

# Personnel Placement

Only those employers and individuals who do not discriminate on the basis of race, sex, religion, age, color, or national origin should submit Personnel Placement advertising.

**POSITIONS WANTED:** 40¢ per word; use of Box Number counts as 10 additional words. Minimum charge \$10. Prepayment required. This rate applies to individuals only; personnel agencies, companies, colleges, and universities take display rate for all advertising.

**DISPLAY (POSITIONS OPEN, MARKET PLACE, AND SO FORTH):** \$130 per inch, minimum, per insertion (1 inch is equivalent to 12 lines of 48 characters each). Ads over 1 inch billed to nearest quarter inch. No charge for Box Number. Rates net. No agency commission allowed for ads under 4 inches. No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information must accompany all other advertising.

COPY for ads must reach SCIENCE by Wednesday, 3-1/2 weeks before issue date (Friday of each week) requested. Send copy for all positions wanted ads and display ads under 5 inches to:

SCIENCE, Room 207  
1515 Massachusetts Ave., NW  
Washington, D.C. 20005

Send copy for display ads, 1/6 page and larger, to:

Scherago Associates, Inc.  
11 West 42nd Street  
New York, N.Y. 10036

BLIND AD replies should be addressed as follows:

Box (give number)  
SCIENCE  
1515 Massachusetts Ave., NW  
Washington, D.C. 20005

## POSITIONS WANTED

**Anatomist:** gross, neuro. Desires teaching/research position. EM, neurovascular system. Box 300, SCIENCE. X

**Biochemist,** Ph.D. 1974. Thesis and postdoctoral experience in lipid biochemistry, kinetic analysis of metabolism, and enzymology. Seeks faculty position or research associateship with opportunity to teach. Has NIH-funded research grant. Available September 1976. Box 301, SCIENCE. X

**Biochemist,** Ph.D. 1964. Broad industrial and academic experience in pharmacokinetics and metabolism of drugs, food additives, pesticides, proteins, cancer specific antigen, radioimmunoassay, supervisory, publications. Interested in responsible position in government or industry. U.S. citizen. Box 302, SCIENCE. 7/2; 8/6

**Biochemist/Chemist:** M.S. (1976) plus. Research experience in rapid enzyme kinetics, chemical modifications, isotope effects, computer methods. Publications. Desires research, development, or teaching position utilizing background in physical/biochemical/organic techniques and/or computerized data analysis. Prefers Mountain States or New England. Box 303, SCIENCE. X

**Biochemist/Chemist** (physiology), M.S., Ph.D. Broad research interest and experience: college teaching, pharmaceuticals, hospital clinical chemistry and toxicology, environmental studies, instrumentation, and cancer. Desires responsible academic, industrial, or public health position. Publications. Box 304, SCIENCE. X

**Biomedical Research Assistant.** M.S. Two years of experience in reproductive endocrinology. Proficient in lab technology, RIA. Research interests are broad and include cell, developmental biology, and physiology. Seeks position in West. Box 305, SCIENCE. X

**BOSTON, Clerical Plus.** Very bright person, degree, typing, biochemistry handicap. I can make it in the right position. Please write: Box 281, SCIENCE. X

**Clinical Microbiologist:** Ph.D. 1964. Experienced, publications, with teaching experience. Seeks suitable hospital, public health, or academic position. Box 292, SCIENCE. X

## POSITIONS WANTED

Ph.D., **Histochemistry** of early fish development. M.S., cell biology and animal physiology. Four years of postdoctoral experience in histochemistry and atherosclerosis. Mucopolysaccharides and lysosomal enzymes. Several publications. Seeking research and/or academic position. Box 293, SCIENCE. X

Ph.D., **Immunology-Biochemistry.** Five years of postdoctoral training; 4 years of radiopharmaceutical R & D; strong in all aspects of radioimmunoassay, immunochemistry; seeks position in industry, academia, or government lab. Available immediately. Box 306, SCIENCE. X

**Immunologist/Microbiologist,** Ph.D. Fellow AAM, certified ABM, 60 publications, numerous awards, patents; extensive interdisciplinary R & D in government, industry, and clinical lab. Experienced with Ag/Ab applications, production, plastics, FGS, GMP, QC, GLC, GSC, instrumentation, and biostatistics. Capable researcher/supervisor/manager/teacher. Desires biomedical R & D or academic position requiring responsibility, initiative; salary history \$20,000 plus. Box 307, SCIENCE. X

**Neuroscientist/Anatomist,** Ph.D. 1972; postdoctorate; 4 years of medical school teaching experience. Publications. Seeks teaching position (neuro, gross) with opportunity to pursue highly fundable research. Telephone 212-650-7695 or write Box 308, SCIENCE. 7/2, 9

Ph.D., **Pharmacology.** Desires teaching/research/medical school/applied health science/biology/industry/government. Available September. Box 297, SCIENCE. X

