

dev, Ed. Translated from the Russian edition (Moscow, 1968). Israel Program for Scientific Translations, Jerusalem, 1976 (U.S. distributor, Halsted [Wiley], New York). x, 534 pp., illus. \$58.50. *To order this book circle No. 356 on Readers' Service Card.*

Sex and Personality. H. J. Eysenck. University of Texas Press, Austin, 1976. vi, 256 pp. \$13.95.

Sex Lives of Animals without Backbones. Haig H. Najarian. Scribner, New York, 1976. x, 116 pp., illus. \$6.95.

Sexual Interactions in Plants. The Role of Specific Substances in Sexual Reproduction. H. van den Ende. Academic Press, New York, 1976. viii, 186 pp., illus. \$14.75. *Experimental Botany*, vol. 9.

Shell Dredging and Its Influence on Gulf Coast Environments. Arnold H. Bouma, Ed. Gulf Publishing Company, Houston, 1976. x, 454 pp., illus. \$32.50.

Skeptical Sociology. Dennis H. Wrong. Columbia University Press, New York, 1976. x, 322 pp. \$14.95.

Spallation Nuclear Reactions and Their Applications. Papers from a conference, Philadelphia, May 1975. B. S. P. Shen and M. Merker, Eds. Reidel, Boston, 1976. viii, 240 pp., illus. \$27.50. *Astrophysics and Space Science Library*, vol. 59. *To order this book circle No. 357 on Readers' Service Card.*

A Statistical Analysis of Behavior. Merle E. Meyer. Wadsworth, Belmont, Calif., 1976. viii, 408 pp., illus. \$12.95. A Charles A. Jones Publication.

Surface and Colloid Science. Vol. 9. Egon Matijević, Ed. Wiley-Interscience, New York, 1976. xii, 382 pp., illus. \$34.95. *To order this book circle No. 358 on Readers' Service Card.*

Thermochemical Kinetics. Methods for the Estimation of Thermochemical Data and Rate Parameters. Sidney W. Benson. Wiley-Interscience, New York, ed. 2, 1976. xiv, 320 pp., illus. \$22.50. *To order this book circle No. 355 on Readers' Service Card.*

Thyristor Physics. Adolph Blicher. Springer-Verlag, New York, 1976. xvi, 304 pp., illus. \$29.80. *Applied Physics and Engineering*, vol. 12.

Transition Metal Organometallics in Organic Synthesis. Vol. 1. Howard Alper, Ed. Academic Press, New York, 1976. x, 260 pp., illus. \$26.50. *Organic Chemistry*, vol. 33.

University Communication Networks. The Small World Method. R. Lance Shotland. Wiley, New York, 1976. xii, 180 pp. Paper, \$6.95.

Van Nostrand's Scientific Encyclopedia. Douglas M. Considine, Ed. Van Nostrand Reinhold, New York, ed. 5, 1976. xii, 2370 pp., illus. \$67.50. *To order this book circle No. 359 on Readers' Service Card.*

Vitamin C, the Common Cold, and the Flu. Linus Pauling. Freeman, San Francisco, ed. 2, 1976. xiv, 230 pp. Cloth, \$8.95; paper, \$3.45.

Volcanoes of the Earth. Fred M. Bullard. University of Texas Press, Austin, ed. 2, 1976. xvi, 580 pp., illus. \$26.95. Dan Danciger Publication Series.

Weed Science. Principles. Wood Powell Anderson. West Publishing Company, St. Paul, Minn, 1977. x, 598 pp., illus. \$24.95.

Youth in a Changing World. Cross-Cultural Perspectives on Adolescence. Papers from a conference, Oshkosh, Wis., Aug. 1973. Estelle Fuchs, Ed. Mouton, The Hague, 1976 (U.S. distributor, Aldine, Chicago). xiv, 346 pp., illus. \$22.50. *World Anthropology*.



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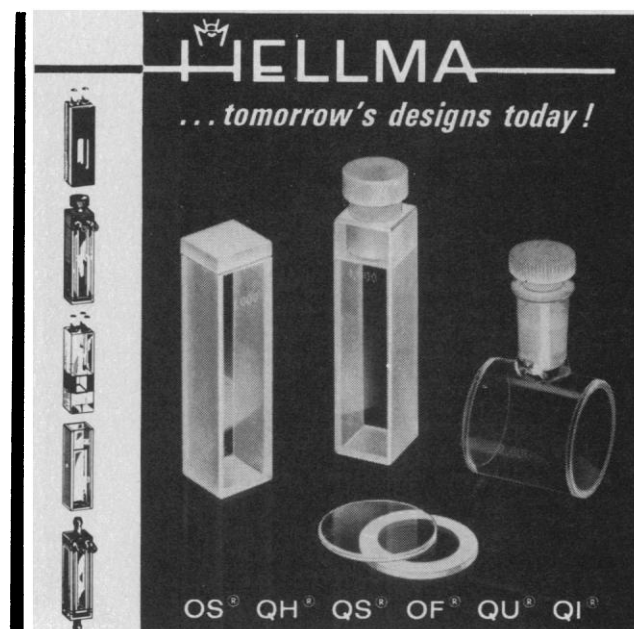
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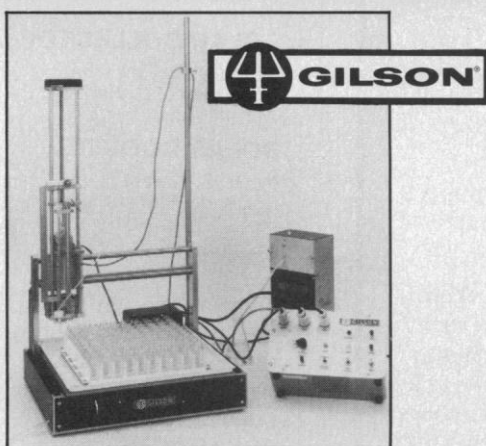
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SCIENCE, VOL. 195

Personnel Placement

POSITIONS WANTED

Anatomist/Developmental Biologist/Endocrinologist. Ph.D. 1976. More than 2000 contact hours of graduate and postdoctoral experience teaching gross anatomy, embryology, and histology. Publications on steroidogenesis in embryonic and postembryonic avian gonads. Seeks academic or research position with opportunity for research in histochemical, cytochemical, ultrastructural, and assay aspects of reproductive endocrinology. Box 104, SCIENCE. 3/11, 18

Biochemist/Endocrinologist. Ph.D. 1970. Experienced in hormone regulated cellular metabolism, isolation of lymphocytes, PMN, platelets, steroid metabolism, tissue culture. Seeks institutional/industrial position. Box 105, SCIENCE. 3/11; 4/1

Biologist. M.S. Recent graduate with part-time teaching experience seeks academic position. Special interests are ornithology, ecology, and animal behavior. Box 14457, Philadelphia, Pennsylvania 19115. 3/11, 18

Biologist. Ph.D. Seeks research position involving aquaculture and/or aquatic toxicology studies. Background includes fish and invertebrate culture studies and techniques; environmental impact statement preparation; teaching and grantsmanship; planning, constructing, and operating bioassay facilities; government, university, and private research laboratory experiences; and field work in the Great Lakes, Gulf Coast, Midwest, and Pacific Northwest. Presently employed. Box 106, SCIENCE. 3/11, 18, 25

Chemist/Pharmacologist. Ph.D. Seeks challenging position in government or industry. Experience: pharmacokinetics, metabolism, toxicity of drugs, pesticides and toxic substances, proteins, immunochimistry, cancer, radioisotope, EPA, FDA, NIOSH regulations, contract research. Administration. Publications. Available immediately. Box 107, SCIENCE. 3/11, 25; 4/8, 22; 5/6, 20

Evolutionary-Ecological Geneticist. Yale Ph.D. 1970, seeks teaching/research position in southern U.S. Publications: mostly insect hybridization; wide experience. Oliver, R.D. 1, Box 78, Scottdale, Pennsylvania 15683. 3/11, 18

Marine Ichthyologist-Ecologist. Ph.D. spring 1977. Research experience in ecological processes, community ecology, and community monitoring. Teaching experience in ichthyology, biometry, and anatomy. Seeks teaching and/or research position. Box 108, SCIENCE. X

Medical Cytogeneticist. M.D., Med.Sc.D.; 15 years of experience in clinical, teaching, and basic research aspects. Desires academic position, preferably in Southwest. Box 109, SCIENCE. X

Neurobiologist/Electrophysiologist. M.D., publications, grants, seeks research or academic position. Box 110, SCIENCE. 3/11, 18, 25

Pearl Culture. Ph.D. Seeks research and development position in government, industry, or academia in protection and culture of commercially important mollusks, freshwater or marine, such as abalone, oysters, and clams. Experience in pearl culture. Likes to develop industries along these lines. Trilingual. Box 111, SCIENCE. X

Ph.D. Pharmacology. Experienced. Publications. Strong medical science background. Seeks teaching/research, medical/related health sciences. Box 112, SCIENCE. 3/11, 18

Ph.D. Physiological Psychologist. Multidisciplinary expertise (teaching and research), biofeedback, ICSS, chronic electrode implantation, electronic instrumentation, animal behavior, brain SP, EEG, and massed units activity correlated with learning, visual perception, and behavior. Box 85, SCIENCE. X

Research Scientist. Ph.D. 1974, with background in endocrinology, experimental pathology, steroids, hypertension, and radioimmunoassay. Publications and postdoctoral experience. Seeking research and/or academic position. Box 115, SCIENCE. X

POSITIONS WANTED

Physiologist. Ph.D. 1973. Three years of postdoctoral experience in reproductive neuroendocrinology (serotonin, pineal) and CNS amine metabolism. Diverse research experience with birds and mammals involving biogenic amines and biorhythms. Microdissection, lesion, isotope, fluorescence, and RIA techniques. Teaching experience. Box 113, SCIENCE. X

Physiologist/Zoologist. Ph.D. Six years of teaching experience in human physiology and histology at undergraduate and professional school levels. Research experience, funding, and publications with diurnal rhythm and teratology research. Seeks teaching/research position. Box 114, SCIENCE. X

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Sociobiologist, Entomologist, Scientific Illustrator. M.S. 1974 (Ph.D. requirements complete except for thesis), with additional teaching experience in parasitology and anatomy and physiology for nurses. Desires teaching and/or research, government, or industry position for September 1977. Box 97, SCIENCE. X

POSITIONS OPEN

ACADEMIC POSITION

The Department of Environmental Health, University of Cincinnati Medical Center is inviting applications for an academic position of the rank of assistant professor or higher, depending upon qualifications. The person would be responsible for developing a program of research and graduate instruction in the area of mechanisms of toxic responses, preferably with emphasis on the lung. Expertise in aerosol technology and inhalation facilities available in the department. Send curriculum vitae and three references to Dr. Paul B. Hammond, Department of Environmental Health, University of Cincinnati Medical Center, 3223 Eden Avenue, Cincinnati, Ohio 45267. An Affirmative Action/Equal Opportunity Employer.

