

# Temperaturo Adaptation

## Temperature

By H. Precht, J. Christophersen, H. Hensel, and W. Larcher Contributions from authors representing

a wide range of fields-microbiology, botany, zoology, biochemistry, and physiology-provide a comprehensive study of the way in which living organisms including plants, adapt to temperature and climate.

The text of the 1955 German edition by Precht, Christophersen, and Hensel has been completely revised and substantially enlarged for this first English edition. 1973. xx, 779p. 263 illus. cloth/\$54.70 ISBN 0-387-06441-9

## Effects of Temperature on

Ecological Implications and Mechanisms of Compensation

Edited by W. Wieser

The study of thermoregulation in ectothermic organisms continues to produce insights into a number of general biological problems, in particular that of metabolic regulation. Ectotherms, in adapting to a thermally unstable environment, exhibit a wide range of subtle molecular and organismic mechanisms. Thus, the experimenter using temperature change as a tool is well-equipped to analyze temperature-induced adaptation. 1973. xi, 298p. 126 illus. cloth/\$28.10 ISBN 0-387-06420-6

## Temperature

By S. A. Richards and P. S. Fielden

This book deals with the responses of all types of vertebrates, especially man, with particular emphasis on physiologic mechanisms. Invertebrates are also considered where relevant. Written primarily for the undergraduate student, it is intended as an introduction to the field of thermoregulatory physiology and as a framework for more advanced studies. Wykeham Science Series, Volume 27 1973. xi, 212p. illus. ISBN 0-387-91110-3 paper/\$6.00

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ney. University of New Mexico Press, Albuquerque, 1974. xvi, 120 pp., illus. Paper, \$9.95.

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Strategy for the West. American-Allied Relations in Transition. Richard B. Foster. Andre Beaufre, and Wynfred Joshua, Eds. Crane, Russak, New York, 1974. xii, 258 pp. \$11. Strategic Studies Center series.

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Submicroscopic Cytochemistry. Vol. 2, Membranes, Mitochondria, and Connective Tissues. Isidore Gersh, Ed. Academic Press, New York, 1973. xviii, 246 pp., illus, \$22.

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Thesaurus Phytomedizin. Pflanzenkrankheiten und Pflanzenschutz. Dedo Blumenbach. Kommissionsverlag Paul Parey, Berlin, 1973. x, 146 pp. Paper, DM 14.50. Mitteilungen aus der Biologischen Bundesanstalt für Land- und Forstwirtschaft, Heft 155.

Time on the Cross. Robert William Fogel and Stanley L. Engerman. Little, Brown, Boston, 1974. 2 vols., illus. Vol. 1, The Economics of American Negro Slavery. xviii, 286 pp. \$8.95. Vol. 2, Evidence and Methods. xii, 268 pp. \$12.50.

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Tropical Pathology. Herbert Spencer and eight others. Springer-Verlag, New York, 1973. xiv, 766 pp., illus. \$88.60. Special edition of Spezielle pathologische Anatomie, Band 8.

Understanding Crime and Delinquency. A Sociological Introduction. Michael Phillipson. Aldine, Chicago, 1974. xviii, 210 pp. Cloth, \$7.50; paper, \$2.95. Second edition of Sociological Aspects of Crime and Delinquency,

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ACADEMIC POSITIONS

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Applicants should have completed the Ph.D. degree by July 1975, provide a curriculum vitae noting research and teaching interest, and request that three letters of recommendation be sent to:

The Chairman, Department of Biology, University of California, Los Angeles 90024.

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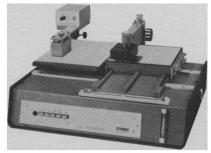
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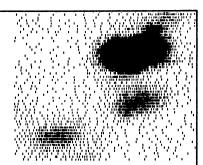
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Assistant professor position in teaching and research available 1 January 1975. Ph.D. required. Postdoctoral research &/or teaching experience desirable. Send curriculum vitae and names of three references to: Dr. Kermit Ratzlaff, Chairman, Search Committee, Department of Biological Sciences, Southern Illinois University, Edwardsville, Ill. 62025. The University is an affirmative action and an equal opportunity employer. Applications from women and minorities are encouraged.

