing programs in enzymology, protein chemistry pharmacology and biotechnology (including development of new immunoassay systems).

Please write, detailing background, experience, and salary requirements to: Martin N. Schuler, Manager, Personnel Operations,

MIDWEST RESEARCH INSTITUTE
425 Volker Boulevard
Kansas City, Missouri 64110
An Equal Opportunity Employer, MIF



SCIENCE APPLICATIONS, INC. (SAI) Oak Ridge, Tennessee

#### Staff Scientists-Environmental Research

SAL a well-established scientific research corporation invites applications for several Ph.D. level positions at its Oak Ridge, Tennessee, office. Generalists with broad, interdisciplinary and quantitative (statistical, modeling and programming) backgrounds are especially encouraged to apply. Selected candidates will work as part of an interdisciplinary research team on environmental aspects of energy related technologies. Positions to be filled are:

#### **Environmental Chemistry and Engineering** Marine Ecology Plant/Soil Ecology Water Resources

Salary levels are competitive with the Oak Ridge/Knoxville scientific market and the company offers a liberal fringe benefit package. SAI is an equal opportunity employer. Interested persons should send a curriculum vitae, including a research synopsis, and the names of three references by September 1, 1977 to:

> DR. C. W. CRAVEN, JR. SCIENCE APPLICATIONS, INC. P.O. BOX 843 OAK RIDGE, TENNESSEE 37830 PHONE 615/482-2438

#### UNIVERSITY COLLEGE LONDON

#### **DEPARTMENT OF ANATOMY AND EMBRYOLOGY**

Professor G. Burnstock, Head of the Department, invites applications for a LECTURE-SHIP from those experienced in the teaching of medical, dental and science students. Appointments from 1 October 1977 or as soon as possible thereafter. Facilities for research in the Department are outstanding. Salary scale £3,355—£6,655 plus £450 London Allowance. Applications by August 8 1977 to the Assistant Secretary (Personnel), University College London, Gower St. London WC1E 6BT, England, from whom further particulars may be obtained. Please quote Ref. S 22/7.

#### **POSITIONS OPEN**

### MEMORIAL UNIVERSITY OF NEWFOUNDLAND DEPARTMENT OF BIOLOGY FISHERIES BIOLOGIST

Applications are invited for a senior faculty position with primary responsibility in the development of a graduate program (M.Sc. and Ph.D.) in the field of fisheries biology. Preference will be given to candidates with an established background and practice. candidates with an established background and practical experience in applied fisheries research. The successful applicant will participate in the development of a proposed Institute of Fisheries and Marine Studies. Candidates should submit a full curriculum vitae and names of three referees to: Dr. G. Robin South, Head, Department of Biology, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1C 587, by 14 October 1977.

#### HEALTH SERVICES RESEARCH COORDINATOR University of California-Fresno, Calif.

Research associate position, University of California, San Francisco School of Medicine, Fresno-Central San Joaquin Valley Medical Education Program. The program, based in Fresno, encompasses medical student and house-staff clinical training with

medical student and nouse-stan clinical training with emphasis on primary care and rural health service. Doctorate degree related to health services re-search, or M.D.-M.P.H. required. Responsibilities include: health services research

with orientation to rural health service problems in central California; design and evaluation of experi-mental, demonstration models of rural health delivery; evaluation of educational programs; consulta-tion; modest administrative responsibilities; and

tion; modest administrative responsibilities; and teaching opportunities.

Apply with curriculum vitae to: David Werdegar, M.D., Associate Dean, Fresno University of California Medical Education Program, 2615 East Clinton Avenue, Fresno, California 3703.

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

#### THE UNIVERSITY OF MICHIGAN Department of Radiology

Instructor, Assistant Professor, Associate Professor, or Professor

Five positions available. Candidate must be Board-Five positions available. Candidate must be Board-eligible or Board-certified. Entering level commensurate with qualifications and experience. The physician will take part in the programs 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 also aid in the teaching of residents and medical students. Send résumé to Box 290, SCIENCE. Codes #500FO, #1200HO, #1600HO, #3200HO, #3400HO.