ANATOMISTS. Two positions, gross anatomy and neuroscience. Assistant professor level: Ph.D. or M.D., with postdoctoral research and teaching experience. Candidates must demonstrate ability to develop a fundable, independent research program. Research preference in female reproductive biology, retinal and visual biology, and photoneuroendocrinology. Send curriculum vitae, bibliography, selected reprints, future research plans, and names of three referees to: Dr. W. Keith O'Steen, Professor and Chairman, Department of Anatomy, Bowman Gray School of Medicine, Winston-Salem, North Carolina 27103. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR POSITION

The California Institute of Technology, Division of Geological and Planetary Sciences, would like to make an appointment at the assistant professor level in the area of solid-state (experimental and/or theoretical) geophysics or experimental petrology with an interest in the earth's interior, and is seeking candidates.

Please write, enclosing résumé and bibliography, to:

Professor Thomas J. Ahrens
Seismological Laboratory (252-21)
California Institute of Technology
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DEPARTMENT OF BIOCHEMISTRY

Applications are invited for a position as assistant professor from candidates with a Ph.D. in biochemistry and with postdoctoral experience. The primary requirements for the position are promise of excellence in teaching and ability to establish an active program of scholarly investigation. Some preference will be given to applicants with biochemical research interests in the areas of endocrinology, nutrition, or immunology. The position is available 1 July 1977. Applicants should submit a curriculum vitae, list of publications, and the names of three references to Dr. Paul M. Anderson, Department of Biochemistry, School of Medicine, University of Minnesota, Duluth, Duluth, Minnesota 55812, by 22 April 1977. An Affirmative Action/Equal Opportunity Employer.

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ASSISTANT PROFESSOR-BIOMEDICAL ENGINEERING. The Harvard-MIT Program in Health Sciences and Technology is seeking an assistant professor whose primary responsibilities would be to help develop the BME activities at the Beth Israel Hospital, Boston, into a more effective teaching and research base for HST and electrical engineering students; and to spend approximately half-time in on-campus teaching at MIT in the general area of biomedical instrumentation. Candidate will develop his/her own research activity at the hospital. Specific research interests are open, although ultrasonics is an identified need. Candidates must be expert in analog/digital instrumentation, and have competence in teaching. Please send résumés and references by 1 April 1977 to: **Dr. Roger Mark, Room 20A-123, Massachusetts Institute of Technology, Cambridge, Mass. 02139.**

ASSISTANT PROFESSOR PLASMA AND ENERGY SCIENCE

Department of Mechanical and Aerospace Sciences, University of Rochester, invites applications for a faculty position available September 1977 at the rank of assistant professor. Teaching responsibilities include participation in both undergraduate and graduate programs. The applicant will be expected to conduct experimental research in high-temperature plasmas physics and engineering. Preference will be given to applicants whose interest overlaps with research currently being conducted in the department. This includes laser pellet fusion, magnetic confinement, laser interactions with matter, nuclear science, and subnanosecond x-ray production.

Applicants should send a résumé and the names of three references to **Alfred Clark, Jr., Chairman, Department of Mechanical and Aerospace Sciences, University of Rochester, Rochester, New York 14627. Full consideration will be given to all qualified candidates in accordance with the University Affirmative Action Program.**

ASSISTANT/ASSOCIATE PROFESSOR OF RESOURCES MANAGEMENT

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Head, Department of Forestry
University of Illinois
Urbana, Illinois 61801**

The University of Illinois is an Affirmative Action/Equal Opportunity Employer and encourages applications from minorities and women.

BIOLOGIST-CHEMIST. Lake Erie College is seeking applications for a joint teaching position in biology and chemistry at the assistant professor level. Candidates must have a doctoral degree and a strong desire to teach in a liberal arts setting at the undergraduate level. Teaching responsibilities include organic chemistry, biochemistry, genetics, and general biology. Send curriculum vitae and three letters of reference by 31 March 1977 to **Dr. K. Michael Foos, Lake Erie College, Painesville, Ohio 44077. Equal Opportunity Employer.**

POSITIONS OPEN

UNIVERSITY OF MICHIGAN ASSISTANT PROFESSOR

Positions available in the Department of Internal Medicine, University of Michigan Medical School. Academic rank: dependent on credentials. Candidate must have demonstrated ability in patient care and teaching, and potential as an investigator. Also, must have an M.D. degree, meet qualifications or equivalent of the American Board of Internal Medicine and have subspecialty training in pulmonary disease. Code #4400HO. Send résumé to **Box 103, SCIENCE. An Affirmative Action, Nondiscriminatory Employer.**

ASSISTANT PROFESSOR OF BIOLOGY HARVARD UNIVERSITY

The Cellular and Developmental Biology Subdivision expects to appoint an assistant professor for the coming year in the area of plant molecular developmental biology. Applicants should have the Ph.D. Preference will be given to candidates with teaching experience, records of research accomplishment, and postdoctoral training.

The University is an Equal Opportunity Employer; women and members of minority groups are specifically encouraged to apply. Please have three professional persons who are well acquainted with your work send letters of recommendation directly to us. Applications should include your résumé, copies of your most significant publications, and a summary of your research goals and should be sent to: **Chairman, Plant Biology Search Committee, Department of Biology, 16 Divinity Avenue, Cambridge, Mass. 02138, prior to 28 March 1977.**

BIOLOGY FACULTY

LOWER PLANTS: Phycologist or mycologist. Teach course on algae and fungi plus one other area such as aquatic or soil ecology, cellular biology, or genetics. Prefer applied biologist.

AQUATIC ECOLOGY: Teach courses in ecology and environmental biology. Prefer stream or marsh ecologist with experience in resource quality assessment and management.

Possible additional position in:

ANIMAL BEHAVIOR: Teach behavior courses plus one other area such as ecology-evolution, physiology, or vertebrate zoology. Prefer broad training and field experience.

All positions are assistant professor and involve participation in both undergraduate and graduate (M.S.) programs. Earned doctorate required by 1 September 1977. Evidence of teaching interest and ability and of commitment to research is desirable. Mail curriculum vitae and names of three references by 1 April 1977 to **Dr. Stephan R. Taub, Chairman, Department of Biology, George Mason University, Fairfax, Va. 22030. Specify position desired.**

George Mason University is the state university in northern Virginia and is located near the Washington, D.C. metropolitan area.

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Three positions will be filled effective 1 September 1977. Applicants with doctorate should be interested in teaching biology to nonscience students and biology majors and in developing undergraduate and graduate courses in their specialty. Opportunity exists to participate in community oriented education and to engage in meaningful research in a well-equipped department. Rank dependent upon qualifications. Salary competitive.

- 1) **BOTANIST:** To teach plant development and applied botany. Experience in horticulture or plant pathology desirable.
- 2) **QUANTITATIVE MAMMALIAN ECOLOGIST:** To teach upper level undergraduate course in ecology, mammalogy, population dynamics, wildlife management, or endocrinology.
- 3) **MOLECULAR BIOLOGIST/BIOCHEMIST:** To teach cell biology, biochemistry, or microbial genetics.

Respond by 15 April 1977 to: **Dr. Albert C. Hoffman, Chairperson, Search Committee, Department of Biology, Millersville State College, Millersville, Pa. 17551. Millersville State College is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

HARVARD SCHOOL OF PUBLIC HEALTH

BEHAVIORAL SCIENTIST at assistant professor level in Department of Health Services to develop a program to influence life styles to improve health. Ph.D. or equivalent and experience in applied research in community behavior required. Would be expected to apply for grants for support of research. Salary within range for rank. *Women, handicapped, and minorities encouraged to apply.* Send résumé only to **Robert J. Haggerty, M.D., Harvard School of Public Health, 677 Huntington Avenue, Boston, Mass. 02115.**

BIOLOGY FACULTY—Two positions: (i) to teach general biology, comparative anatomy, human anatomy and physiology (nonmajors), developmental biology, the animal kingdom, and genetics or cell biology, and (ii) to teach general biology, environmental biology, microbiology, plant kingdom cell biology or genetics, and one other course in his/her area. Ph.D. preferred; beginning date: 2 September 1977. Salary: \$9,500 to \$12,000. Send credentials to: **A. J. Catana, Yankton College, Yankton, S.D. 57078. An Equal Opportunity/Affirmative Action Employer.**

A **BIOMEDICAL ENGINEER** is required for a faculty position in the Kinesiology Department at Simon Fraser University. The appointee will be required to work in an interdisciplinary environment with biochemists, biologists, physiologists, physicians, psychologists, and biomechanics faculty on research problems related to human movement and human performance. The appointee should be able to teach courses at the undergraduate and graduate level on systems theory and biomedical instrumentation and to participate in team-taught physiology and human factors courses taking particular responsibility for neurophysiology.

The appointment will probably be made, effective September 1977, at the assistant professor level with salary dependent on qualifications. Applications with the names of three referees should be sent to:

**Dr. T. W. Calvert, Chairman
Department of Kinesiology
Simon Fraser University
Burnaby, B.C., V5A 1S6
Canada**

The Department of Biological Sciences at Stanford University plans to appoint two faculty at the non-tenured level in the general areas of **CELLULAR AND DEVELOPMENTAL BIOLOGY**. These positions will be on the Palo Alto campus and will be available in September 1977. Successful candidates should have demonstrated independent research capabilities and are expected to participate in both undergraduate and graduate teaching programs in the department, as well as to carry out an active research program. Preference for one of the positions may be given to a person whose research activities are in botanical systems. Nominations or curriculum vitae should include the names of three references and can be sent to: **Robert T. Schimke, Search Committee Chairperson, Department of Biological Sciences, Stanford University, Stanford, California 94305.**

Stanford University is an Equal Opportunity/Affirmative Action Employer.