#### ASSISTANT PROFESSOR OF ANATOMY

An anatomist Ph.D. and/or M.D. with predoctoral experience in an anatomical sciences training program and 2 to 3 years of postdoctoral experience in cell biology research. Must be interested in independent and/or collaborative research in cell biology, and teaching microscopic and developmental anatomy in integrated programs for medical and graduate students. Salary will depend on qualifications. Apply to Dr. G. Gordon Robertson, Department of Anatomy, University of Tennessee Center for the Health Sciences, 875 Monroe Ave., Memphis, Tennessee 38163. 38163.

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#### ASSISTANT PROFESSOR VERTEBRATE NEUROBIOLOGIST

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THE DEPARTMENT OF BIOCHEMISTRY AND BIOPHYSICS, University of California, San Francisco, is seeking one or two individuals (rank open) who are experienced in the determination of the structure of proteins and/or nucleic acids using x-ray crystallographic methods.

nucleic acids using x-ray crystallographic methods. The Department hopes to attract a person with a strong background in physics and/or physical chemistry, but who also has a broad scientific inquisitiveness, and can communicate well with others in the Department and other biologists on campus. The person(s) would be expected to carry on an active research program in their own field of interest and to teach in the general area of physical biochemistry, especially the determination of the structure of macromolecules. The prime requisite, however, is that the appointee(s) have the independence, technical competence, and creative qualities necessary to be a leader in this field.

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The University of California is an equal op-portunity employer with an Affirmative Action Program, and welcomes applications from women and minority candidates.

Address enquiries to: Dr. Howard Goodman, Department of Biochemistry and Biophysics, University of California, San Francisco, San Francisco, California 94143.

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Applications with supporting curriculum vitae should be directed to: P. C. Whybrow, M.D., Chairman, Community Medicine Search Commitee, Dartmouth Medical School, Hanover, New Hampshire 03755. Dartmouth College is an equal opportunity/affirmative action employer. Women and minority group candidates are encouraged to apply. apply.

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graduate level teaching duties; supervision of M.S.
thesis research. Submit complete curriculum vitae,
three letters of reference, and a written description of research plans, before 15 October 1974,
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Position available January 1975. Initial duties will stress undergraduate and graduate teaching with the development of a research program, preferably in somatic cell or plant population genetics, to follow Applicants (Ph.D. required) should send curriculum vitae and names of three referees to: Dr. James D. Smith, Genetics Section, Department of Plant Sciences, Texas A&M University, College Station, Texas 77843. An equal opportunity/affirmative action employer.

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#### CELL PHYSIOLOGIST

Rank according to qualifications. Minimum 1 year postdoctoral experience. Interested in biochemical aspects of secretion or chemoreception, ultrastructure, or muscle physiology. Knowledge of membrane biophysics and electrophysiological techniques desirable. Appointee will be expected to develop active, independent research program. The University of Colorado is an equal opportunity employer. Apply to: Professor A. R. Martin, Department of Physiology, University of Colorado Medical Center, Denver, Colorado, 80220.

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#### ASSISTANT PROFESSOR

Position available in the Department of Internal Medicine, University of Michigan Medical School. Candidates must have prior training in Internal Medicine and at least 2 years experience in clinical Hypertension required, Must show interest and ability to perform research by having publications in the field of hypertension. Code #4000FO. Send résumé to Box 429, SCIENCE. A Non-Discriminatory Affirmative Action Em-

#### ASSISTANT PROFESSOR

Position available in the Department of Internal Medicine, University of Michigan Medical School. Candidates must meet qualifications equivalent to those of the American Board of Internal Medicine with subspecialty qualifications in Nephrology. Must also be fully qualified to carry out investigation and to teach at undergraduate and graduate medical education levels. Code #1000FO. Send résumé to Box 430, SCI-ENCE. A Non-Discriminatory Affirmative Action Employer.

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Department of Microbiology, New York Medical College. Applicants for the position of Professor and Chairperson of Microbiology from qualified individuals are requested. New York Medical College is an affirmative action equal employment employer. Applicants should submit curriculum vitae and bibliography to Robert Goldstein, M.D., Chairman of Search Committee, Department of Medicine, New York Medical College, 1249 Fifth Avenue, New York, New York 10029.