An Affirmative Action/Equal Opportunity Employer

## MOLECULAR BIOLOGIST/MEMBRANE BIOCHEMIST-POSTDOCTORAL

Recent Ph.D. with training in molecular biology of RNA tumor viruses or related areas. Preference will be given to candidates with specific training in either (i) nucleic acid biochemistry and molecular hybridization or (ii) biochemical characterization of mem-

brane proteins in eucaryotic systems.

Direct inquiries to: Doctors M. R. Das or C. M. McGrath, Department of Biology, Michigan Cancer Foundation, 110 East Warren Avenue, Detroit, Mich. 48201.

An Equal Opportunity Employer

POPULATION BIOLOGIST: to teach lower-division and upper-division courses; interest in community ecology and field research preferred. Temporary appointment as acting assistant professor for 1977–75, possible extension to 1978–79. Salary: \$13,284 for possible extension to 1978–79. Salary: \$13,284 for period. Ph.D. required. By 31 August 1977, send résumé, three letters of recommendation, and up to four publications to: Dr. M. E. Gilpin; Department of Biology, C-016, University of California, San Diego, La Jolla, Calif. 92093. The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL. Research in lipid biosynthesis POSTIDOCTORAL. Research in lipid biosynthesis and membrane-protein interactions. Ph.D. in biochemistry, experience with proteins, kinetics, radioisotopes, electron microscopy, and NMR techniques necessary. Send curriculum vitae and names of three references by I September to: Dr. M. L. Ernst-Fonberg, Department of Biology, Yale University, New Haven, Conn. 06520. An Affirmative Action Employ-

#### **POSITIONS OPEN**

#### UNIVERSITY OF CALIFORNIA, BERKELEY

Faculty Position in
INSECT ECOLOGY-BIOLOGICAL CONTROL
Division of Biological Control and
Department of Entomological Sciences
College of Natural Resources

A position as associate professor of entomology and associate entomologist in the experiment station will be available 1 December 1977. Teaching in insect ecology and research in biological control on predator-prey (host-parasite) and other ecological relationships of insects and other pests of crops and other resources. Emphasis on both physical and biotic ecology. Qualifications must include Ph.D. degree with specialization in insect ecology and training and experience applicable to biological control, as well as 4 years of experience subsequent to the Ph.D. in these areas, and quantitative insect ecology and population ecology, especially predator-prey or host-parasite relationships. Skills in statistics, mathematical modeling and computer methodology highly desirable. Send full curriculum vitae, official tran-A position as associate professor of entomology and cal modeling and computer methodology highly desirable. Send full curriculum vitae, official transcripts, copies of all publications or manuscripts, and names of three references by 1 September 1977 to: Dr. Carl Huffaker, Acting Chairman, Division of Biological Control, College of Natural Resources, University of California, Berkeley, California 94720. The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.

#### ORGANIC POLYMERS-PHOTOCHEMISTRY

Two-year postdoctoral position for comparative studies of polymerization of modern and fossil resins as part of joint biological and chemical research proas part of joint biological and chemical research program. Emphasis upon mechanisms of polymerization, including photoinitiation. \$12,000 annually. Available fall 1977. Deadline for applications: 15 August. Send résumé and three letters of recommendation to: Professor J. Langenheim, Thimann Laboratories, University of California, Santa Cruz, Calif. 95064. University of California, Santa Cruz, is an Engl. Operation of California Agine Employee. Equal Opportunity/Affirmative Action Employer.

#### PLANT BIOCHEMIST, Ph.D.

Available immediately faculty position in Biochemistry Department for joint appointment, College of Agriculture and Experiment Station. Successful ap-plicant must have Ph.D. and interest and training for plicant must have Ph.D. and interest and training for teaching and research in area of plant biochemistry. Research experience in photosynthesis or nitrogen fixation preferred; however, other areas of plant biochemistry will be considered. Salary and rank commensurate with experience. Twelve-month appointment; tenure tract position. Send résumé to: Dr. B. F. Barrentine, Drawer BB, Mississippi State University, Mississippi State, Miss. 39762.

Mississippi State University is an Equal Opportunity/Affirmative Action Employer. Mississippi State University does not discriminate on the basis of race, color, religion, national origin, sex, age, or handicap.