CHAIRPERSON, DEPARTMENT OF ANATOMY MICHIGAN STATE UNIVERSITY

Applications and nominations are invited for the position of chairperson in the Department of Anatomy at Michigan State University. The department has 21 full-time faculty, a graduate program, and commitments to professional, graduate, and undergraduate students in the areas of gross anatomy, histology, embryology, and neuroanatomy. The department is jointly administered by the Colleges of Human, Osteopathic and Veterinary Medicine. In the future, emphasis will be placed on expanding the graduate and research programs and encouraging the development of interdisciplinary research activities.

Applicants should possess the Ph.D., M.D., D.O., or D.V.M. degree, have demonstrated accomplishment in education, research and service, and preferably, experience in academic administration.

Correspondence should be directed before 11 April 1977 to the chairman of the search committee:

**Dr. Arthur F. Kohrman
Michigan State University
Department of Human Development
B-247 Life Sciences Building
East Lansing, Michigan 48824**

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POSITIONS OPEN

BIOCHEMIST

A research position will be available in April 1977 for a Ph.D. biochemist with experience in cellular biology. Initial studies will involve experimental evaluation of physicochemical approach to organ preservation. Prior research or academic interest in enzymology or bioelectrochemistry is a decided plus factor. Please send résumé to:

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CELL BIOLOGY. Assistant or associate professor to teach undergraduate cell and animal physiology and establish an independent research programme in animal cell biology. Ph.D. required; postdoctoral experience preferred. Submit curriculum vitae and names of three references to **Dr. J. K. Morton, Chairman, Department of Biology, University of Waterloo, Waterloo, Ontario, N2L 3G1 Canada.** The effective date of appointment will be 1 July 1977.

The University of Geneva, Switzerland, seeks candidates for a vacant **CHAIR IN ORGANIC CHEMISTRY** at the associate or full professor level in the Department of Organic Chemistry for 1 July 1977, or at a date to be arranged.

Candidates are invited to send copies of their résumés to the **Faculté des Sciences, quai Ernest-Ansermet 20, 1211 Genève 4, Switzerland** before 15 March 1977.

Department of Applied Behavioral Sciences
College of Agricultural and Environmental Sciences
University of California, Davis

Applications for department **CHAIRPERSON** are being accepted. Closing date is 2 May 1977 or until filled. Must be able to qualify for rank of professor in the University of California system. A strong record in teaching and research is imperative. Candidate must possess a range of administrative and human relation skills. Candidate is expected to provide a social and humanistic viewpoint in a college which is noted for applied science. Apply by submitting curriculum vitae, statement of qualifications, and names of five references to **Professor Glenn R. Hawkes, Chair, Search Committee, Department of Applied Behavioral Sciences, University of California, Davis, Calif. 95616. Telephone: 916-752-2479; 752-0770.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

Position Opening
University of Illinois
College of Medicine
School of Basic Medical Sciences
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CURRICULUM COORDINATOR

Responsibilities: full-time faculty position responsible for organization and coordination of faculty effort in interdisciplinary, guided self-study program. Work closely with faculty members and chair Committee on Curriculum and Instruction. Pursuit of scholarly activities and/or research encouraged. Responsible to dean.

Qualifications: established M.D. and/or Ph.D., with experience in medical education and a record of accomplishment in basic or clinical science discipline. Broad-based knowledge of interrelationship of basic and clinical sciences essential.

Appointment: 21 August 1977; salary and rank commensurate with experience.

Send curriculum vitae to: **John D. Anderson, Ph.D., Chairperson, Search Committee for Curriculum Coordinator, University of Illinois School of Basic Medical Sciences, 190 Medical Sciences Building, Urbana, Ill. 61801. Telephone: 217-333-9384.**

The University of Illinois is an Affirmative Action/Equal Opportunity Employer and encourages applications from minorities and women.

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- Civil Engineering
- Veterinary Medicine

Applicants must hold a doctorate in their own field, be experienced in teaching at university or equivalent level and be able to teach in either French or Arabic.

Applications must be accompanied by a short résumé, and mailed to the following address:

Ministère de l'Enseignement Supérieur
et de la Recherche Scientifique
Sous-Direction du Personnel
1, rue Bachir Attar
Algiers, Algeria

Some further information can be obtained from the Embassy of Algeria, 2118 Kalorama Road, NW, Washington, D.C. 20008; Telephone: 202-234-7246.

A SUMMER WORKSHOP IN BIOLOGICAL CLOCKS

The Hopkins Marine Station
Pacific Grove, California

An intensive 5-week workshop-course in biological clocks will be held at the Hopkins Marine Station from 13 June to 17 July 1977. The workshop is intended for graduate students and postdoctorals beginning to work in the field, but applications will be considered from advanced undergraduates with adequate preparation. The fee for the workshop is \$300. The workshop consists of three parts: (i) a series of 50 lectures (two per day) covering the entire field; (ii) a series of laboratory experiments involving all the principal techniques used in the study of biological clocks; and (iii) an ongoing "symposium" of evening lectures and discussions on current work by the faculty and visiting lecturers.

Enrollment will be limited to 50 students. Applications should be addressed to **C. S. Pittendrigh, The Hopkins Marine Station, Pacific Grove, California, 93950**, before 1 May 1977. Applications should include: (i) statement of current student status and (ii) a letter of recommendation.

The workshop faculty will include: C. S. Pittendrigh, chairman, Stanford University; J. Aschoff, University of Munich, Max-Planck Institut, Germany; G. Block, Stanford University; K. Brinkmann, University of Bonn, Germany; V. G. Bruce, Princeton University; S. Daan, University of Groningen, Holland; P. deCoursey, University of South Carolina; J. T. Enright, Scripps Institution; A. Eskin, Rice University; J. Feldman, University of California, Santa Cruz; E. Gwinner, Max-Planck Institut, Germany; J. W. Hastings, Harvard University; R. Konopka, California Technological State University; M. Lickey, University of Oregon; M. Menaker, University of Texas; M. Moore-Ede, Harvard Medical School; D. Neumann, University of Cologne, Germany; T. Page, Stanford University; Th. Pavlidis, Princeton University; Ruth Satter, Yale University; S. Skopik, University of Delaware; F. Strumwasser, California Technological State University; B. Sweeney, University of California, Santa Barbara; F. W. Turek, Northwestern University; A. T. Winfree, Purdue University; I. Zucker, University of California, Berkeley.

**University of Geneva
School of Medicine
Geneva, Switzerland**

**PROFESSOR OF
PHYSIOLOGY**

Applications are invited for a full-time faculty position in the Department of Physiology at a professorial level. The opening is for an experienced teacher and scientist (M.D. or Ph.D.) who will be required to contribute to courses in physiology (in French) and to conduct and supervise research.

The salary is in the range SFr 6'480. to SFr 7'722. per month minus legal deduction of approximately 12 percent (for insurance, retirement plan, and so forth).

Applicants should submit curriculum vitae, list of publications, and the name of two referees to the following address: **Secrétariat de la Faculté de Médecine, Quai Ernest Ansermet 20, 1211 Genève 4, Switzerland, until 25 March 1977.**

Late applications from overseas candidates will be considered.

FACULTY POSITIONS

**College of Medicine
King Faisal University
Dammam, Saudi Arabia**

Biology	Epidemiology
Chemistry	Biochemistry
Physics	Embryology
Anatomy	Physiology
Community medicine	Hematology
Biostatistics	Pathology

Applications are invited from U.S., British, and Canadian academicians who have a doctorate or similar degree and postdoctorate teaching experience. Openings are available immediately and for 1977-1978 at all levels. The language of instruction is English.

Salary ranges:	
Monthly salary and bonus in Saudi riyals	Approximate annual equivalent in U.S. dollars
Professor 6,720 to 7,392	\$22,600 to \$24,800
Associate professor 5,376 to 6,496	\$18,100 to \$21,800
Assistant professor 4,032 to 5,152	\$13,500 to \$17,300

M.D. degree commands a higher salary. Fringe benefits include free furnished accommodations and annual leave and travel allowance to country of origin.

Send résumé and names, addresses, and phone numbers of three references to:

**Mohammed T. Altorki, M.D., MRCP
Dean of the Medical Faculty
King Faisal University
c/o Saudi Arabian Educational Mission
2223 West Loop South, Suite 400
Houston, Texas 77027**

Specify teaching experience and date of availability.

POSITIONS OPEN

The UCLA School of Medicine is seeking the most highly qualified person to become **CHAIRMAN** of its Department of Pediatrics on 1 July 1977. Candidates must have substantial background in academic pediatrics, with interest and experience in patient care, teaching, research, and administration. *UCLA is an Equal Opportunity/Affirmative Action Employer and encourages minority and women candidates to apply.* Interested persons should submit letters summarizing their qualifications to: **Chairman, Pediatrics Search Committee, c/o Dean, UCLA School of Medicine, Los Angeles, California 90024.**

DEAN OF THE SCHOOL OF SCIENCE. California State Polytechnic University, Pomona, invites applications for the position of dean of the School of Science, to be filled on or before 1 July 1977. An applicant must have an earned doctorate from programs in biological sciences, chemistry, earth sciences, mathematics, or physics; have clearly demonstrated recent scientific and responsible administrative leadership, preferably at educational institutions; be prepared to encourage faculty development in teaching and research and to strengthen degree programs for the school's nine B.S. majors and three M.S. programs (biological sciences, chemistry, and mathematics). Applications or letters of intent accompanied by a résumé and letters of reference must be received before 15 April 1977. Address all correspondence to **Dr. Kenneth H. Anderson, University Dean for Academic Affairs, California State Polytechnic University, Pomona, 3801 West Temple Avenue, Pomona, California 91768, Attention: Jessie Hart.** *Cal Poly is a member of the California State University and Colleges System and an Affirmative Action/Equal Opportunity Employer.*

DIRECTOR OF PATHOLOGY. A 750-bed, acute general hospital, affiliated with the College of Physicians and Surgeons and located adjacent to the Morningside Heights campus of Columbia University, is seeking a dynamic director who can administer effectively the total range of services of a growing Department of Pathology in a university hospital. Candidates must be Board-certified and must meet university standards for the appointment of professor of pathology. *The institution is an Equal Opportunity/Affirmative Action Employer.* Interested persons should write promptly, enclosing a curriculum vitae and bibliography, to: **William S. Clark, M.D., Chairman, Search Committee, ST. LUKE'S HOSPITAL CENTER, 114th Street and Amsterdam Avenue, New York, N.Y. 10025.**

DIRECTOR/PRESIDENT needed for Science Museum of Minnesota, chartered 1907. Vigorous and enthusiastic leader with academic orientation. Administrative, fund-raising ability, and political sensitivity. Will have opportunity to guide a large museum and develop programs in natural and applied sciences. Annual operating budget in excess of \$600,000. Publicly and privately supported with endowment program. Staff numbers in excess of 70. \$12 million expansion now in process. Application review will begin 1 April 1977. Salary and starting date are negotiable. Apply, with list of references to be contacted, to **Richard G. Gray, Sr., Chairman, Search Committee, Science Museum of Minnesota, 30 East 10th Street, Saint Paul, Minnesota 55101.**

The Science Museum of Minnesota is an Equal Opportunity/Affirmative Action Employer.