Applications or nominations are invited for the position of PROFESSOR AND CHAIRPERSON of the Department of Biological Structure (Anatomy). Applicants must possess the Ph.D. or M.D. degree, have an outstanding record in research and proven ability to direct medical and graduate programs. The University of Miami is an equal opportunity/affirmative action employer. Correspondence should be addressed to: Dr. Lincoln Potter, Chairman, Search Committee, University of Miami School of Medicine, P.O. Box 520875, Miami, Florida 33152.

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Correspondence should be addressed to:

Dr. W. N. Adams-Smith, M.D., D.Phil. Vice President for Health Affairs University of South Carolina Columbia, South Carolina 29208

#### DIRECTOR

The MARINE BIOLOGICAL LABORATORY, Woods Hole, Mass, 02543 invites applications for the position of Director of the Laboratory, which will become open on 15 August 1975. Qualified applicants are invited to submit a curriculum vitae, summary of experience and 3 references to one of the following:

references to one of the following:

Dr. Harlyn O. Halvorson, Chairman Search
Committee, Rosenstiel Basic Medical Research
Center, Brandeis Univ., Waltham, Mass. 02154

Dr. James Case, Member Search Committee,
Department of Biology, University of California, Santa Barbara, Calif. 93106

Dr. J. Woodland Hastings, Member Search Committee, Division of Biological Sciences, Harvard Univ., Cambridge, Mass. 02138

Dr. James W. Lash, Department of Anatomy,
Univ. of Pennsylvania School of Medicine,
Philadelphia, Pa. 19174

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#### POSITIONS OPEN

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MEDICINAL CHEMISTRY CHAIRPERSON
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in training at the pre- and postdoctoral level,
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record of achievement in teaching, research, and
leadership in medicinal chemistry and/or related
areas.

Applications and nominations should be sent to Professor Jacob Kleinberg, Search Committee Chairman, Department of Chemistry, University of Kansas, Lawrence, Kansas 66045.

The University of Kansas is an equal opportunity employer. Applications from minority groups and women are encouraged.

CHAIRPERSON—DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY Applications and nominations are invited for the position of Chairperson of the Department of Pharmacology and Toxicology, School of Pharmacy, University of Kansas, effective 1 July 1975. Duties will include the advancement of established undergraduate and graduate programs in teaching and research in pharmacology and toxicology, and contributions to the continuing education programs. Qualifications for the position of Chairperson of the Department of Pharmacology and Toxicology are a doctorate in pharmacology, toxicology, or any related basic science, a distinguished record of achievement in teaching and research, and demonstration of innovative leadership. Administrative experience is preferred but not essential. A background in pharmacy education and related professional experience would be desirable but is not necessarily a requisite. Letters of inquiry, application, and nominations should be sent to: Dr. Morris D. Faiman, Chairman, Search Committee, Department of Pharmacology and Toxicology, School of Pharmacy, University of Kansas, Lawrence, Kansas 66045. Interested applicants should include their curriculum vitae and names of three references. Closing date for applications is 15 November 1974. The University of Kansas is an Equal Opportunity Employer. Applications from minorities and women are encouraged.

CHAIRMAN, DEPARTMENT OF ASTRON-

CHAIRMAN, DEPARTMENT OF ASTRON-OMY, University of Washington. Department offers Ph.D., M.S. and B.S. programs. The current faculty consists of six to be expanded to seven with this appointment. Research facilities include a 30-inch reflector on Manatash Ridge near Ellensburg, Washington. Department has received bequest for construction or acquisition of new observation facilities. Applications from minority persons and women are encouraged. Contact Prof. L. Wilets, Chairman, Search Committee, Department of Physics, BJ-10, University of Washington, Seattle, Washington 98105.

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LABORATORY ANIMAL MEDICINE
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Doctorate degree in health sciences including training in epidemiology and familiarity with toxicology are invited to apply for the position of project director for Environmental Hazard Evaluation Project with American Public Health Association. Position needs qualified scientific and management person. Send curriculum vitae to Dr. Richard Wade, APHA, 1015 18th St., NW, Washington, D.C. 20036. Salary \$25,000 to \$30,000 per year depending on qualifications.