## CLEVELAND CHIROPRACTIC COLLEGES OF KANSAS CITY AND LOS ANGELES

Applications are invited for several full-time positions in the following departments:

**ANATOMY**: teaching responsibilities in either gross anatomy, neuroanatomy, or histology. MICROBIOLOGY: teaching responsibilities in or-

ganic and biochemistry, and nutrition

PHYSIOLOGY: teaching responsibilities in physi-

Openings are available immediately to all qualified individuals. Send references and recommendations Cleveland Chiropractic College

6401 Rockhill Road Kansas City, Missouri 64131 Attention: Academic Dean

Cleveland Chiropractic College 590 North Vermont Avenue Los Angeles, California 90004 Attention: Academic Dean

POSTDOCTORAL POSITION. Available immediately for 1 year, renewal possible, to study the neural control of salt and water metabolism. Experience rai control of sail and water metadonism. Experience in neurophysiology and/or RIA preferred. Stipend \$14,000 plus benefits. Send curriculum vitae and names of three references to Dr. A. B. Rothballer, Department of Neurosurgery, New York Medical College, 1249 Fifth Avenue, New York, New York 10029.

#### **POSITIONS OPEN**

POSTDOCTORAL POSITION-Biochemist to study the interaction of halogenated antibacterials with proteins and biological membranes. Salary up to \$12,000, depending on experience and qualifica-tions. Applicants should send curriculum vitae and the names of three references before 1 September 1977, to:

Dr. Donald R. Buhler Department of Agricultural Chemistry and Environmental Health Sciences Center Oregon State University Corvallis, Oregon 97331

An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL TRAINING POSITION: one opening, starting 1 September 1977, for a recent Ph.D. in psychology or related field. Research focused on behavioral (especially learning) deficits in animals with experimentally retarded cerebellar development. Opportunity to learn modern anatomical techniques and computer-aided quantification in histology. Send curriculum vitae and three letters of reference to: Dr. Joseph Altman, Laboratory of Developmental Neurobiology, Purdue University, West Lafayette, Indiana 47907. An Equal Access/Equal Opportunity Employer.

#### POSTDOCTORAL POSITION

Opportunity available for postdoctoral training in Opportunity available for postdoctoral training in pulmonary lung cell function effective immediately through Institutional National Research Service Award. A major research focus is fibrotic lung disease. Resources and faculty of the W. Alton Jones Cell Science Center, Lake Placid, New York, are also available. Opportunities are available to study fibroblast, macrophage, and type II cell structure and function. and function.

Dr. Robert B. Low
Department of Physiology and Biophysics
University of Vermont
College of Medicine
Given Medical Building Burlington, Vermont 05401

POSTDOCTORAL POSITION (1 to 2 years). Ph.D. Biophysics, toxicology, pharmacology, physiology, or related field. Available about 1 October 1977, for or related field. Available about 1 October 1977, for studies of aerosol properties, the deposition and re-tention of inhaled particles of potentially toxic mate-rials, and related inhalation toxicology. A specific goal will be the development of deposition and cleargoal will be the development of deposition and clear-ance models which are predictive of the potential toxicity of specific particulate and gaseous atmo-spheres. Candidates should have a background which includes aerosol generation and character-ization, respiratory tract anatomy and lung physi-ology, and methods for exposing laboratory animals to test aerosols. Formal training should be biophys-ics toxicology physiology of reics, toxicology, pharmacology, physiology, or related field. Applications will be accepted through 15 August 1977. Send curriculum vitae, transcript, and three letters of recommendation to: **Dr. Otto G. Raabe, Radiobiology Laboratory, University of California, Davis, California 95616.** 

The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply

POSTDOCTORAL RESEARCH POSITION avail-POSTDOCTORAL RESEARCH POSITION available in October for recent Ph.D. with training and research experience in solid-state physics and physical metallurgy. Position will involve experimental studies of point defect, atomic transport, and mechanical behavior of certain metallic alloys. Please send curriculum vitae, including names of three references, to: Professor David Turnbull, Division of Applied Sciences, Pierce Hall, Harvard University, Cambridge, Mass. 02138. Harvard is an Affirmative Action Employer and welcomes applications from female and/or minority candidates. female and/or minority candidates.