EDITORIAL STAFF OF SCIENCE

The American Association for the Advancement of Science (AAAS) is seeking candidates for a position on the editorial staff of *Science*. The individual will be responsible for assisting in the selection of papers for publication in the report section of *Science*.

Ability to apply critical judgment is essential. Excellent English skills are required. Qualifications include Ph.D. with at least 1 year of experience in cell science and with a background in more than one of the following areas: molecular biology and genetics, cell physiology, neurobiology, biochemistry.

Please send letter of application, résumé, transcripts, list of publications, salary requirements, and names of three references to **Carole Dickert-Scherr, Personnel Office, AAAS, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005.**

An Equal Opportunity Employer

POSITIONS OPEN

CYTOPATHOLOGIST

Position immediately available at assistant or associate professor level for pathologist with major interest in the process of neoplasia and competence in its early detection. Enthusiasm and competence in the training of pathology residents and cytotechnology students in cytopathology is essential. Send curriculum vitae by 1 April 1977 to **Dr. George M. Martin, Search Committee, Department of Pathology SM-30, University of Washington, Seattle, Wash. 98195.** *Affirmative Action/Equal Opportunity Employer.*

**DRUG
METABOLISM**

To assist senior investigator in: analyzing for drugs in biological fluids by "hot" and "cold" methods, dosing animals and obtaining blood and organ tissue samples, preparation of radioactive samples.

B.A. or M.A. with 2 to 3 years of laboratory experience in above described functions.

Please submit résumé and salary requirements, in confidence, to: **J. T. MacLachlan,**

**COOPER
Laboratories,
Inc.**

**110 East Hanover Avenue
Cedar Knolls, N.J. 07927**

An Equal Opportunity Employer, M/F

EXECUTIVE SECRETARY

**Board on Toxicology
and Environmental Health Hazards**

The Assembly of Life Sciences of the National Academy of Sciences/National Research Council, is seeking an executive secretary for its newly established Board on Toxicology and Environmental Health Hazards. The executive secretary will be responsible for the direction of programs concerned with fundamental scientific questions, the vitality of the national scientific endeavor, and broad national problems in the field of toxicology and effects of environmental health hazards on man and biological systems. Candidates should be doctoral level professionals from fields within the life sciences, with emphasis on toxicology, pharmacology, and the environmental health sciences, preferably having experience both in scientific research and in administrative management of scientific research programs from a national perspective. Substantial leadership experience in academic, government, or industrial organizations is important. Familiarity with government agencies and with grant and contract matters is desirable. Applicants should send résumés to: **Dr. Councilman Morgan, Executive Director, Assembly of Life Sciences, National Academy of Sciences, 2101 Constitution Avenue, NW, Washington, D.C. 20418.** *An Equal Opportunity Employer.*

**EXECUTIVE SECRETARY
Division of Medical Sciences**

The Assembly of Life Sciences of the National Academy of Sciences/National Research Council, is seeking an executive secretary for its Division of Medical Sciences. The executive secretary is responsible for the direction of programs concerned with fundamental scientific questions, the vitality of the national scientific endeavor, and broad national problems, with emphasis on the basic medical sciences as compared to health care delivery. Candidates should be doctoral level professionals from fields within the life sciences, preferably having experience both in scientific research and in the administrative management of scientific research programs from a national perspective. Substantial leadership experience in academic, government, health care, or industrial organizations is important. Familiarity with government agencies and with grant and contract matters is desirable. An M.D. is highly desirable, but not essential. Applicants should send résumés to: **Dr. Councilman Morgan, Executive Director, Assembly of Life Sciences, National Academy of Sciences, 2101 Constitution Avenue, NW, Washington, D.C. 20418.** *An Equal Opportunity Employer.*

POSITIONS OPEN

DIRECTOR OF EDUCATIONAL RESOURCES EAST TENNESSEE STATE UNIVERSITY COLLEGE OF MEDICINE

East Tennessee State University invites applications from, and nominations of, qualified individuals for the position of director of educational resources of its developing College of Medicine which is being established in affiliation with the Mountain Home Veterans Administration Hospital and community hospitals of the Tri-Cities area. Letters of application or nomination for this immediate opening should include a curriculum vitae and three personal and professional references.

Candidates should possess a doctoral degree and be trained in educational evaluation and/or curriculum development. Skills in development of tests and other evaluation instruments and previous medical school experience in the areas of program development and testing are essential.

Responsibilities will include the development of a comprehensive plan for evaluation of students, faculty, and the medical education program to be conducted in the affiliated hospitals.

Correspondence should be received not later than 15 March 1977, and addressed to:

**Dr. Jack E. Mobley, Dean
East Tennessee State University
College of Medicine
Johnson City, Tennessee 37601**

East Tennessee State University offers Equal Opportunity in its employment, admissions, and educational activities and is an Affirmative Action Employer.

EXPERIMENTAL PATHOLOGIST

Position immediately available at associate professor or professor level for nationally recognized medical scientist (pathologist preferred) with major investigative interest in tumor biology or cell injury. Enthusiasm and competence in teaching of professional and graduate students is essential. Opportunity for limited participation in hospital pathology service. Send curriculum vitae by 1 April 1977 to **Dr. George M. Martin, Search Committee, Department of Pathology SM-30, University of Washington, Seattle, Wash. 98195. Affirmative Action/Equal Opportunity Employer.**

FACULTY POSITION IN MECHANICAL ENGINEERING

The State University of New York at Buffalo has a faculty opening for teaching and research in fundamental aspects of fluid mechanics, heat transfer and transport. Applicants should have a strong background in the most modern and current aspects of their particular specialties in mechanical engineering. Rank and salary are open for this position which may be filled in September 1977. We will consider both new Ph.D.'s and candidates already well established in their fields. The department will have extensive opportunities for new research and teaching initiatives in occupying its new quarters on our new suburban campus. Our extensive laboratory space there will be accompanied by very substantial capital funds for new instruments and equipment. Send résumé and the addresses of professional references, by 15 April 1977, to **Professor Benjamin Gebhart, Chairman, Department of Mechanical Engineering, Parker Engineering, State University of New York at Buffalo, Buffalo, N.Y. 14214. The University is an Affirmative Action/Equal Opportunity Employer.**

UNIVERSITY OF SOUTH CAROLINA SCHOOL OF MEDICINE DEPARTMENT OF SURGERY

The University of South Carolina School of Medicine invites applications for **FACULTY POSITIONS** in its recently established Department of Surgery.

Candidates should desire involvement in a growing department and have a commitment to the teaching of medical students.

Outstanding applicants will be considered in a new medical school established in affiliation with the Columbia Veterans Administration Hospital under the authority of the Veterans Administration Medical School Assistance and Health Manpower Training Act of 1972. Letters of application or nomination should include a curriculum vitae.

Correspondence should be addressed to:

**Roderick Macdonald, Jr., Dean
School of Medicine
University of South Carolina
Columbia, South Carolina 29206**

An Affirmative Action/Equal Opportunity Employer

11 MARCH 1977

SENIOR BIOCHEMIST/ SUPERVISOR PhD Nucleotide Biochemist

New England Nuclear Corporation is seeking a PhD Biochemist to head up a vital Nucleotide Group 8 within our Biosynthesis Department.

The ideal candidate should possess post-doctoral experience and/or working knowledge of Nucleic Acid Metabolism and Enzymology and have proficiency with the use of modern biochemical techniques for the separation and analysis of Nucleic Acid derivatives.

The successful candidate will be a highly motivated communicator capable of training and evaluating subordinates and whose responsibilities will include the day to day supervision of a laboratory producing ³H and ¹⁴C labelled nucleotides and polynucleotides. Additional responsibilities include the coordinating and scheduling of production with inventory requirements, problem solving and troubleshooting. The ability to write coherent research and development reports is imperative.

We offer a competitive salary and compensation program commensurate with experience and ability. Interested applicants may submit their resume and salary history, in complete confidence to John Chabot, Corporate Employment Manager, 549 Albany St., Boston, MA 02118

NEN New England Nuclear

An Equal Opportunity Employer

POST-DOCTORAL FELLOWSHIPS

Department of Physics
University of Waterloo
Waterloo, Ontario, Canada

Applications are invited for postdoctoral research fellowships in physics.

Fellowships carry a stipend of \$11,220. per annum which is subject to Canadian income tax. The awards are tenable for the period of one year with a possible renewal for a second year.

Research areas include:

Atomic and Molecular Physics, Biophysics, Brillouin Spectroscopy, Crystallography, Electron Microscopy, Electron tunneling, Ellipsometry, Experimental superconductivity, Diffraction Physics, Far-infrared spectroscopy, Infrared and Raman Spectroscopy, De Haas-van Alphen effect, Magnetoconductivity of metals, Laser Physics, Lattice dynamics, Nuclear magnetic resonance, Semiconductors, and amorphous semiconductors, Theoretical studies of magnetic impurities in superconductors and other related fields.