**Plant Scientist.** Ph.D. Distinguished 20-year research record, honors, society offices, books, fine teacher; broad interests in physiology, ecology, biochemistry; seeks academic position. Full-time teaching or administration happily accepted in preference to continuing at research institution under intense but unintelligent "mission" pressure. Box 285, SCIENCE. X

## POSITIONS OPEN

**ACADEMIC MEDICINE—CAREER OPPORTUNITIES** in Department of Internal Medicine, Admissions Center. Full-time faculty appointment with responsibilities in well-staffed admissions area of a primary teaching hospital of the Medical College of Wisconsin. Appointment to an appropriate subspecialty section. Ample time and opportunity to pursue clinical or laboratory investigations aimed at developing a career in academic medicine. *Non-discrimination in employment.* Contact: **George B. Theil, M.D., Chief, Medical Service, Veterans Administration Center, Wood (Milwaukee), Wisconsin 53193.**

**ADJUNCT ASSISTANT PROFESSOR:** Starting salary approximately \$16,000. Starting 1 July 1976. Requirements: Ph.D. and 1 or 2 years of postdoctoral training in gerontology and immunology including familiarity with cell fractionation and cellular immunity techniques, enzyme purification, radioactive counting techniques including radioautography, and experience with autopsy interpretation. *University of California, Los Angeles, is an Equal Opportunity/Affirmative Action Employer interested in receiving applications from minorities and women candidates as well as other qualified people.* Send curriculum vitae and three references to **Dr. Roy L. Walford, Department of Pathology, University of California, Los Angeles, Calif. 90024.**

**ASSISTANT PROFESSOR.** Unexpected September opening for **vertebrate zoologist.** Teaching and organizational responsibilities include sharing introductory zoology, human anatomy or anatomy/physiology, and specialized zoology offerings for upper-class and graduate students. Applicants should have quantitative field-research orientation (ecological and/or evolutionary-systematic) preferably in **ichthyology** or **mammalogy**. Ph.D., some teaching experience, and recent research required. Urban university has marine station and suburban woodlots. Send curriculum vitae, transcripts, description of research interests, and names of three references to **Dr. Henry O. Wernitz, Chairman, Search Committee, Department of Biology, Northeastern University, Boston, Mass. 02115.** *An Equal Opportunity/Affirmative Action Employer*

## POSITIONS OPEN

**ANIMAL PHYSIOLOGY—HISTOLOGY.** Position open for a Ph.D. at the assistant professor level. Applicant should be qualified to develop and teach upper-level undergraduate and graduate-level courses in stated areas. Applicants will be expected to teach introductory courses in general biology and to develop an active research program. Send curriculum vitae, official transcripts, and three letters of recommendation by 15 July to: **Search Committee, Department of Biology, Pan American University, Edinburg, Texas 78539.** *Pan American University is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR— ADOLESCENT MEDICINE

### ASSISTANT PROFESSOR— HEMATOLOGY/ONCOLOGY (PEDIATRICS)

Contact: **Billy F. Andrews, M.D., Professor and Chairman, Department of Pediatrics, University of Louisville Health Sciences Center, P.O. Box 1055, Louisville, Kentucky 40201.** *Equal Opportunity Employer*

**ASSISTANT PROFESSOR—A** biochemically trained nutritionist with research interests in carcinogenesis is sought by a Department of Biochemistry. The position also requires the teaching of a one-semester graduate course in biochemical nutrition. Interested individuals should send their curriculum vitae, letters of recommendation, an outline for the course in biochemical nutrition, and a coherent and comprehensive plan for future research to: **Dr. Lawrence Grossman, Chairman, Department of Biochemistry, The Johns Hopkins University, 615 North Wolfe Street, Baltimore, Md. 21205.** *An Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT PROFESSOR.** Fall 1976. **ANIMAL VIROLOGY.** Ph.D. required. Postdoctoral experience and strong biochemistry background desirable. Primary teaching duties in animal virology and molecular biology. Expect participation in M.S. program. Salary: \$12,000 to \$12,700. Send résumé, transcripts, and three reference letters to: **Chairman, Department of Microbiology and Biochemistry, Idaho State University, Pocatello, Idaho 83209.** Application deadline: 10 July 1976. *Equal Opportunity (M/F)/Affirmative Action Employer.*

**ASSISTANT PROFESSOR OF ANTHROPOLOGY** New York University seeks a highly qualified new Ph.D. in social/cultural anthropology or physical anthropology for autumn 1977. Field of specialization not important. Submit curriculum vitae and names of referees to: **Professor John Buettner-Janusch, Chairman, Department of Anthropology, 25 Waverly Place, New York University, New York, New York 10003.** *An Affirmative Action/Equal Opportunity Employer.*