RESEARCH ASSOCIATE: postdoctoral position to study the dynamics of air/sea interaction on climatic time scales. Duties include the analysis of oceanic data in relation to atmospheric forcing, and assistance in the design and analysis of coupled atmosphere-ocean climate models. Requires minimum of 1 year postdoctoral experience in areas closely related to projected duties, experience in computer lated to projected duties, experience in computer programming, and Ph.D. specialty in atmospheric or ocean dynamical modeling. Starting annual salary: \$18,000 to \$20,000, depending upon experience. Application deadline: 30 July 1977, with duties beginning 15 September 1977. Send résumé and three letters of recommendation to: W. L. Gates, Director, Climatic Research Institute, Oregon State University, Corvallis, Oregon, 97331. Oregon State University is an Equal Opportunity/Affirmative Action Employer.

## SENIOR STAFF TOXICOLOGIST

MS or PhD in toxicology, pharmacology or biochemistry with a minimum of 4 years experience in industrial toxicology preferred. Responsibilities include toxicologic evaluation of industrial consumer products, air and water contaminants, and potential food and drug products through contract laboratories. Also requires interfacing with research, product development and marketing management and federal regulatory agencies.

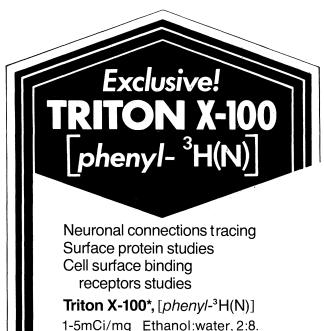
Salary commensurate with educational background and experience. Extensive benefits and career development opportunities. Please send your resume in confidence including salary history to:

W.F. Schreiber Employee Relations Services Dept.



200 E. Randolph Drive MC 0302 Chicago, Ill. 60601

An Equal Opportunity Employer M/F



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## THE INTERNATIONAL LABORATORY FOR RESEARCH ON ANIMAL DISEASES

P.O. Box 30709, Nairobi, Kenya Telephone: 592244/45/46, Telex: 22040

The International Laboratory for Research on Animal Diseases (ILRAD) is a newly established international institute in Nairobi, Kenya, which conducts research on African trypanosomiasis and theileriasis, two vectorborne, hemoparasitic diseases of widespread importance in approximately 50 developing countries. Multidisciplinary research involving immunology, biochemistry, cell culture, pathology, parasitology, ultrastructure, epidemiology, and clinical medicine is being carried out and will be expanded in 1978. The scientific staff is recruited internationally and is composed of core scientists, visiting scientists, and postdoctorals. Core scientists have a long-term association with the institution, while the visiting scientists have appointments for 1 to 2 years and generally are on leave from their home institutions. Postdoctorals are appointed for 2 to 3 years.

ILRAD is recruiting SCIENTIFIC STAFF for employment in 1978. Positions will be available in 1978 for CORE SCIENTISTS, VISITING SCIENTISTS, and POSTDOCTORALS in immunology, cell culture, pathology, and parasitology. Visiting scientist and postdoctoral posts will be open in biochemistry, epidemiology, and clinical medicine. Core and postdoctoral posts will be available in electron microscopy. The individuals appointed to core and visiting scientist positions must be well-established investigators with excellent training and experience in the relevant discipline and must show evidence of past research productivity. In addition, these individuals must be interested in interacting with other staff in multidisciplinary approaches to relevant questions leading to the control of trypanosomiasis and theileriasis. Postdoctoral candidates must have a strong science background in the relevant discipline and must have shown excellent potential and aptitude for research. Salary is based upon the background, training, and experience of the candidate. In addition to salary, ILRAD pays housing, moving expenses, commutation, insurance, retirement, and other perquisites.

Positions will be available in 1978 for a STAFF SCIENTIST, VISITING SCIENTISTS, and POSTDOCTORALS. These positions are open to people with research experience and interests in: basic cell biology, including cell synchronization and division analysis, mutation screening, and cell cloning; molecular biology, including mRNA analysis, cDNA probe analysis, and DNA cloning; and protein chemistry, including antigen isolation and purification and peptide analysis. Experience in protozoology would be advantageous. Salary and overseas benefits will be commensurate with age and experience.