The applicants should submit their resumes and three letters of references to:

**Dr. J. W. Leech, Chairman,
Department of Physics,
University of Waterloo,
Waterloo, Ontario, Canada. N2L 3G1**

POSITIONS OPEN

University of Washington Department of Environmental Health FACULTY POSITION AVAILABLE

Faculty position immediately available for experienced **ENVIRONMENTAL TOXICOLOGIST**. Responsibilities include participation in teaching of medical students, nurses, industrial hygienists and physicians, and the development of a major research effort in occupational and environmental toxicology. Appropriate Ph.D. required in addition to a minimum of 5 years experience and evidence of productive scientific output. Should be certified by or eligible for certification by the American Board of Industrial Hygiene. *Women and minorities are encouraged to apply.* Send résumé and references to: **Chairman, Toxicology Search Committee, Department of Environmental Health SC-34, School of Public Health and Community Medicine, University of Washington, Seattle, Washington 98195.** *The University of Washington is an Affirmative Action/Equal Opportunity Employer.*

TWO FACULTY POSITIONS—Appointment at assistant or associate professor rank depending upon qualifications.

Molecular Geneticist—Strong background in genetics and biochemistry required. Biochemical approach to genetics research. Postdoctoral experience required. Ability to interact with ongoing research in comparative biochemistry of steroid biosynthesis, molecular bases of aging, evolutionary biochemistry, and research on cell membranes, are highly desirable.

Toxicologist—Strong background in pharmacology. Develop fundamental research program in physiological/biochemical bases of effects of toxic substances. Desire to provide expertise to ongoing biochemical and physiological research, essential. Send résumés and three letters of reference to: **Dr. J. W. A. Burley, Department of Biological Sciences, Drexel University, Philadelphia, Pa. 19104.**

FACULTY EXTENSION POSITION in dairy science—animal science. Applications are invited from persons with a Ph.D. degree in ruminant-dairy nutrition. Responsibilities include extension teaching, development of educational materials and programs on a statewide basis as relates to dairy nutrition and management and continuing education programs for professional animal nutritionists. Apply with résumé to: **Dr. S. A. Ewing, Head, Department of Animal Science, Iowa State University, Ames, Iowa 50011.** *Affirmative Action/Equal Opportunity Employer.*

HUMAN POPULATION GENETICIST: Faculty position open July 1977. Teaching includes undergraduate and graduate courses. Research interests should be appropriate to training graduate students in human population genetics. Submit curriculum vitae, three letters of recommendation, and a synopsis of research interests by 15 April 1977 to the **Search Committee, Department of Genetics, University of California, Berkeley, California 94720.** *An Affirmative Action/Equal Opportunity Employer. Women and minority candidates welcomed.*

MICROBIOLOGIST, Ph.D.

Fermentation—Antibiotics

For this high-priority program, at least 1 to 5 years of experience are required at the Ph.D. level or equivalent, in research on antibiotic-producing organisms. Strong background in strain selection and antibiotic fermentation required.

For further information and consideration, please direct a résumé of your qualifications to: Manager, Research Personnel, Schering-Plough Corporation, 60 Orange Street, Bloomfield, New Jersey 07003.

**SCHERING-PLOUGH
CORPORATION**

WE ARE AN EQUAL OPPORTUNITY EMPLOYER M F

POSITIONS OPEN

FACULTY POSITION IN NEUROPHARMACOLOGY. The Division of Biology and Medicine at Brown University has an opening at the assistant professor level for an individual with research and teaching interests in the areas of neurochemistry and neuropharmacology. This individual can select affiliation with the Sections of Biochemical Pharmacology, Neurosciences, or Physiological Chemistry, depending upon his/her specific research interests. Applicants must have an M.D. or Ph.D., a minimum of 2 years of postdoctoral training, and demonstrated ability and productivity in research. Candidates should be prepared to establish an independent research program and to take an active role in the teaching of neuropharmacology to medical and graduate students. Please send curriculum vitae, bibliography, career objectives, and names of at least three referees to: **Dr. Jean M. Marshall, Section of Neurosciences, Brown University Program in Medicine, Providence, R.I. 02912.** *Brown University is an Equal Opportunity/Affirmative Action Employer.*

THE UNIVERSITY OF CALGARY DEPARTMENT OF BIOLOGY INSTRUCTORSHIP IN INVERTEBRATE ZOOLOGY

Responsibilities will be planning, direction, and coordination of laboratories in multisectioned courses in invertebrate zoology. Applicants should have a strong commitment to undergraduate teaching and should have at least a master's degree. Anticipated starting date is 1 July 1977. The salary floor for the rank of instructor is \$13,100 (likely to be adjusted effective 1 July 1977).

Applicants should send curriculum vitae and name and addresses of three referees to: **Dr. J. H. Williamson, Head, Department of Biology, University of Calgary, Calgary, Alberta, T2N 1N4, Canada** by 1 May 1977.

MARINE BENTHIC ECOLOGIST

Prefer recent Ph.D. with knowledge of marine invertebrate communities and dynamics. Strong statistical background, particularly multivariate analysis required. Assist in management of ongoing benthic epifaunal and infaunal studies of the South Texas Outer Continental Shelf; data analysis; report preparation. Send résumé, including salary requirements, to **Dr. J. S. Holland.**

**The University of Texas
Marine Science Institute
Port Aransas Marine Laboratory
Port Aransas, Texas 78373
Telephone: 512-749-6726/6750**

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

MEDICAL AND VETERINARY ENTOMOLOGIST

The Department of Entomology seeks an assistant or associate professor of medical and veterinary entomology with Ph.D. for 1 September 1977, or thereafter. Division of effort is 50 percent research and 50 percent teaching. Responsibilities are to carry out original research with primary emphasis on veterinary entomology, to teach two or three courses including medical and veterinary entomology, and to contribute to the pest management curriculum.

Applications including curriculum vitae, transcripts, reprints, statement of goals, and three letters of reference will be accepted through 15 April 1977, or until a qualified applicant is found. Send to **Dr. M. L. Fairchild, 1-87 Agriculture Building, University of Missouri, Columbia, Missouri 65201.** *The University is an Equal Opportunity/Affirmative Action Employer.*

PHARMACEUTICS/PHYSICAL PHARMACY. Applications are invited for an opening at the assistant professor level. Candidates should be recent Ph.D. graduates, possibly with postdoctoral experience. The position involves responsibility for the beginning professional course in drug delivery systems, combining concepts of biopharmaceutics and physical pharmacy, and graduate instruction. Research interests in physical pharmacy, biopharmaceutics, bioengineering, and/or analytical methodology. Background in pharmaceutical sciences is required.

A curriculum vitae and the names of three references from whom supporting letters have been requested should be sent before 1 April 1977, to: **Dr. Thomas N. Tozer, Department of Pharmacy, School of Pharmacy, University of California, San Francisco, San Francisco, California 94143.**

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

Applications are solicited for a **MICROBIOLOGIST**. Ph.D. with several years of research experience beyond doctorate for position at assistant or associate professor rank. Research interests in oral microbiology or virology. Instruction of graduate, dental, and medical students. Applicants should send curriculum vitae to: **Dr. Thomas N. Lynn, Dean, College of Medicine, P.O. Box 26901, Oklahoma City, Oklahoma 73190.** *Equal Opportunity Employer.*

PALYNOLOGIST/PALEOBOTANIST

The Department of Geosciences at the University of Arizona seeks applicants for a faculty position in palynology/paleobotany. The person should hold the Ph.D. degree and be interested equally in teaching and research. Further information can be obtained from **Dr. E. J. McCullough, Head, Department of Geosciences, University of Arizona, Tucson, Arizona, 85721.** *The University of Arizona is an Affirmative Action/Equal Opportunity Employer under state and federal laws and regulations including Title IX, 1972 Education Amendments, and encourages applications from women and minorities.*

PATHOLOGISTS are needed at the new University Hospital of the University of Massachusetts Medical Center. Positions available range from assistant professor to full professor. Preference given to Board-certified pathologists with primary interest in surgical pathology (including cytopathology) and autopsies, and strong collateral interest in teaching and/or research. *Minority candidates and women are especially encouraged to apply.* Write to **Dr. G. Majno, Chairman, Department of Pathology, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, Mass. 01605.** *An Equal Opportunity/Affirmative Action Employer.*

PHARMACOLOGIST (TOXICOLOGY)

The National Cancer Institute is seeking candidates for an inhalation toxicologist position in the Carcinogenesis Program. The person selected will be expected to design and supervise inhalation carcinogen bioassay studies and experiments related to toxicity and metabolism of carcinogens. He or she will also supervise the analysis, evaluation, and presentation of data resulting from these studies. The position is primarily an administrative assignment that requires a close working relationship with other government agencies and the scientific community at large. Salary range will be from \$28,725 to \$37,000, based upon experience and training. This position is a career Civil Service appointment. Experience in inhalation toxicology, pharmacology, biochemistry, and/or metabolism is desirable. Please send résumé by 2 April 1977 to:

**Yvonne DeWald
NCI Personnel Office
National Institutes of Health
Public Health Service
9000 Rockville Pike
Building 31, Room 3A27
Bethesda, Maryland 20014
Equal Opportunity Employer**

PHYSICAL OCEANOGRAPHER-NSF

The National Science Foundation is seeking qualified applicants for rotating appointment to the position of program director in the Physical Oceanography Program. The position is excepted from the competitive Civil Service, and will have a duration of up to 2 years. The program provides support for scientists primarily from academic institutions to pursue fundamental research in physical oceanography. The selected candidate will carry out program planning, proposal evaluation, administration of research grants, and liaison with other federal agencies.