The Hormel Institute, a Research Unit of the Graduate School of the University of Minnesota, invites applications for a position at the level of **ASSISTANT PROFESSOR.** Ph.D. degree and postdoctoral experience are required. The successful candidate is expected to establish an independent research group in an area of, or related to, **LIPID BIOCHEMISTRY.** Preference will be given to applicants whose research plans complement ongoing Institute projects in lipid research. Available after 1 October 1976. Before 1 August 1976, please submit a curriculum vitae, research plans, full publication list, graduate transcripts, and the names and addresses of three references to: **Dr. Howard Brockman, Chairman of the Search Committee, The Hormel Institute, University of Minnesota, Austin, Minnesota 55912.** *An Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR, OPHTHALMOLOGY

Applications are sought for an ophthalmologist with subspecialty training in glaucoma. Requirements for this position include a glaucoma fellowship following the successful completion of a residency in ophthalmology. Research interests and background in basic laboratory as well as clinical research should also be documented. Please send inquiries and curriculum vitae to **Stephen J. Ryan, M.D., Chairman, Department of Ophthalmology, University of Southern California School of Medicine, 1355 San Pablo Street, Los Angeles, California 90033.** *The University of Southern California is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**ASSISTANT PROFESSOR.** Fall 1976. **IMMUNOLOGY.** Ph.D. required. Postdoctoral experience and strong biochemistry background desirable. Primary teaching duties in immunology and pathogenic microbiology. Expect participation in M.S. program. Salary: \$12,000 to \$12,700 per academic year. Send résumé, transcripts, and three reference letters to: **Chairman, Department of Microbiology and Biochemistry, Idaho State University, Pocatello, Idaho 83209.** Application deadline: 10 July 1976. *Equal Opportunity (M/F)/Affirmative Action Employer.*

**ASSISTANT PROFESSOR, ORGANIC CHEMISTRY**—Ph.D. in chemistry with postdoctoral experience preferred. Creativity, ambition, and initiative in both teaching and research are more important than specific area of research interest, although consideration will be given to complementing rather than duplicating current departmental strength. We anticipate final selection of a candidate during the fall 1976 semester and urge immediate application. Qualified female and minority applicants are encouraged to apply. Send complete résumé, including outlines of research proposals, and three letters of reference to: **Secretary, Organic Search Committee, Department of Chemistry, State University of New York at Buffalo, Buffalo, New York 14214.** *The University is an Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT RESEARCH ANATOMIST.** Position available immediately. Ph.D. or equivalent in developmental biology with interest and experience in prenatal development of mammals. Full-time position supported by federal funds. Involves collaborative research in embryology/teratology of nonhuman primates. Includes opportunities for training graduate students. Research experience preferred but not required. Send complete curriculum vitae, including a statement of research interest, and names of at least three references to **Director, California Primate Research Center, University of California, Davis, Calif. 95616.** Closing date for applications is 20 August 1976. *The University of California is an Equal Opportunity Employer. Applications from women and minorities are encouraged.*

**REPRODUCTIVE PHYSIOLOGIST/ANIMAL HUSBANDRY.** Position available immediately. Ph.D. or D.V.M. with research training in mammalian reproductive physiology and breeding management. Full-time position supported by federal funds. Will involve supervision/management of large rhesus monkey breeding colony, and applied research (half time) of domestic breeding of nonhuman primates. Research experience preferred but not required. Send a complete curriculum vitae, including a statement of research interests, and names of at least three references to **Director, California Primate Research Center, University of California, Davis, Calif. 95616.** Closing date for applications is 20 August 1976. *The University of California is an Equal Opportunity Employer. Applications from women and minorities are encouraged.*

**BIOCHEMIST.** Position available for a Ph.D. with broad interests in enzymology, metabolism, protein chemistry, and at least 2 years of postdoctoral experience in nucleic acid biochemistry. Teaching opportunities available. Send curriculum vitae, list of publications, and names of three references to **Dr. George L. Wolff, Chief, Division of Mutagenic Research, National Center for Toxicological Research, Jefferson, Arkansas 72079.**

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

**BIOLOGICAL CHEMISTRY FACULTY POSITION** jointly appointed in the College of Science and Engineering and the School of Medicine. Rank and salary are negotiable. Position will require teaching (undergraduate, graduate, and medical) and research. Preference will be given candidates with previous medical school experience. Clinical chemistry background would be useful. *Wright State University is an Equal Opportunity/Affirmative Action Employer.* Applications received after 15 July may not be considered. Curriculum vitae and three reference letters should be sent to:

**Dr. H. Ira Fritz, Chairman  
Department of Biological Chemistry  
P.O. Box 927  
Wright State University  
Dayton, Ohio 45401**

## POSITIONS OPEN

**BIOCHEMIST**—A position at the rank of assistant professor is available in the Department of Biochemistry, College of Medicine, University of Saskatchewan. Applicants must have a Ph.D. and/or M.D. degree. Duties will include research and teaching of biochemistry to undergraduate and graduate students. Effective date of appointment is negotiable. Salary will be commensurate with experience and training. Send curriculum vitae and names of three referees to: **Dr. J. D. Wood, Head, Department of Biochemistry, University of Saskatchewan, Saskatoon, Saskatchewan, Canada S7N 0W0.**