ILRAD has a position available immediately for a SENIOR TECHNICIAN IN DIAGNOSTIC SEROLOGY. The individual in this position must be well trained, have 6 to 10 years of experience in a diagnostic laboratory, and be familiar with various serologic techniques including fluorescent antibody, haemagglutination, complement fixation, gel diffusion, and others. The person filling this post should be capable of setting up, conducting, and evaluating the results of serologic procedures as well as having sufficient background and training to develop new procedures and improve available ones in cooperation with scientific staff members. In addition, this individual must be able to supervise a small diagnostic laboratory including the activities of other technical staff conducting bacteriological, haematological, and other diagnostic procedures. The salary range is from \$8,000 to \$15,000 per annum and is based upon the training and experience of the candidate. Perquisites include moving, commutation, insurance, retirement, and others.

ILRAD has SENIOR POSITIONS available in 1977 and 1978 for TECHNICAL STAFF for both short-term (1 or 2 years) and longer-term appointments in biochemistry, immunology, cell culture, and parasitology. Individuals filling these positions must be well trained, with 6 to 10 years experience in the discipline, be capable of supervising the functions of a laboratory, including junior grade staff and have the interest and ability to train junior staff. Positions in immunology are for research in both cellular immunology and in immunoglobulins. One post is for a senior technician in serology for diagnostic work. Openings in cell culture are for individuals with training and experience in the initiation and maintenance of mammalian or insect cell cultures and their use in infectious disease research. Positions are available in parasitology for persons experienced in tick and tsetse fly rearing and research techniques as well as in research relating to trypanosomiasis and theileriasis. Individuals with experience in other hemoparasitic diseases will also be considered. Biochemistry openings are available for persons well versed in techniques involving protein, lipid, and enzyme chemistry. The salary range is \$8,000 to \$15,000 and is dependent upon the training and experience of the candidate. Also included are perquisites for transportation, housing, insurance, and other things.

Interested individuals should submit a synopsis of past research activities, curriculum vitae, publications, and the names of three references who could be contacted on behalf of their candidacy to the **Director**, **ILRAD**, **P.O. Box 30709**, **Nairobi**, **Kenya**. Additional information can be obtained by writing to the same address.

#### **POSITIONS OPEN**

TWO POSTDOCTORAL RESEARCH ASSO-TWO POSTDOCTORAL RESEARCH ASSOCIATE POSITIONS are available immediately for research on the effects of cancer drugs on the template activity of DNA. Research experience will be required in either: (i) drug alterations in UV, CD, sedimentation, and other colligative properties of DNA or (ii) purification and assay of various mammalian DNA polymerases with drug-treated DNAs. Salary: \$11,500. Send curriculum vitae and references to Dr. Harold C. Harder, Department of Pharmacology, The George Washington University Medical Center, 2300 I Street, NW, Washington, D.C. 20037. An Afirmative Action/Equal Opportunity Employer.

POSTDOCTORAL TRAINING OPPORTUNITIES at the University of Alabama in Birmingham in molecular and cellular aging (Dr. R. Hiramoto, Director). Postdoctoral research fellowships (\$10,000 and up) are available immediately, under preceptors from the Faculty of Medicine, Dentistry, and Basic Sciences. Individuals interested should send their curriculum vitae with three references to the appropriate director, Department of Microbiology, University of Alabama in Birmingham, Birmingham, Alabama 35294.

PROFESSOR-RADIATION ONCOLOGIST-Applications are invited for a senior radiation oncologist, at the professional level, experienced in all branches of radiotherapy including interstitial methods. Candidates must have a high academic standing and background with excellent clinical experience. Administrative experience is also a requirement. Apply with curriculum vitae and letter of interest to: Simon Kramer, M.D., Professor-Chairman, Department of Radiation Therapy and Nuclear Medicine, THOMAS JEFFERSON UNIVERSITY, 1025 Walnut Street, Philadelphia, Pa. 19107. Equal Opportunity/Affirmative Action Employer.