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#### POSITIONS OPEN

The Department of Psychology of the University of Michigan expects to make several faculty appointments in Experimental Psychology for terms starting September 1975. Candidates at all levels starting September 1975. Candidates at all levels will be considered. Letters of inquiry, applications with curriculum vitae, and nominations should be addressed to Prof. J. Reitman, Department of Psychology, University of Michigan, 330 Packard, Ann Arbor, Mich. 48104. A Non-discriminatory, Affirmative Action Employer.

EXPERIMENTAL PSYCHOLOGISTS

#### FACULTY POSITION

Available for psychiatrist interested in an academic career in alcoholism and drug abuse at the Department of Psychiatry, University of Michigan Medical School. Responsibilities will include outpatient and community work, as well as teaching medical students, residents and other disciplines. Demonstrable teaching, clinical and research skills important. Must be graduate of an approved residency program.\* Send résumé to Box 431, SCIENCE. A Non-Discriminatory Affirmative Action Employer.

\* Rank dependent on qualifications and experience.

#### FACULTY POSITION

Available for psychiatrist to participate in Adolescent Program of The University of Michigan Department of Psychiatry. Must be Board eligible with documented clinical, teaching and research skills. Faculty rank dependent on qualifications. Send résumé to Box 432, SCIENCE. A Non-Discriminatory Affirmative Action Employer.

#### FACULTY POSITION

Available for psychiatrist in psychosomatic-liaison program at The University of Michigan, Department of Psychiatry. Must be Board eligible with documented clinical, teaching and research skills. Faculty rank dependent on qualifications. Send résumé to Box 433, SCIENCE. A Non-Discriminatory Affirmative Action Employer.

#### FACULTY POSITION

Available for psychiatrist to take leadership role and participate in geriatrics program at The University of Michigan, Department of Psychiatry. Must be Board eligible with documented clinical, teaching and research skills. Faculty rank dependent on qualifications. Send résumé to Box 434, SCIENCE. A Non-Discriminatory Affirmative Action Employer.

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For further information contact Dr. D. J.
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#### IMMUNOCHEMIST/IMMUNOLOGIST

Ph.D., R & D in pharmaceutical companies, various locations. Know modern techniques in analysis and product development. \$18,000-\$24,000. Mail résumés to: J. P. McKenna, Sampson • Neil Associates Inc., 543 Valley Road, Upper Montclair, N.J. 07043.

#### JUNIOR POSITION IN RADIOBIOLOGY AND ANATOMY

Ph.D.; primary interest in hard tissues; applicant must be expert in thick and thin sectioning of undecalcified bone, thin sectioning of decalcified bone, autoradiography, microradiography, hard tissues electron microscopy, dosimetry, morphometric methods of analyses (image-analyzing microscopy). Will supervise one or more graduate students. Preferably conduct independent research in proliferation and differentiation of hard tissue cells. Send curriculum vitae to Dr. W. S. S. Jee, Department of Anatomy, College of Medicine, University of Utah, Salt Lake City, Utah 34132. Equal Opportunity Employer

The Mental Retardation Research Center at the University of California is seeking an experienced scientist with specific interests in the SOCIAL EPIDEMIOLOGY OF MENTAL RETARDATION. Duties will involve research, administration, and teaching in collaboration with the research program at Pacific State Hospital in Pomona, California. Candidates should qualify at the Associate Professor level or higher in the University of California system and must have no less than Ph.D. plus 5 years of experience, or an M.D. plus residency plus 5 years of experience. Candidates would be welcome from such fields as Psychiatry, Psychology, Sociology, Education, and related disciplines. UCLA is an Equal Opportunity employer with a vigorous affirmative action program. Please send résumé to: Dr. Nathaniel Buchwald, Mental Retardation Research Center, University of California, 760 Westwood Plaza, Los Angeles, California 90024.

#### NEUROPHYSIOLOGIST

With minimum of 4 years of postdoctoral experimental research experience on sensory motor control of head and neck musculature and expertise in the recording of single motor units in the supra- and infra-mandibular muscles. The position at Associate or Assistant Professor level in the School of Dentistry is dependent on grant support. School of Dentistry, University of California, San Francisco, Calif. 94143. The University of California, San Francisco, is an equal opportunity employer with an affirmative action program.