**BIOLOGY FACULTY POSITION:** Available fall 1976. Ph.D. molecular biologist/biochemist. Assistant-associate professor level dependent on experience. Evidence of successful teaching experience an asset. Interested persons should respond with letter of application, résumé, and three letters of recommendation by 20 July 1976 to: **Brother Richard Hawley, Department of Biology, La Salle College, 20th Street and Olney Avenue, Philadelphia, Pennsylvania 19141.**

*An Equal Opportunity/Affirmative Action Employer*

### TWO TEMPORARY BIOLOGY POSITIONS

Half-time temporary position to teach in invertebrate biology and one half-time temporary position to teach in vertebrate biology for academic year 1976-77. Applicants should preferably have at least 1 year of postdoctoral training. Send curriculum vitae and names of three references to: **Search Secretary, Biology Department, University of California, Los Angeles, Los Angeles, Calif. 90024.** Deadline: 1 August 1976. *An Equal Opportunity/Affirmative Action Employer.*

### EASTERN MONTANA COLLEGE BOTANY

Position open in Biology Department for academic year 1976-77. Ph.D. required. Teaching responsibilities include plant ecology, plant systematics, and general botany. Emphasis will also be placed upon interest in research. Ability to teach genetics is desirable. Send curriculum vitae, including transcripts, and three letters of reference to **Dr. Gary L. Bintz, Department of Biology, Eastern Montana College, Billings, Montana 59101.** (Deadline: 23 July 1976.) *Eastern Montana College is a committed Affirmative Action Employer. All appointments are based on merit principles without regard to race, color, religion, sex, age, or national origin.* All appointments are made in accordance with the rank, salary, and other provisions of the current collective bargaining agreement.

**CHAIRPERSON, Epidemiology and Demography Unit, Cancer Center of Hawaii, University of Hawaii.** Applications are invited for the position as head of the Epidemiology and Demography Unit of the Cancer Center of Hawaii. Candidates should have an M.D. degree. They should also have formal training in epidemiology and/or substantial experience in cancer epidemiology. The position is primarily one of research and administration, but opportunities exist for teaching in the School of Public Health, University of Hawaii. Major responsibilities are for developing and carrying out research activities in the multi-ethnic setting of Hawaii. The ability to collaborate effectively with others in a multi-institutional environment is essential. Salary negotiable. Closing date is 1 October 1976.

Send curriculum vitae and the names of three references to:

**Lawrence H. Piette, Ph.D.  
Chairman, Epidemiologist Search Committee  
Cancer Center of Hawaii  
University of Hawaii  
1997 East-West Road, Room 215  
Honolulu, Hawaii 96822  
*An Equal Opportunity Employer***

**CORE CULTURE FACILITY TECHNICIAN.** Departmental core culture facility needs a senior technician with about 3 years of experience in cell culture of muscle to take charge of ongoing facility and direct one or two technicians. Facility is mainly geared toward culture of vascular smooth muscle. Salary negotiable. Send curriculum vitae and reference names to:

**Dr. Robert M. Berne  
Department of Physiology  
University of Virginia  
Jordan Medical Education Building  
Charlottesville, Virginia 22901**

*An Equal Opportunity/Affirmative Action Employer*

## POSITIONS OPEN

### CARDIOVASCULAR RESEARCH ASSOCIATE

Applications are invited for the position of cardiovascular research associate in the Department of Surgery, Saint Louis University School of Medicine. The position involves all areas of cardiovascular research and requires a Ph.D. or M.D. However, extensive experience in cardiovascular research will be considered in lieu of the degree. Inquiries and curriculum vitae should be sent to: **Patrick R. Devereux, Department of Surgery, Saint Louis University School of Medicine, 1325 South Grand Boulevard, St. Louis, Missouri 63104.** *An Equal Opportunity/Affirmative Action Employer.*

### UNIVERSITY OF QUEENSLAND CHAIR OF PHYSIOLOGY

The University invites applications for the chair of physiology, to fall vacant upon the retirement of Professor O. E. Budtz-Olsen. Applicants should have high academic qualifications, a distinguished research record in any area of physiology and experience in tertiary teaching. The appointee will be expected to provide leadership in research and teaching in medical, veterinary, or science physiology.

The present salary for the position is \$A25,955 per annum. The University provides prescribed traveling and removal expenses, superannuation, study leave, and housing assistance.

Additional information and application forms are obtainable from the **Staff Officer, University of Queensland, St. Lucia, Brisbane, Queensland 4067, Australia,** with whom applications close on 31 August 1976.