Applicants should have a Ph.D. in physical oceanography, a related physical science, or the equivalent in experience. Field experience in an academic institutional program is highly desirable. Salary range is from \$28,725 to \$39,600 depending on qualifications and experience. Those interested in being considered for the position should forward current résumés by 31 March 1977 to the **Division of Personnel and Management, Section III, National Science Foundation, 1800 G Street, NW, Washington, D.C. 20550.** *An Equal Opportunity Employer.*

RESEARCH POSITIONS RESOURCE SYSTEMS INSTITUTE

The East-West Center, a national educational institution founded by the U.S. Congress in 1960 to promote better relations and understanding among nations through cooperative programs of study, research, and training, announces several staff positions for its new Resource Systems Institute, to be inaugurated in October 1977. Some positions are full-time and permanent (subject to successful probationary period); others are for specified terms. All center programs are multinational and multidisciplinary. Staff, visiting scholars, professionals, and graduate degree students form teams which work on problems with significant mutual consequences for nations of East and West. In its staff, the center seeks excellence in team research, commitment to the development of policy aids, educational products, and practical applications of such research, and ability to work cooperatively with those from other cultures and disciplines. For its Resource Systems Institute, the center is seeking physical, natural, social, and systems scientists and scholars in humanistic studies and professions from universities, research and development organizations, business and industry, and government or other agencies and institutions who have been working on resource systems and their interconnections, including resource availability, distribution, access, use, alternatives to existing use, and policies. Scope covers resource systems and system relations among water, food, energy, nonfuel minerals, related management and technology, and system and policy sciences.

Candidates must have a Ph.D. or its academic equivalent in a discipline relevant to the program and evidence of ability and accomplishment in three primary areas: (i) discovery of knowledge about problematical aspects of resource systems, especially at the regional and transnational levels, as evidenced by published and unpublished research; (ii) development of applications (for example, curricula, educational materials, physical models or prototype equipment design, policy aids) of this knowledge; and (iii) cooperative (team, preferably multinational) design and implementation of related research, education, and training projects and activities. Cover letter must provide two examples of achievements demonstrating ability in each of these three areas. This statement will be evaluated along with curriculum vitae to determine degree of accomplishment and related salary placement. Subsequent promotion is based on continued contribution and growth of accomplishment in each area.

The salary range covering the four relevant grades of positions begins at \$17,056 and ends at \$37,347, plus, for those eligible, cost-of-living allowance currently at 17.5 percent (subject to change). Cover letter and complete curriculum vitae with name and address of three professional references must be postmarked no later than 30 April 1977. Starting date preferably no later than October 1977. Send to **Resource Systems Institute, Personnel Division, Department 19, East-West Center, 1777 East-West Road, Honolulu, Hawaii 96822.**

An Equal Opportunity Employer, M/F

PROJECT DIRECTOR

A nonprofit educational organization located in Washington, D.C., has a 1-year appointment available for a project director on a study to examine the role of women in scientific research.

Responsibilities will include administration of the project in the following areas:

- assisting in the development of research designs,
- collection and analysis of data and reports on the status of women,
- coordinating arrangements for national conference including selection of participants and survey of attitudes and experience of research scientist, and
- writing of final report.

Additional responsibilities will include contributing to the work of the office in promoting the participation of minorities, women, and the handicapped in science.

Superior organizational and writing skills are essential. Knowledge of and interest in the role of women in science in the United States and a sensitivity to the concerns of minorities and handicapped persons are important. Previous experience in conference planning is beneficial.

Qualifications include: Ph.D. or master's degree and research experience in the natural sciences. Please submit statement of interest, résumé, samples of expository writing, and salary requirements to **Carole Dickert-Scherr, Personnel Office, American Association for the Advancement of Science, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005.**

An Equal Opportunity Employer

CSIRO DIVISION OF FOREST RESEARCH CANBERRA, A.C.T.

RESEARCH SCIENTIST (FOUR POSITIONS)

CSIRO has a broad charter for research into primary and secondary industry areas. The organization has approximately 7000 employees, 2200 of whom are research and professional scientists, located in divisions and sections throughout Australia.

- 1) **Nutritional Physiologist**
- 2) **Soil Physicist/Soil Chemist**
- 3) **Plant Pathologist**
- 4) **Forest Ecologist**

- 1) **1050/73—Nutritional Physiologist
Canberra, A.C.T.**

General: The effects of various management practices on forest productivity and hydrological relationships are being studied in a series of instrumented catchments in pine and eucalypt forest in the Cotter Valley near Canberra. The work integrates activities of research groups concerned with soils, hydrology, and fire.

Duties: To examine the total forest ecosystem including the principles underlying patterns of vegetation and the cycling of nutrient elements, in the above study. To measure the effects of management practices on vegetation and mineral cycling.

- 2) **1050/76—Soil Physicist/Soil Chemist
Canberra, A.C.T.**

General: The movement of soil-water and associated plant nutrients is important to both mineral cycling and stream water quality. The division wishes to examine this process in the integrated study described in position 1050/73.

Duties: To undertake theoretical and experimental research on the chemistry, movement, and redistribution of soil-water solutes and particulate matter through the vegetation-litter-soil system, and the loss of nutrients by streams.

- 3) **1050/77—Plant Pathologist
Canberra, A.C.T.**

General: Studies are in progress on the eucalypt dieback diseases in Tasmania and on jarrah dieback in Western Australia. A pathologist is required at divisional headquarters in Canberra to work on aspects of pathology of trees, especially in plantations in Australia. A number of pathogens are of real and potential importance and it is vital that the division be in a position to cope with these.

Duties: To undertake research in the diseases of important forest trees, particularly conifers in Australia.

- 4) **1050/74—Forest Ecologist
Tasmania**

General: The division has an established research station at Llanherne, near Hobart Airport, which is primarily concerned with the growth characteristics of eucalypt forests and problems of forest dieback. The division is expanding these activities to examine ecological aspects of the more intensive forest utilization which is being progressively introduced to Tasmanian forests.

Duties: A biological scientist is required to undertake research into the achievement and maintenance of high productivity in eucalypt forests especially when grown on short rotations, and to examine in particular the nutrient balances under such conditions.

Qualifications: Applicants for any of the above positions should have a Ph.D. degree or equivalent postgraduate research experience together with demonstrable research ability. In particular the appointee to the position of plant pathologist should have broad training and experience in mycology. Experience in relevant aspects of silviculture or forest ecology (for example, mineral cycling) would be desirable for appointment to the position of forest ecologist.

Salary: Research scientist or senior research scientist: A\$13,517 to A\$19,919 per annum.

Tenure: An indefinite or 3-year fixed-term appointment may be offered.

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

The Chief
Division of Forest Research
CSIRO
P.O. Box 4008
Canberra, A.C.T. 2600
Australia

by 1 April 1977

POSITIONS OPEN

PHARMACOLOGY. The Department of Pharmacology, School of Medicine, University of Louisville invites applications for four full-time faculty positions. Two positions for clinical pharmacologists with an M.D. degree who would have a joint appointment in the appropriate clinical department are open at the assistant professor level, or if qualified, associate professor. Applicants whose interests are in cardiovascular pharmacology, drug metabolism, or molecular pharmacology will be preferred candidates for the other two assistant professor positions. Send curriculum vitae and three letters of recommendation to: **William J. Waddell, M.D., Chairman, Department of Pharmacology, University of Louisville, School of Medicine, Health Sciences Center, P.O. Box 1055, Louisville, Kentucky 40201.** *An Equal Opportunity/Affirmative Action Employer.*

PHYSIOLOGIST CASE WESTERN RESERVE UNIVERSITY

The Department of Biology invites applications for an **assistant professorship in physiology.** Applicants should have a strong commitment to research, undergraduate, and graduate education. Interested persons should submit a curriculum vitae plus a brief statement of current research interests, and have three letters of recommendation sent to **Dr. Norman B. Rushforth, Chairman, Department of Biology, Case Western Reserve University, Cleveland, Ohio 44106.** *Case Western Reserve University is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION: One-to 2-year period for the study of erythrocyte and other cell membranes. Particular projects include lectin binding studies, effect of enucleation on membrane properties, and amino acid studies of membrane proteins. Send curriculum vitae to **Dr. J. A. Gordon, Department of Pathology, University of Colorado Medical Center, 4200 East Ninth Avenue, Denver, Colorado 80262.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION IN PHARMACOLOGY

Position available immediately for recent Ph.D. to study the pharmacological effects of apomorphine-like drugs. Salary: \$10,300. Send curriculum vitae and three letters of reference to:

**Dr. Steven Leslie
College of Pharmacy
The University of Texas at Austin
Austin, Texas 78712**
An Equal Opportunity Employer

POSTDOCTORAL POSITION CARDIOVASCULAR PHARMACOLOGY

Immediate opening: To study central control of cardiovascular system with emphasis on central actions of angiotensin II. Ph.D. degree with major in pharmacology; to specialize in broad area of cardiovascular pharmacology. Send curriculum vitae to: **Dr. Joseph P. Buckley, Professor of Pharmacology, Director of Cardiovascular Research, 212F, University of Houston, Houston, Texas 77004.** *Equal Opportunity Employer.*

POSTDOCTORAL POSITION. Immediate opening for a recent Ph.D. biochemist to participate in a research program on cardiac hypertrophy. Investigations will focus on the molecular signals controlling transcription and translation of heart muscle proteins. Preference will be given to applicants with expertise in investigations of protein synthesis and degradation. This is a collaborative program between the Department of Surgery in the Yale Medical School and the Department of Biology. Send résumé and references to **Professor C. L. Markert, Department of Biology, Yale University, New Haven, Connecticut 06520.** *The University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS available starting spring, summer, or fall 1977. Salary range: \$11,000 to \$14,000, plus fringe benefits. Please send curriculum vitae. Projects: (i) Primary structure of pulmonary- and emphysema-related proteins; contact **Dr. S. K. Chan.** (ii) Terminal deoxynucleotidyltransferase and human leukemia; background in protein purification and antibody technique preferred; contact **Dr. Mary Sue Coleman.** (iii) Structure and function of a hormonally controlled messenger RNA; contact **Dr. Robert E. Rhoads.** All three positions in the **Department of Biochemistry, Medical Sciences Building, University of Kentucky, Lexington, Kentucky 40506.**

POSITIONS OPEN

PHYSIOLOGIST

Positions are available in the Department of Physiology, Rush Medical College, for scientists studying the electrical properties of cells or tissues. The department wishes to support the development of the scientist's career and is able to do so. Responsibilities include some teaching of medical and nursing students and active participation in the graduate program; but the major responsibility is the development of an active independent research effort.