### **SUPERINTENDENT**

#### **BACTERIAL AND** VIRAL VACCINES

We are currently seeking an individual with a Ph.D. in Microbiology with exposure to tissue culture and virology and extensive experience in a commercial laboratory or research institute who can accept the challenge of combining technical expertise with managerial ability. Will be responsible for coordinating the activities of several departments associated with the manufacture of bacterial and viral vaccines.

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Admission is limited to a maximum of thirty-five students.

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#### POSITIONS OPEN

#### MASS SPECTROSCOPIST ASSISTANT PROFESSOR

Applications are invited for a position as Assistant Professor of Mass Spectroscopy in the departments of Pediatrics and Pharmacology at the University of Colorado Medical Center, Denver. Candidates are expected to have a Ph.D. in Organic Chemistry and at least 3 years of postdoctoral experience, preferably in the biochemical applications. The successful applicant will be required to keep charge of a Clinical Organic Chemistry Laboratory and to work in the areas of inborn errors of metabolism, toxicology, and steroid metabolism. Send curriculum vitae to Dr. Donough O'Brien, Department of Pediatrics, University of Colorado Medical Center, 4200 East Ninth Avenue, Denver, Colo. 80220. ter, 4

The University of Colorado is an equal opportunity and affirmative action employer; female and minority persons are urged to apply.

#### POSTDOCTORAL POSITION

Manager for an Environmental Protection Agency-sponsored project on "Maximum Utilization of Water Resources in a Planned Community." Duties include: administering overall grants, preparing monthly and annual reports, preparing technical reports for publication, evaluating technical progress of subcontractual work, and directing surface water hydrology sampling and monitoring programs. Applicant must have a working knowledge of applied hydrology. Position is available immediately. Salary is commensurate with qualifications. Call Dr. W. G. Characklis, Department of Environmental Science and Engineering, Rice University, Houston, Texas (713-528-4141). Rice University is an equal opportunity/affirmative action employer. affirmative action employer.

#### POSTDOCTORAL POSITION

Research Associate in biochemistry of fibrous Research Associate in biochemistry of fibrous proteins. Knowledge of modern isolation and purification techniques. One- to two-year appointment. Write or call Prof. Robert V. Rice, Head, Department of Biological Sciences, Carnegie-Mellon University, 4400 Fifth Avenue, Pittsburgh, Pa. 15213. Telephone (412)-621-1100, Ext. 608. Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL POSITION

Opening in Molecular Biology/Biochemistry to work on nucleic acids and protein synthesis in invertebrates. Salary: \$10,000. Résumé to Dr. Moises Agosin, Department of Zoology, University of Georgia, Athens, Georgia 30602.

#### POSTDOCTORAL RESEARCH ASSOCIATE

Position available for individual interested in rosition available for individual interested in areas of gene structure and genome organization in prokaryotes and eukaryotes, restriction endonucleases, and nucleic acid sequencing. Please send résumé with desired starting date and list of three references to: Arthur Landy, Division of Bio-Medical Sciences, Brown University, Providence, R.I. 02912.

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#### POSTDOCTORAL RESEARCH POSITION

Postdoctoral research position | October 1974 through 30 June 1975 to isolate and identify fungi from decaying wood products. Experience in identification of Basidiomycetes and Fungi Imperfecti desired.

Oregon State University subscribes to a policy of active recruitment of women and ethnic minority persons and invites all interested and qualified persons to apply with resume and references to:

Professor Malcolm E. Corden Botany and Plant Pathology Oregon State University Corvallis, Oregon 97331

#### POSTDOCTORAL RESEARCH

Postdoctoral research to study immunotherapy in animal tumor model systems. Candidate must have previous training in cellular immunology.

**Box 435, SCIENCE** 

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#### POSITIONS OPEN

#### POSTDOCTORAL TRAINEESHIPS IN CLINICAL CHEMISTRY

Will become available 1 July 1975 to recent Ph.D. biochemists and chemists in a program designed to train clinical chemists for positions in research-oriented hospitals. The appointments are for 2 years, with a stipend of \$6000 to \$7000 per annum plus a dependency allowance. Interested applicants are invited to send a curriculum vitae to: Dr. Alex Kaplan, Department of Laboratory Medicine, University of Washington, Seattle, Wash. 98195.