### CHEMICAL OCEANOGRAPHY

**ROSENSTIEL SCHOOL OF MARINE AND ATMOSPHERIC SCIENCE** of the University of Miami invites applications for a faculty position that will involve teaching and research. Research interests in the area of sources and fluxes of particles in the ocean would be of special interest. The appointment would be at the assistant or associate professor level, as appropriate. Applicants are requested to contact **James H. Carpenter, Division of Chemical Oceanography, Rosenstiel School of Marine and Atmospheric Science, 4600 Rickenbacker Causeway, Miami, Florida 33149.** *The University of Miami is an Equal Opportunity/Affirmative Action Employer.*

### CHEMICAL OCEANOGRAPHY

**ROSENSTIEL SCHOOL OF MARINE AND ATMOSPHERIC SCIENCE** of the University of Miami invites applications for a faculty position that will involve teaching and research. Research interests in the area of sediment-water interactions and sediment diagenesis would be of special interest. The appointment would be at the rank of assistant through professor, as appropriate. Applicants are requested to contact **James H. Carpenter, Division of Chemical Oceanography, Rosenstiel School of Marine and Atmospheric Science, 4600 Rickenbacker Causeway, Miami, Florida 33149.** *The University of Miami is an Equal Opportunity/Affirmative Action Employer.*

**CHIEF, THORACIC SURGERY SERVICE,** Department of Surgery, University of Texas Medical Branch, Galveston, Texas. Nominations and applications are invited for this position. Applicants should possess nationally recognized capability in clinical cardio-thoracic surgery, teaching, and investigation. Letters of application and curriculum vitae should be sent to **James C. Thompson, M.D., Chairman, Department of Surgery, University of Texas Medical Branch, Galveston, Texas 77550.** *We are an Equal Opportunity (M/F)/Affirmative Action Employer.*

### DIRECTOR OF COMPUTING

The University of California at Irvine is seeking a director of computing who will report to the Vice Chancellor for Academic Affairs. The director will be responsible for planning and management of computing on campus including a computer facility that has a staff of 14 and a budget of \$1 million. The campus is heavily committed to instructional computing and the facility operates largely in an interactive mode. The annual salary is \$22,300 to \$31,500. Candidates should have demonstrated outstanding management ability and technical competence in computing. A background in academic computing preferred.

Applications must be received by 16 July 1976. Please send résumé, salary history, and the names of three references to **Professor Stephen H. White, Chairman of the Director of Computing Search Committee, c/o Personnel Office, 152 Administration Building, University of California, Irvine, California 92717.**

## POSITIONS OPEN

### UNIVERSITY OF ILLINOIS SCHOOL OF BASIC MEDICAL SCIENCES AT URBANA-CHAMPAIGN

**CURRICULUM EVALUATOR:** Functional position in the Office of Curriculum and Evaluation to support the evaluation of ongoing and developing allied health and nursing programs in east central Illinois; will be member of the School of Associated Medical Sciences faculty; will provide formative and summative evaluation support to allied health and nursing faculty who have program development and instructional responsibilities; will also participate in developing an interregional system of educational process support for health professions programs.

**SALARY:** \$14,000 to \$16,000; M.A. plus required; Ph.D. preferred; expertise in the fields of statistics, measurement, program evaluation.

**APPOINTMENT EFFECTIVE:** 21 August 1976. Closing date for receiving candidate applications is 26 July 1976.

Address correspondence to William E. Sorlie, Assistant Dean, Office of Curriculum and Evaluation, University of Illinois School of Basic Medical Sciences at Urbana-Champaign, 190 Medical Sciences Building, Urbana, Illinois 61801.

*The University of Illinois is an Affirmative Action/Equal Opportunity Employer and encourages applications from members of minority groups and women.*

### DIRECTOR MARINE SCIENCE CENTER

Oregon State University invites applications from qualified individuals for the position of director of the Marine Science Center in Newport, Oregon. Candidates should possess a doctoral degree and should have significant experience in marine science. The successful applicant should have administrative experience and scholarly achievements in teaching and research. He/she should possess an aptitude for developing educational and basic/applied research programs, as well as the ability to work with a variety of scientists and administrators from a broad range of disciplines. Director will have faculty rank in an appropriate academic department. Applications including a curriculum vitae will be accepted until 15 August.

Send to:

John V. Byrne, Chairman  
Marine Science Center Search Committee  
c/o School of Oceanography  
Oregon State University  
Corvallis, Oregon 97331

*Oregon State University is an Equal Opportunity/Affirmative Action Employer*

### DIRECTOR OCEANOGRAPHIC RESEARCH

Mid-Atlantic university consortium has an immediate opening for a director who will be responsible for negotiating, planning, and supervising research programs, including relations with sponsoring state and federal agencies. At least 2 years of experience in academic or applied research and supervision of research programs required. Doctorate in oceanography preferred; however, similar background in another environmental science or engineering will be fully considered. Excellent benefits. Send complete work experience including salary history to **Box 310, SCIENCE**, by 1 August.