Applicants should send a scientific and academic biography, a brief statement of their research interests and goals, and the names of two colleagues familiar with them and their work to **R. S. Eisenberg, Chairman, Department of Physiology, Rush Medical College of Rush-Presbyterian-St. Luke's Medical Center, 1753 West Congress Parkway, Chicago, Illinois 60612.**

Rush-Presbyterian-St. Luke's Medical Center is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available, fall 1977, School of Medicine, University of California, San Diego (*An Equal Opportunity Employer*), La Jolla, California. Studies include structure, assembly, DNA-protein interactions and DNA sequencing of polyoma, and studies of interferon messenger RNA. References with curriculum vitae to: **Theodore Friedmann, M.D., MRC Laboratory of Molecular Biology, Hills Road, Cambridge, CB2 2QH, England.**

POSTDOCTORAL POSITION available immediately for Ph.D. with strong background in soil microbiology to work with the Rutgers Rhizosphere Research Group in developing a vigorous program in microbiology of the rhizosphere as it relates to symbiotic nitrogen fixation. Send curriculum vitae, personal bibliography, and references to: **Dr. Llonas Miller, Department of Biochemistry and Microbiology, Litman Hall, Cook College, Rutgers University, New Brunswick, New Jersey 08903.** Telephone: 201-932-9829. *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION: Development of cell cultures of neuronal tissue to study the synthesis and secretion of neurotransmitters. Ph.D. or M.D. with background in biochemistry or tissue culture techniques preferred. Send curriculum vitae and three names for references to **Dr. Kenneth S. McCarty, Department of Biochemistry, Duke University Medical Center, Durham, N.C. 27706.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION: Two, available immediately. To study (i) elemental composition of isolated cell systems (red blood cells, isolated gastric cells), and (ii) the distribution of diffusible elements in the kidney at the cellular level. Techniques of microphysiology and electron probe microanalysis will be used. Apply to: **C. Lechene, M.D., Director, Biotechnology Resource in Electron Probe Microanalysis, Harvard Medical School, LHRB, 45 Shattuck Street, Boston, Massachusetts 02115.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE. Available from 1 April 1977 (2 years) for a graduate in biochemistry or molecular biology interested in studies concerning the significance of DNA-membrane complexes in eukaryotic cells. Salary \$10,000 (beginning) plus fringe benefits (15 percent). Send curriculum vitae and two references to **Dr. William Firshein, Biology Department, Hall-Atwater Laboratories, Wesleyan University, Middletown, Conn. 06457.** *Wesleyan University is an Affirmative Action/Equal Opportunity Employer.*

SACRAMENTO PEAK OBSERVATORY Postdoctoral Research Scientists

Postdoctoral appointments are available at Sacramento Peak Observatory for 1- to 3-year periods beginning 1 October 1977. Salaries range upward from \$14,000 depending on qualifications. The observatory is operated by the National Science Foundation to undertake research in solar physics and to provide observing opportunities for the community. Staff scientists have access to a variety of advanced telescopes and auxiliary instrumentation, including the Vacuum Solar Tower. Observational and theoretical research in many areas of solar physics that relate to stellar astrophysics are pursued at the observatory. Applications specifying qualifications, experience, and the names of three professional references should be sent to: **Director, Sacramento Peak Observatory, Sunspot, N.M. 88349,** by not later than 15 April 1977.

An Equal Opportunity Employer

POSITIONS OPEN

The University of California, Irvine, College of Medicine, has **POSTDOCTORAL RESEARCH POSITIONS** available in the Department of Medical Microbiology, in the areas of virology, immunology, regulation of mammalian cell growth, enzyme regulation in bacteria and mammalian cells, and development, genetics, and nucleic acid metabolism of bacteria. Applicants must have a Ph.D. and a background in the quantitative aspects of biochemistry, microbiology, or genetics. *Applications from all qualified candidates are welcomed; minorities and women are encouraged to apply.* Interested individuals should write: **Chairman, Department of Medical Microbiology, College of Medicine, University of California, Irvine, Calif. 92717.**

RESEARCH CHEMIST

Position Vacancy: Director, Division of Biochemistry Walter Reed Army Institute of Research (WRAIR) Washington, D.C. 20012

WRAIR, an *Equal Opportunity Employer*, has projected vacancies for job opportunities leading to career Civil Service openings for management of basic and applied biological research of problems of military medical interest. The division is a large research unit involved in collaborative studies in support of a wide variety of programs oriented by categorical disease. Individuals with experience and demonstrated competence in research management as well as proven productivity in biochemical research are encouraged to send résumé to: **Chief, Recruitment and Placement Branch, Walter Reed Army Medical Center, Washington, D.C. 20012.** Salary range: \$33,789 to \$39,600.

RESEARCH PATHOLOGIST OCCUPATIONAL RESPIRATORY DISEASES

The National Institute for Occupational Safety and Health (NIOSH—Center for Disease Control—U.S. Public Health Service) is seeking a pathologist interested in cardiopulmonary research for the Appalachian Laboratory for Occupational Safety and Health (ALOSH). The laboratory is devoted to research into all types of occupational respiratory disease and is exceptionally well equipped. Responsibilities will include assisting the pathology section chief in current research and the development of new projects in both human occupational respiratory disease and animal model systems. Research collaboration with basic sciences and clinical sections housed in the laboratory is encouraged, and affiliation with the adjacent West Virginia University Medical Center affords the opportunity to participate in its program.

Candidate must be a medical doctor well trained in anatomic pathology (preferably Board-eligible or Board-certified), with demonstrated research achievement. Experience or interest in occupational or environmental medicine is desired. Positions are in the career Civil Service or the Public Health Service Commissioned Corps. Salary range \$30,000's to \$40,000's, depending on qualifications, experience, and personnel system. Liberal fringe benefits.

Interested candidates should send inquiries, curriculum vitae, and references to: **James A. Merchant, M.D., Director, Appalachian Laboratory for Occupational Safety and Health, 944 Chestnut Ridge Road, Morgantown, W. Va. 26505.**

An Equal Opportunity Employer

RESIDENT FIELD ECOLOGISTS. Married couple to operate field station of an international ecology program in the rain forest of Venezuela. Opportunity for developing own research project. Must have conversational Spanish, advanced degrees. Three-year contract. Field station located in small town, and ability to relate to local people is important. Send curriculum vitae by 1 June 1977 to **Joan Yantko, Institute of Ecology, University of Georgia, Athens, Georgia 30602.** *The University of Georgia is an Equal Opportunity/Affirmative Action Employer.*

SABBATICAL REPLACEMENTS

Two sabbatical leave replacements are sought for the 1977-78 academic year to teach lectures and laboratories in (i) **introductory biology**, and (ii) **human anatomy and physiology.** M.A. or Ph.D. in biological sciences, plus a strong interest and motivation in teaching at the introductory level. Send curriculum vitae and three letters of recommendation to: **Chairman, Department of Biological Sciences, State University of New York College at Plattsburgh, Plattsburgh, New York 12901.** Salary about \$9500 for 10 months. *An Equal Opportunity Employer.*

MICROBIAL TAXONOMIST

Leading specialty chemical manufacturer, located in San Diego, has an immediate opening for a microbiologist. Major responsibility is taxonomic identification of microorganisms especially bacterial strains.

Applicants should have an MS or PhD in Microbiology with a strong background in microbial taxonomy. Up to 3 yrs. experience in industrial or clinical taxonomy is desirable.

We offer an excellent starting salary and a complete benefit package. Please send resume and salary requirements to: W.L. LLOYD, JR.



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RADIOIMMUNOASSAY DEVELOPMENTAL SCIENTIST

The Upjohn Company requires a creative person (Ph.D. level) to be responsible for the development of new testing procedures for clinical laboratory diagnosis. Areas of activity to include synthesis of derivatives and immunogens, isolation and purification of naturally-occurring substances, animal immunizations, testing of antisera, preparation of receptor substances, development of radio-labelling techniques, new purification methods for radio-labeled compounds, and development and simplification of assay procedures such as with solid-phase techniques.

Qual.: Ph.D. in biochem, clin. chem, or related field. Exper. in radioimmunoassay essential. Location: Kalamazoo, a medium-sized community in Southwestern Michigan with ample lakes and recreational areas. Excellent benefits and living and working conditions. Salary negotiable.

Send complete resume with transcripts and references to Dennis Nevala, 5032-41-1, The Upjohn Company, 7171 Portage Road, Kalamazoo, Michigan 49001. An Equal Opportunity Employer M/F.

THE UNIVERSITY OF CALGARY

ASSISTANT PROFESSOR OF BIOCHEMISTRY

Applications are invited from Ph.D. biochemists of proven research ability to join a vigorous biochemistry group within the Faculty of Science. Excellent facilities and a competitive salary are available. Close collaboration with the Faculty of Medicine is possible. Development of an active research programme and excellence in undergraduate and graduate (M.Sc., Ph.D.) instruction are expected. Prospective candidates should submit a curriculum vitae, synopsis of research plans, and arrange for three letters of reference to be sent to **Dr. G. I. Drummond, Chairman of Search Committee, Department of Chemistry, The University of Calgary, Calgary, Alberta, T2N 1N4, Canada.** The closing date for receipt of applications is 15 April 1977. Starting date of position is 1 August 1977.



Genetic Engineering for Nitrogen Fixation

Associated Universities, Inc. with the support of the National Science Foundation (RANN) will hold a conference on genetic engineering for nitrogen fixation at Brookhaven National Laboratory at Upton, Long Island, New York, 13 to 17 March 1977. Genetic engineering for nitrogen fixation is of great interest from a basic point of view and has important practical implications. This conference will try to bring out both of these and conclude with a discussion of the agricultural, social, economic, and legal implications of genetic modification of nitrogen fixation.

A registration fee of \$35 includes the conference banquet and a copy of the proceedings as soon as they appear. The meeting is open to graduate students and postdoctoral fellows.