#### POSTDOCTORAL NIH TRAINEESHIPS

Available for Ph.D. or M.D. to work on (1), energy metabolism in subcellular preparations, and on (2), physicochemical studies on collagen. Ph.D. in biochemistry, cell biology, or chemistry with experience in enzymology or protein chemistry. Stipend \$10,000. Submit résumé and two letters of reference to (1), Dr. D. R. Sanadi or (2) Dr. P. F. Davison, Boston Biomedical Research Institute, 20 Staniford St., Boston, Mass. 02114. An Equal Opportunity Employer.

#### RESEARCH ASSOCIATE

Ph.D. in Chemistry, Biochemistry, or Life Sciences. To study molecular aspects of bacteriophage replication or properties of phage-coded enzymes. Minimum salary, \$8500. Reply, with curriculum vitae and names of three references, to Dr. Christopher K. Mathews, Department of Biochemistry, University of Arizona, College of Medicine, Tucson, Arizona 85724.

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#### RESEARCH ASSOCIATE

Position available immediately. Research on immunopathology of viral disease. Ph.D. or M.D. required. Experience with virus and tissue culture techniques as well as animal work preferred. Send curriculum vitae to: Jack F. Woodruff, M.D., Pathology Department, Cornell University Medical College, New York, N.Y. 10021.

#### RESEARCH ASSOCIATE POSITION

For person interested in the primary structure of animal virus RNA. Experience with Sanger's two-dimensional electrophoresis technique required. Funds available for 3 years. Apply with curriculum vitae and references.

M. E. Reichmann Department of Microbiology University of Illinois Urbana-Champaign, Illinois 61801

#### RESOURCE ECONOMIST

With competency in regional development to par-With competency in regional development to participate in interdisciplinary study on marine resources in Mexico, Ph.D. in economics or closely related field, Knowledge of Spanish desirable. Appointment at Assistant Research level. Address inquiries to: Dr. Gerald L. Wick, Director, Center for Marine Affairs, Scripps Institution of Oceanography, P.O. Box 1529, La Jolla, Calif. 92037.

#### NEW ZEALAND FOREST SERVICE SCIENTIST (BIOMETRICIAN), FOREST RESEARCH INSTITUTE ROTORUA

Applications are invited for the above position. Commencing salary up to \$12,261 per annum depending on qualifications and experience.

Qualifications Desired: Honours degree in or including mathematical statistics and some experience in applied statistics, preferably biological science.

Duties: Appointee will be in charge of Biometrics Section, will act as statistical consultant to officers engaged in the full range of forestry and forest products research and will undertake research into the application of statistical methods to research problems. Assistance with fares will be considered on merit.

Application forms may be obtained from the New Zealand Embassy, 19 Observatory Circle, NW, Washington, D.C. 20008. Please quote Vacancy No. 9/74/4291. Closing date for applications is 20 November.

Further particulars may be obtained from the New Zealand Forest Service, Private Bag, Wellington, N.Z.

### **AAAS Elections**

Ballots for the 1974 general election of AAAS president-elect, members of the Board of Directors, and members of the Committee on Nominations have been mailed to all members. Biographical information concerning the candidates was published in the June issue of the AAAS Bulletin. If you would like a copy, write to the Executive Office, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036.

Members who are enrolled in electorates will also receive ballots for election of section and electorate officers. Again, biographies appeared in the June Bulletin. Nonreceipt of such a ballot indicates that the AAAS office has no record of your having enrolled in an electorate (voting section). If you would like to participate in future electorate elections, send a note to the AAAS Membership Office, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005 specifying the AAAS section in which you would like to vote. A list of the sections appears on the contents page of Science.

## **CANCER** RESEARCH

The National Cancer Institute is seeking candidates for Chemistry, Information Science, and Data Analysis/Systems Manager positions in the Carcinogen Bioassay and Program Resources Branch, Carcinogenesis, Division of Cancer Cause and Prevention, National Cancer Institute. The persons selected will have major responsibilities in the testing of chemical and physical agents to determine their carcinogenicity. They will assist in the selection and analysis of chemicals for testing; design and supervision of the experiments; collection and analysis of the data; and the reporting of the results. The positions are primarily administrative assignments that require close working relationships with other Government Agencies and the scientific community at large.