#### PROGRAM DIRECTOR

A faculty position for September 1977 at the assistant professor rank in a baccalaureate program in industrial health and safety. A unique program involving a new curricular approach to integrating the activities of worker and student. Qualified applicants should possess a doctorate degree in an area related should possess a doctorate degree in an area related to industrial health and safety, for example, industrial hygiene, toxicology, public health epidemiology, occupational medicine, applied physics, environmental science, and so forth. Experience in worker health problems, especially in industrial employment setting and a familiarity with the objectives and trends of the labor union movement will be acquired as well as an interest and complement to required as well as an interest and commitment to research. Salary commensurate with experience and qualifications. All replies will be answered with strict confidentiality assured. Applications and inquiries should be directed to:

Dr. Moon J. Pak
Associate Provost and Director
Center for Health Sciences
Oakland University
Rochester, Michigan 48063
Telephone: 313-377-3562

An Affirmative Action/Equal Opportunity Employer

An Affirmative Action/Equial Opportunity Employer

The Department of Biological Sciences of CarnegieMellon University has the following three positions available: PROTEIN BIOCHEMIST or BIOPHYSICIST; EUKARYOTIC GENETICIST; MOLECULAR BIOLOGIST applying restriction endonuclease technology in the area of structural studies of nucleic acids, genetic analyses, or recombinant DNA techniques. Candidates should have a Ph.D. (or equivalent) and preferably postdoctoral experience. Positions are at the ASSISTANT PROFESSOR level, although higher appointments will be considered. Duties include teaching at the undergraduate and graduate level. Applicants should forward their curriculum vitae, three or more letters of reference, and a brief résumé of research plans to: Search Committee (1), Department of Biological Sciences, Carnegie-Mellon University, 4400 Fifth Avenue, Pittsburgh, Pa. 15213. Carnegie-Mellon University is an Equal Opportunity/Affirmative Action Employer.

#### RESEARCH POSITION

Immediate opportunity for individual with research experience in tissue culture (cancer viruses), molecular biology (nucleic acid hybridization) or immunology. Minimum of 2 years of postdoctoral experience is required. Will conduct research on biology or biochemistry of murine cancer viruses. Salary commensurate with experience. Please submit curriculum vitae in confidence to: A. H. Rainey, Employment Manager, Litton Bionetics, Inc., 5516 Nicholson Lane, Kensington, Md. 20795. An Equal Opportunity Employer, MIF.

#### **POSITIONS OPEN**

#### RESEARCH ASSOCIATES

Two postdoctoral positions are available at once for persons interested in working with a group studying mechanisms of induction of bladder cancer. Research group is affiliated with Department of Urology, University of Tennessee Center for the Health Sciences. The projects are (i) studies of mechanisms of metabolic activation of N-butyl-N-(hydroxybutyl)nitrosamines and related dialkylnitrosamines. (hackground in drug/carcinogen metabolism ines (background in drug/carcinogen metabolism required) and (ii) studies on the in vitro transforma-tion of bladder epithelial cells (background in tissue culture required). Initial salaries are \$12,000 per

Interested candidates should send curriculum interested candidates should send curriculum vitae, names of three references, and representative publications to: Dr. Charles C. Irving, Chief, Cancer Research Laboratory, Veterans Administration Hospital, 1030 Jefferson Avenue, Memphis, Tenn. 38104.

### NEW ZEALAND FOREST SERVICE SCIENTIST, FOREST PRODUCTS DIVISION, FOREST RESEARCH INSTITUTE, ROTORUA

RESEARCH INSTITUTE, ROTORUA

Applications are invited for the above position. Salary up to \$14,453 (NZ) per annum depending on qualifications and experience.

Qualifications desired: a good research degree, preferably Ph.D. with experience in gymnosperm physiology. Knowledge of wood anatomy and related fields an advantage.

Application forms and details of passage assistance may be obtained from: the New Zealand Embassy, 19 Observatory Circle, NW, Washington, D.C. 20008, with whom applications close on 23 September 1977. Please quote Vacancy No. 9/77/775.

Further particulars about the position may be obtained from: The Director, Forest Products Division, Forest Research Institute, Private Bag, Rotorua, New Zealand.

WILDLANDS VEGETATION MANAGEMENT-assistant professor of plant pathology. The Department of Plant Pathology, University of California, Berkeley, announces a faculty position for a scientist with a Ph.D. in plant pathology. Training and/or experience in one or more of the following areas is desirable: forestry, range management, weed science, epidemiology, soil microbiology, plant ecology. Research emphasis will focus on diseases and/or beneficial microorganisms affecting range and forest plants. Applicants should send curriculum vitae, publications, and the names of three references to: Dr. A. R. Weinhold, Chairman, Department of Plant Pathology, University of California, Berkeley, Calif. 94720, by 19 August 1977.