*Equal Opportunity Employer. M/F*

### ENDOCRINOLOGIST

The Department of Physiology, Medical College of Virginia, is seeking an endocrinologist with teaching experience and evidence of research accomplishment to join the department during the academic year 1976-1977. The Department of Physiology currently has 24 faculty and 16 graduate students. Applicants should submit a résumé indicating educational background, professional experience, research productivity, and the names of three references to: **Norman Briggs, Chairman, Department of Physiology, Medical College of Virginia, Richmond, Va. 23298.**

*An Equal Opportunity/Affirmative Action Employer*

## POSITIONS OPEN

### THE PUBLIC HEALTH RESEARCH INSTITUTE OF THE CITY OF NEW YORK, INC.

The Chairman and Board of Directors invite nominations and applications for the position of **DIRECTOR** of the Public Health Research Institute.

The Institute is a center for research in those disciplines and areas concerned with the public health defined in the broadest terms. The Institute is supported by the city of New York as well as by federal and private funds.

The director is responsible for the administration of the Institute and the implementation and coordination of the policies of the Board.

We are looking for a director who will be responsible not only for the continuance of programs already in operation but for the initiation of new programs concerned with urban public health problems. Sufficient space, resources, and facilities are available for the development of these additional research programs.

Nominations and applications will be accepted until 15 August 1976. All communications should be sent to:

Dr. Barbara W. Low  
Chairman, Search Committee  
c/o Miss Florence M. Zulberti  
455 First Avenue  
New York, New York 10016

*An Equal Opportunity/Affirmative Action Employer*

## A PRESIDENT The University of Hartford



The President, chief executive officer of the University, plans to retire at the end of the 1976-77 academic year. The University of Hartford, a medium-sized private institution, offers degree and non-degree programs at the graduate and undergraduate levels in its eight colleges. It also plays a major role in the educational and cultural life of central Connecticut. The new president will be chosen from among those whose qualifications demonstrate the ability to lead a strong, growing University in this critical time for American education. Nominations and applications should be addressed to the Regents' Screening Committee, North House, University of Hartford, 200 Bloomfield Avenue, West Hartford, Conn. 06117.

*An equal opportunity employer*

## ADVICE AND DISSENT

Scientists in the Political Arena

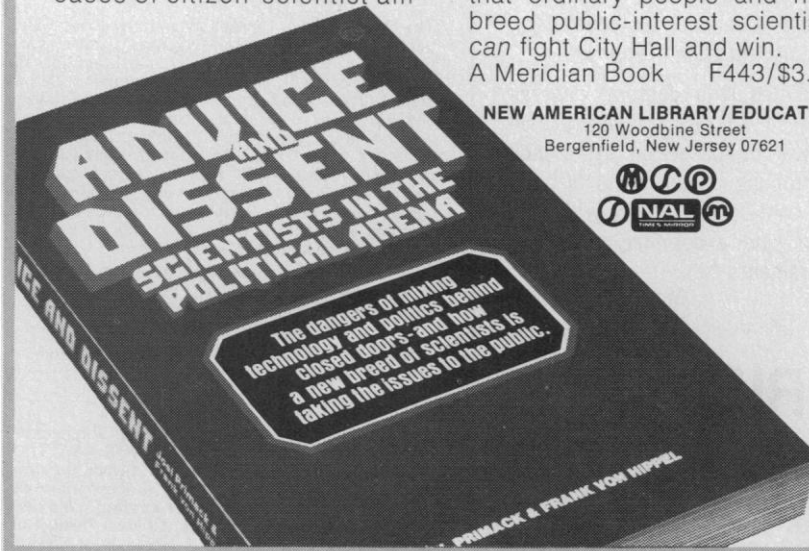
Joel Primack and Frank von Hippel

How the Federal government scandalously misrepresents, buries, and "reinterprets" technical information on vital issues affecting us. By citing actual cases of citizen-scientist alli-

ances that challenged the Federal government on issues like uncontrolled use of pesticides, and the addition of cyclamates to our food, the authors prove that ordinary people and new breed public-interest scientists can fight City Hall and win.

A Meridian Book F443/\$3.95

NEW AMERICAN LIBRARY/EDUCATION  
120 Woodbine Street  
Bergenfield, New Jersey 07621



## POSITIONS OPEN

**EXPERIMENTAL NEUROPATHOLOGY.** Two positions exist at postdoctoral or junior faculty levels at a medical school in New York City active in the neurosciences. The positions will involve full-time research in neuropathologic problems associated with aging, viral diseases, immunopathologic and myelin disorders of the nervous system. Experience in morphologic (ultrastructural) and experimental techniques desirable. **Box 311, SCIENCE.**

*Equal Opportunity Employer*

**FACULTY POSITION OPPORTUNITY—Ph.D., GENETICS.** A faculty position is available for a Ph.D. in genetics in an established clinical and research program concerned with genetic counseling and antenatal diagnosis. Experience in human cytogenetics is desirable. Salary negotiable. Respond with curriculum vitae to: **Allan B. Weingold, M.D., Department of Obstetrics and Gynecology, George Washington University Medical Center, 2150 Pennsylvania Avenue, NW, Washington, D.C. 20037.** Interview calls will be made on review of curriculum vitae. *Equal Opportunity Employer.*

## PHARMACOLOGISTS

### VETERINARY PATHOLOGIST

Midwest Research Institute, a not-for-profit organization, offers excellent career opportunities in the rapidly expanding fields of pharmacology and toxicology.