Qualifications for these positions are as follows:

1) Chemist—must be trained and experienced in organic, analytical and/or biochemistry;

2) Information Scientist—scientific background in chemistry or biology with experience and interest in information processing:

istry or biology with experience and history coccessing;
3) Data Analyst/Systems Manager—training in biometry and data analysis with experience or interest in automatic data processing and computerized data systems.

Starting salaries will be based upon training and experience. All applications must be received by 30 October 1974. Please send résumé to:

National Cancer Institute NATIONAL INSTITUTES OF HEALTH Public Health Service Building 31, Room 3A-32 9000 Rockville Pike Bethesda, Maryland 20014

ATTN: Mr. Robert Wagner

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#### UNIVERSITY OF CAPE TOWN SENIOR LECTURESHIP IN ENVIRONMENTAL STUDIES

Applications are invited for the newly created post of Senior Lecturer in Environmental Studies. Appointment, according to qualifications and experience, will be made on the salary scale R6300 × 300 to R8100 per annum plus a pensionable allowance of 15 percent of basic salary. This salary scale does not include improvements under consideration.

Applicants for the post must have interest and experience in at least one aspect of environmental study, should desire to participate in inter-disciplinary teaching and research, and should have a Ph.D. or its equivalent.

Applicants should submit a curriculum vitae, stating present salary, research interests and publications, when available if appointed, and the names and addresses of three suitable referees.

Further information concerning the post and general conditions of service should be obtained from the Registrar, University of Cape Town, Private Bag, Rondebosch, 7700, South Africa, by whom applications must be received not later than 1 November 1974.

Appointment will be subject to a satisfactory medical examination. The University reserves the right to appoint a person other than one of the applicants or to make no appointment.

#### PROFESSORSHIP IN BIOLOGY

Applications are invited for the above position, which is to be filled as soon as possible after 1 November 1974. Candidates should have research interests in experimental biology covering the areas of both ecology and physiology. The professorship carries teaching responsibilities in experimental and environmental biology at the advanced level as well as involvement in the Institute's introductory biology courses, Applications together with reprints of relevant publications should be sent in triplicate to: Administration, Odense University, DK 5000, Denmark. Inquiries can be addressed to: dr. philos. Rolf Lange, Institute of Biology.

#### TECHNICAL WRITER/EDITOR

Assignment will involve rewriting and editing technical progress reports and journal articles in the nuclear field. Desirable background will include a B.S. or B.A. degree in an engineering or scientific discipline or equivalent experience and a thorough knowledge of printing procedures and grammar. Technical writing/editing experience in nuclear fields is particularly desirable. We offer competitive salaries and excellent benefits. Submit résumé and salary requirements to:

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All positions competitive; rank and salary commensurate with qualifications and experience.

If interested please apply to: Dr. H. H. Fudenberg, Chairman, Department of Basic and Clinical Immunology and Microbiology, Medical University of South Carolina, Charleston, S.C. 29401. An equal opportunity employer.

#### TISSUE CULTURE TECHNICIAN

Immediate opening for a research technician with expertise in mammalian tissue culture. Experience in isotope handling, membrane lipids and cell biochemistry desirable but not essential. Salary commensurate with experience. Interested applicants please send curriculum vitae and application to: Dr. Tom M. Yau, Division of Radiation Biology, Department of Radiology, Case Western Reserve University, Cleveland, Ohio 44106.

#### VIROLOGIST

Position available immediately to join research group working on mammalian RNA oncogenic viruses, Experience in tissue culture and viral technology required. Rank and salary will be determined by qualifications.

**BOX 436, SCIENCE** 

#### VETERINARY PHARMACOLOGY AND **PHYSIOLOGY**

PHYSIOLOGY

Positions are available for Ph.D. or D.V.M. with Ph.D. at Assistant Professor or Associate Professor levels. Responsibilities include teaching in the professional curriculum, participation in the departmental graduate program, and research in one's area of interest. Multidisciplinary research at the college and university levels and development of innovative advanced training programs is encouraged. The College is moving into completely new facilities (fall 1975) to accommodate a growing enrollment and expansion of academic and research programs.