The University of California is an Affirmative Ac-WILDLANDS VEGETATION MANAGEMENT-as-

The University of California is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

#### **FELLOWSHIPS**

MEMBRANE BIOCHEMISTRY AND STRUC-URE. POSTDOCTORAL FELLOWSHIPS (2) TURE. POSTDOCTORAL FELLOWSHIPS (2) AVAILABLE. To do biochemical or ultrastructural studies on plasma membranes on differentiated and undifferentiated and normal and transformed cells. Glycoprotein labeling and isolation, membrane enzymes, effects of various agents including hormones on differentiated and undifferentiated cells; interested in both avotain and limit studies. Structural on differentiated and undifferentiated ceis; inter-ested in both protein and lipid studies. Structural studies involve TEM, freeze fracture, immuno-cytochemistry, and SEM; experience in all not re-quired. Experience with isolation and antibody pro-duction of contractile proteins beneficial. Salary ne-gotiable. Send curriculum vitae and three letters of recommendation to:

Dr. Leo T. Furcht
Box 198 Mayo
Department of Laboratory Medicine and Pathology
University of Minnesota Medical School
Minneapolis, Minnesota 55455

## POSTDOCTORAL FELLOWSHIPS AT THE HARVARD FOREST

One fellowship in silviculture, the other in tree physiology, both available after 1 September 1977. One-year appointments with renewal possibilities. Research of your own choice and assistance with ongoing research and teaching.

Write to: The Director, Harvard Forest, Petersham, Mass. 01366.

Harvard is an Equal Opportunity/Affirmative Ac-

tion Employer.

#### **FELLOWSHIPS**

## POSTDOCTORAL FELLOWSHIPS IN CELLULAR AGING

Two postdoctoral positions of 2 to 3 years duration are available to study cellular aging. Appointees will participate in a National Institute of Aging Training Grand Program involving the development of in vitro model systems relevant to the study of aging. Emphasis of the training program is on the devel-opment and use of techniques for establishing cell or opment and use of techniques for establishing cell or organotypic cultures that retain tissue-specific functions in vitro. These systems will be used to study various aspects of aging. Candidates must hold an M.D. or Ph.D. degree in some area of the life sciences and have a demonstrable interest in aging research. Candidates must also be permanent residents of the United States and be committed to a career in aging research. Stipends range from \$10,000 to \$12,000 depending on previous postdoctoral experience. Box 289, SCIENCE.

#### FELLOWSHIP IN MEDICAL GENETICS

NIH postdoctoral fellowship for training in medical genetics available September 1977 for Ph.D. or M.D. applicants. Main focus of training and research m.D. applicants. Main focus of training and research program is biochemical genetics and cytogenetics, with special emphasis on prenatal diagnosis. Apply to: Dr. Aubrey Milunsky, Genetics Division, Eunice Kennedy Shriver Center, 200 Trapelo Road, Waltham, Massachusetts 02154.

#### **TRAINEESHIPS**

TOXICOLOGY: Pre- and postdoctoral train-eeships in biochemical and environmental toxicology. Trainee may select from pro-grams in seven areas of biological sciences. For further details, contact: F. E. Guthrie, Department of Entomology, North Carolina State University, Raleigh, N.C. 27607.

#### **CONFERENCE**

### WORKSHOP ON BIOLOGICAL X-RAY MICROANALYSIS BY ELECTRON BEAM EXCITATION 25 to 26 AUGUST 1977

This workshop is sponsored and supported by Division of Research Resources, National Institutes of Health, and will be held at the Sheraton Boston Hotel (Boston). The following themes will be covered by 40 national and international speakers:

Instrumentation (including ion probe and electron energy loss spectroscopy)

Quantitation
Liquid Droplet and Single Cell Analysis
Frozen Hydrated Tissue Analysis

The workshop is open to general attendance with a registration fee of \$25. Students \$10.

For further information write or call: Workshop on Biological X-ray Microanalysis by Electron Beam Ex-citation, Biotechnology Resource in Electron Probe Microanalysis, Harvard Medical School, 45 Shattuck Street, Boston, Mass. 02115. Telephone: 617-732-

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