### DRUG METABOLISM

Experience in drug disposition, metabolism and pharmacokinetics; knowledge in analytical techniques essential.

### BIOCHEMICAL PHARMACOLOGY

Experience in nucleic acid and protein biochemistry; knowledge of RNA/DNA hybridization and polyacrylamide gel electrophoresis technique desirable.

### VETERINARY PATHOLOGY

DVM with strong background and interest in animal histopathology; board certification preferred.

Candidates with doctoral degrees preferred. Salaries are competitive and will be based on experience and training. Please send in complete confidence, resume with education, work experience and salary requirements to:

Martin N. Schuler  
Manager, Staff Development



**MIDWEST RESEARCH INSTITUTE**  
425 Volker Boulevard  
Kansas City, Missouri 64110

*An Equal Opportunity Employer M/F*

## POSITIONS OPEN

### DIRECTOR, INDUSTRIAL AND EXTRACTIVE PROCESSES DIVISION

The Environmental Protection Agency (EPA) is seeking a director, Industrial and Extractive Processes Division within the Office of Research and Development. The mission of the Division is to provide staff support in the planning, coordination, and review of a research program to develop and demonstrate cost-effective technology to prevent, control, and abate adverse impacts from industrial and extractive processes; assess the overall environmental and socioeconomic impact of such processes; and identify and/or develop alternative systems and conservation measures including those necessary for unplanned releases (spills) to the environment. Candidates must have a bachelor's or higher degree in physical science, engineering, or mathematics that included 24 semester hours in physical science such as mechanics, dynamics, properties of materials; or equivalent combination of 4 years of experience and education that included 24 semester hours of physical science and/or closely related engineering science. In addition, at least three or more years of professional experience, including managing a scientific or technical group, are required. One year of the required experience must have been at a level of difficulty comparable to the next lower level in the federal service.

Location: Washington, D.C.

Salary range: \$31,309 to \$37,800 plus Civil Service benefits.

Contact: Please send a detailed résumé or a completed Standard Form 171 (Personal Qualifications Statement), which can be obtained from any federal government personnel office, to reach EPA no later than 6 August 1976, to: **Brenda Cunningham (PM-212), Personnel Management Division, Environmental Protection Agency, 401 M Street, SW, Washington, D.C. 20460.**

*An Equal Opportunity Employer*

### DIRECTOR OF RESEARCH ADMINISTRATION University of Pennsylvania

Responsible for the administration of administrative direction and negotiation of University contracts and grants currently at \$70 million per year. Detailed job description on request. Qualifications include ten or more years of experience in administration of sponsored research, academic/industrial/government. Experience in federal relations and in the performance of research desirable. Salary negotiable. Reply to: **Jacqui Pollard, 737 Franklin Building, 3451 Walnut Street, Philadelphia, Pa. 19174.** *An Equal Opportunity Employer.*

### FACULTY POSITIONS PHYSIOLOGY AND BIOPHYSICS

The Department of Physiology and Biophysics, University of Iowa College of Medicine, invites applications from well-qualified individuals, holding the M.D. and/or Ph.D. degree, for openings at various faculty levels. Candidates should be in a position to develop strong research programs and to participate in the medical and graduate teaching and doctoral training activities of the Department. Rank and salary commensurate with experience and qualifications. Please send curriculum vitae, including bibliography and a brief description of research interests, teaching experience, and career objectives, with names of at least three references to:

**Dr. Robert E. Fellows**  
Department of Physiology and Biophysics  
University of Iowa College of Medicine  
Iowa City, Iowa 52242

*The University of Iowa is an Equal Opportunity Employer*

Newly approved Mineral Processing Engineering Programs needs **SENIOR AND JUNIOR FACULTY** before August 1976. This is a tenure track opportunity. Background desired includes appropriate degrees and experience in coal preparation, coal conversion, or process metallurgy. Contact **Dean, College of Mineral and Energy Resources, West Virginia University, Morgantown, W. Va. 26506.**

## POSITIONS OPEN

### FACULTY POSITIONS AT YARMOUK UNIVERSITY, JORDAN

The newly established modern university in Jordan invites candidates, with minimum of Ph.D., for faculty positions in mathematics, physics, chemistry, biology, English literature, and linguistics, with attractive salaries and fringe benefits.

Send applications, résumés, transcripts, and three letters of recommendation to:

**Dr. Adnan M. Badran, President**  
Yarmouk University  
P.O. Box 20184  
Amman, Jordan

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### UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

Applications are solicited for faculty positions in the following areas:

**Assistant professor of pharmacology.** Participate in teaching programs and develop an independent research program, preferably in cardiovascular pharmacology, toxicology, or drug metabolism.