Send résumé and also request that three letters of recommendation be sent to Dr. Neal R. Cholvin, Department of Veterinary Anatomy, Pharmacology and Physiology, College of Veterinary Medicine, Iowa State University, Ames, Iowa 50010. Iowa State University is an equal opportunity—affirmative action employer

#### FELLOWSHIPS FELLOWSHIPS

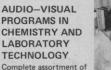
#### UNIVERSITY OF CALIFORNIA, IRVINE POSTDOCTORAL FELLOW

A postdoctoral research position is available for work on circular DNA of small bacteriophages and plasmids in relation to problems of recombination and replication. Applicant must have a Ph.D. and experience in the biochemistry or genetics of phages and bacteria. Applications from qualified candidates are welcome; minorities and women are encouraged to apply. Send curriculum vitae, bibliography and names of references to Dr. Robert C. Warner, Department of Molecular Biology and Biochemistry, University of California, Irvine, California 92664.

#### POSTDOCTORAL FELLOWS

The Department of Microbiology, Harvard School of Public Health, has several positions for post-doctoral fellows during 1974-75. Fields of research include venereal disease (chlamydia), rickettsia, immunology, viral oncology, viral epidemiology, and the Training of Directors of large communicable disease laboratories. Inquiries and résumé to Dr. Roger L. Nichols, Chairman, Department of Microbiology, Harvard School of Public Health, 665 Huntington Ave., Boston, Mass. 02115.

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#### POSTDOCTORAL FELLOW

A research position is available for a postdoctoral fellow in an active laboratory working on invertebrate photoreceptors. Send curriculum vitae to Dr. R. Srebro, Department of Physiology, State University of New York School of Medi-cine, 2211 Main St., Buffalo, N.Y. 14214. Include earliest date you are available.

#### COURSES

## January Courses at the Marine Biological Laboratory (MBL) Woods Hole, Mass. 02543 DEVELOPMENTAL BIOLOGY for undergraduates 8-30 January 1975

8-30 January 1975

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Designed for motivated students with a background in introductory biology and interest in development. Lectures on concepts of development and genetics accompany labs dealing primarily with marine organisms and emphasizing modern experimentation based on understanding development. Introduction to ecology of organisms studied. Instructors: L. and L. Barth, MBL; A. W. and J. R. Coleman, Brown University; L. E. DeLanney, Ithaca College; J. D. Ebert. Carnegie Institution of Washington and MBL; J. E. Fortune, Cornell University; W. S. Vincent, University of Delaware; plus visiting seminar speakers. speakers.

## NEUROBIOLOGY

NEUROBIOLOGY
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and beginning graduate students
6-31 January 1975
Offered jointly by MBL and the
Boston University Marine Program

For students with a background in introductory
biology, general physics, and general chemistry,
and interest in neurobiology. Emphasis upon lab
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A. Fein, and E. F. MacNichol, Jr., MBL: F. Lang,
Boston University Marine Program.

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### BEHAVIOR for advanced undergraduates and beginning graduate students 6-31 January 1975 Offered jointly by MBL and the Boston University Marine Program

Offered jointly by MBL and the Boston University Marine Program

Presupposes a background in introductory biology, general physics, and general chemistry. An intensive study of selected topics in behavior of terrestrial and marine animals, emphasizing ethology, including lectures, seminars, and laboratory exercises and demonstrations. Topics include: behavior in the maintenance of the individual (locomotion, feeding, orientation, circadian rhythms), intraspecific behavior (reproduction, communication and ritualization, group behavior of invertebrates and vertebrates), and interspecific behavior (predator-prey relations, mimicry, symbioses). Instructors: Jelle Atema and Adrianus Kalmijn, Woods Hole Oceanographic Institution; J. Stanley Cobb, University of Rhode Island; Donald R. Griffin, Rockefelle University; Robert L. Jeanne and George Michel, Boston University; Robert A. Metcalf, Harvard University; Celia Moore and Jeremy Hatch, University of Massachusetts (Boston); Carl W. Rettenmeyer, University of Connecticut; Louis M. Roth, U.S. Army Natick Laboratories; Alastair M. Stuart, University of Massachusetts (Amherst); and Charles Walcott, State University of New York (Stony Brook).

## THE BIOSPHERE A basic course in ecology for advanced undergraduates and beginning graduate students 6-31 January 1975 Offered by the Ecosystems Center of the Marine Biological Laboratory

Offered by the Ecosystems Center of the Marine Biological Laboratory

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