Mail your check for registration to **Mrs. Virginia R. Sayre, Brookhaven National Laboratory, Upton, New York, 11973. Telephone 516-345-3364. Alexander Hollaender, Chairman.**

POSITIONS OPEN

UNIVERSITY OF CALIFORNIA, DAVIS

Research fellow in **POSTHARVEST BIOLOGY** in support of postdoctoral or senior scientists on sabbatic leave. Recipients may conduct research under the auspices of one or more of the resident staff emphasizing various aspects (molecular, cellular, biochemical, physiological, horticultural) of plant senescence as related to the postharvest biology of fruits, vegetables, or ornamentals. Appointment is normally for 1 year commencing summer or fall 1977. Salary range \$10,000 to \$16,000, as determined by training, prior experience, and other sources of support. Application may be made by forwarding a curriculum vitae, the names of three referees, and a brief (one- to two-page) description of research interests to **Dr. Roger Romani, 2039 Wickson Hall, University of California, Davis, California 95616**. Applications received after 30 April 1977 cannot be assured of consideration. *The University of California is an Equal Opportunity Employer.*

MEDICAL RESEARCH FOUNDATION PRESIDENT

Senior research scientist who will serve as scientific director and devote major portion of his/her time to planning, development, and implementation of scientific programs of Oklahoma Medical Research Foundation. As chief executive officer, president is responsible to Board of Directors and Executive Committee for direction, planning, and development of the Foundation within Board-approved policies and programs. Foundation has close working relationships with University of Oklahoma Health Sciences Center and other Oklahoma Health Center institutions. Salary negotiable with excellent fringe benefits. *Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae and letter of interest to **Chairman, Search Committee for President, Oklahoma Medical Research Foundation, 825 Northeast 13th Street, Oklahoma City, Oklahoma 73104**.

SAHEL DEVELOPMENT PROJECT

A Washington, D.C., scientific institution is seeking candidates for two openings in the international relations and development area: **STUDY DIRECTOR** and **PROGRAM ASSISTANT**. *Study director's responsibilities:* direct and supervise staff; coordinate and arrange workshop, meetings, and U.S. participation at international meetings; prepare reports and correspondence. Qualifications: Ph.D., or equivalent, in ecology, geography, science policy, or similar multidisciplinary areas involving both social and natural sciences; at least 4 years of experience in teaching and/or research in area; training and/or working knowledge of overseas development philosophies and programs, and knowledge of Sahel countries; fluency in French language; administrative experience. *Program assistant's responsibilities:* carry out independent research, review and compile data and provide information to committees; assist with organizing meetings and workshops. Qualifications: M.Sc., or equivalent, in ecology, geography, science policy, or similar multidisciplinary areas; training and/or working knowledge of overseas development philosophies and programs, knowledge of Sahel area; fluency in French language. Submit résumé to **Box 102, SCIENCE**. *An Equal Opportunity Employer*

SCIENTIST with a minimum of 5 years of postdoctoral experience in tissue culture and related work is sought to join a newly formed group involved in a project investigating muscle and nerve disease in humans and animals. Curriculum vitae and bibliography to:

Walter G. Bradley
Department of Neurology
Tufts-New England Medical Center
171 Harrison Avenue
Boston, Mass. 02111

The Chemistry Department at Yale University has **OPENINGS** at the **SENIOR FACULTY LEVEL** in inorganic and organic chemistry. Although the precise area is not the major factor, candidates with research interests complementing our current concentrations would be given preference. We are seeking candidates who have achieved international recognition and are considered to be leaders in their field. *Yale is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and members of minority groups with appropriate qualifications.* Applications should be returned by 30 March 1977 to the **Chairman, Department of Chemistry, Yale University, 225 Prospect Street, New Haven, Connecticut 06520**.

POSITIONS OPEN

VERTEBRATE ZOOLOGIST. Ph.D. required. Assistant professor. Fall 1977. Will be expected to develop a course in animal behavior on undergraduate and graduate level, also teach a course in histological techniques. Teaching may also include sections of comparative anatomy, embryology, and freshman biology. Will be expected to engage in research and sponsor graduate students for the master's degree. Send curriculum vitae no later than 1 April 1977 to: **Dr. David Lapin, Chairman, Department of Biological Sciences, Fairleigh Dickinson University, Teaneck, New Jersey 07666. An Equal Opportunity/Affirmative Action Employer, MIF.**

VETERINARY PATHOLOGISTS

D.V.M., Ph.D., or equivalent experience. Board-certification desirable. Pathologic evaluation of rats and mice on long-term chemical carcinogenesis studies for neoplasia and lesions of chronic toxicity. Diagnostic support for the other research units and collaborative investigations. Opportunity for publication and individual research. Send résumé to **Marian Knill, Recruitment Manager, LITTON BIONETICS, INC., Frederick Cancer Research Center, P.O. Box B, Frederick, Md. 21701**. *An Equal Opportunity Employer, MIF*

CONFERENCE

CONFERENCE ON CLINICAL PERSPECTIVES of Carcinoembryonic Antigen (CEA)

1 to 3 June 1977
University of Kentucky Medical Center
Lexington, Kentucky

This conference is intended to assess the current clinical uses of carcinoembryonic antigen (CEA) assays in the management of cancer patients, and to discuss various new approaches for measuring and detecting CEA in body fluids and tissues. Emphasis will be placed on determining the value and problems of CEA tests in various clinical practices. A part of the conference will also be devoted to basic questions of the immunology and chemistry of CEA, immunocytochemistry of CEA in the pathology laboratory, and a discussion of other new markers identified in tumors which may prove of value for cancer immunodiagnosis.

In addition to invited lectures, a number of short proffered papers will be accepted. For further information and abstract forms, contact **Dr. D. M. Goldenberg, Division of Experimental Pathology, MDRF No. 3, University of Kentucky Medical Center, Lexington, Kentucky 40506**.

COURSES

University of Southern California
Catalina Marine Science Center

SUMMER PROGRAM IN NEUROSCIENCE

25 July to 30 August 1977

An intensive "hands on" electrophysiology course. The major emphasis will be on the membrane properties of neurons and their interactions which produce organismic behavior patterns. Topics covered will include excitability mechanisms, synaptic processes, neuronal interactions, and neuronal correlates of behavior. Techniques will include intracellular and extracellular recording, ionic replacement studies, intracellular staining, micro-iontophoresis, statistical analysis of synaptic phenomena, and recording from intact animals. Experimental preparations will come primarily from invertebrates, including *Aplysia*, leech, and lobster.

Instructor: **Charles Lent** (State University of New York, Stony Brook). Participants: **S. Hagiwara** (University of California, Los Angeles), **D. Hartline** (University of California, San Diego), **D. Junge** (University of California, Los Angeles), **W. Kristan** (University of California, San Diego), **R. McKaman** (City of Hope), **G. Moore** (University of Southern California), **C. Platt** (University of Southern California), **A. Selverston** (University of California, San Diego), **A. Siger** (University of Southern California), and **H. Wachtel** (Duke University).

Financial aid is available on a competitive basis through the generosity of the University of Southern California Oceanographic Associates. For information about application and financial aid, contact: **Dr. Alvin Siger, Department of Biological Sciences, University of Southern California, University Park, Los Angeles, Calif. 90007**.

COURSES

The Pathology Department of Eastern Virginia Medical School will offer an intensive 5-week **COURSE** in the theory and practice of electron microscopy in summer 1977. The course is not an overview but is designed to provide competence in the field. A certificate will be awarded upon completion. Class size is limited to five people. For further information please contact: **Dr. S. H. Vernick, Department of Pathology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, Virginia 23501**.

FELLOWSHIPS

POSTDOCTORAL POSITIONS

A number of fellowships are available for research on the regulatory aspects of zinc and cadmium metabolism at the cellular and subcellular level. Requires a Ph.D. in biochemistry, cell biology, nutrition, or physiology. Research expertise in one of the following areas: protein synthesis, gastrointestinal absorption, or metal transport is desirable. Send curriculum vitae including references to: **Dr. Robert J. Cousins, Department of Nutrition, Rutgers University, New Brunswick, New Jersey 08903. An Equal Opportunity/Affirmative Action Employer.**

FELLOWSHIP IN RENAL AND MEMBRANE PHYSIOLOGY

A fellowship commemorating Dr. Louis G. Welt has been established by the Department of Medicine, University of North Carolina, Chapel Hill, for 2 years of support for an M.D. or Ph.D. interested in postdoctoral research in the areas of nephrology or membrane physiology. Recipient would concentrate in one of several areas including renal physiology, epithelial transport, endocrinology of ion and water metabolism, hormones and membranes, or red blood cell transport. Interested parties should communicate with **Arthur L. Finn, M.D., Department of Medicine and Physiology, University of North Carolina-Chapel Hill, Chapel Hill, N.C. 27514**. Deadline for receipt of applications: 15 May 1977.

POSTDOCTORAL FELLOWSHIP, Naval Arctic Research Laboratory, Barrow, Alaska, University of Alaska. Position available for work on **environmental mammalian physiology relating to adaptation to a cold-dominant environment**. Experience in comparative metabolism, nutrition, water and electrolyte balance and/or mechanisms of thermoregulation required. Basic stipend \$13,000. Benefits include housing, food, and travel expenses for self and family. Send résumé and references to: **Dr. Gary A. Laursen, Assistant Director for Science, Naval Arctic Research Laboratory, Barrow, Alaska 99723. The University of Alaska is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIP in nephrology and renal metabolism. A 1-year research training position to study renal tubular transport at physiologic and biochemical level. Full-time investigative position. Background in laboratory techniques or medical residency is required. Salary \$11,000 to \$14,000 depending upon experience. Available July 1977. Send curriculum vitae and names of three references to: **Dr. K. C. Bovee, University of Pennsylvania, School of Veterinary Medicine, 3800 Spruce Street, Philadelphia, Pa. 19104**. *An Affirmative Action/Equal Opportunity Employer*

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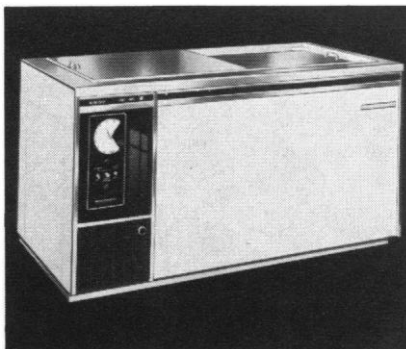
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