**Three assistant professors of anatomical sciences.** Teach students in colleges of medicine, dentistry, allied health, and graduate studies. Ph.D. or M.D. with training in anatomy is required. Research interests in ultrastructure, cellular biology, or comparative gross anatomy is desired.

Applicants should send curriculum vitae to:

**Dr. Thomas N. Lynn**  
Dean, College of Medicine  
The University of Oklahoma Health Sciences Center  
P.O. Box 26901  
Oklahoma City, Oklahoma 73190

### FACULTY POSITION

Florida Institute of Technology is seeking a terrestrial ecologist to assume the position of acting head of our Environmental Technology Program. Candidates must have outstanding teaching ability and completed all requirements for their Ph.D. Applicants should forward transcripts, two letters of recommendation, and a listing of all areas of teaching competence. Please include minimum 9-month salary requirement. Closing date: 15 July 1976.

**Dr. William R. Gehring**  
Chairman, Search Committee  
Florida Institute of Technology  
720 South Indian River Drive  
Jensen Beach, Florida 33457

### FACULTY RESEARCH POSITION IN PHYSIOLOGY

The University of California, Los Angeles, Department of Physiology invites applications for the position of **adjunct assistant professor.** Primary interest must be in the cardiovascular area with particular attention to myocardial function. Expertise in isolated muscle perfusion, isotopic techniques, and muscle biochemistry is desirable. Position requires direct supervision of laboratory technical personnel with major proportion of time devoted to research.

If you are interested in this position, please send your letter of application and résumé to:

**Dr. Glenn A. Langer**  
University of California, Los Angeles  
Department of Physiology  
A3-375 Center for the Health Sciences  
Los Angeles, Calif. 90024

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

### LECTURER IN VERTEBRATE STRUCTURE AND FUNCTION

Applications are invited for a 2-year position to develop and teach a laboratory course integrating anatomy and physiology at the introductory level. First year will be devoted to developing a series of laboratories; the second year to teaching these laboratories.

Salary: \$12,700 for initial 10 months.

Position to begin between September to December 1976.

Send curriculum vitae and names of references to:

**Chairman, Search Committee**  
Harvard University  
Department of Biology  
16 Divinity Avenue  
Cambridge, Mass. 02138



## POSITIONS OPEN

**FACULTY RESEARCH POSITION:** Salary and rank commensurate with qualifications and experience. Duties: assist in expanding research and graduate training program in department, continue or initiate research program in morphology with emphasis toward supporting clinical medicine; minimal teaching in professional curriculum. Qualifications: D.V.M., Ph.D.; preference will be given to individuals with 5 to 10 years of experience in research and graduate training demonstrated by publications in nationally recognized journals and direction of Ph.D. dissertations. Applicants must have taught graduate courses and be able to communicate well with both students and co-workers. Starting date: on or after 1 September 1976. Contact **Dr. R. E. Lewis, Department of Anatomy and Radiology, College of Veterinary Medicine, University of Georgia, Athens, Georgia 30602.**

### FOREST ENTOMOLOGIST

Applications are invited for full-time faculty position in applied research for forest protection and pest management. Ph.D. and 3 years of experience in forest entomology required. Write to **Dr. Ralph D. Nyland, Chairman, Search Committee, Applied Forestry Research Institute, State University of New York College of Environmental Science and Forestry, Syracuse, N.Y. 13210.**

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### MARINE BIOLOGISTS

Positions available for graduate-level and experienced marine biologists: to assist in establishing a marine fisheries research program in the Dominican Republic and to do research on culture of shellfish, combined with teaching, at a technical university in southern Chile. Two-year assignments as Peace Corps Volunteers. Write to **Smithsonian-Peace Corps Environmental Program, Department S-3, Smithsonian Institution, Washington, D.C. 20560.**

### WOODS HOLE OCEANOGRAPHIC INSTITUTION

Applications are invited from scientists (Ph.D.) interested in pursuing original research in **marine chemistry or geochemistry.** Applicants with a background in low temperature inorganic chemistry, marine radiochemistry, or marine organic chemistry are particularly invited to apply. However, the main criterion for acceptance will be recognized potential to do outstanding research in any area of marine chemistry. The successful candidate will be appointed to a staff position as a Doherty Scientist for 1 year; reappointment will be considered after that term. Address all inquiries to **Chairman, Chemistry Department, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543.**

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### MICROBIOLOGY

Applications are invited for a faculty position in microbiology (rank open) in the Basic Sciences Division, Faculty of Medicine, Memorial University of Newfoundland, starting 1 January 1977. The new Health Sciences Centre, consisting of modern research, teaching, and hospital facilities, will serve as the base for those individuals with a Ph.D. or M.D., postdoctoral experience and research interests in the areas of microbial physiology, biochemistry, or molecular biology. Responsibilities will include the development of an active research program, participation in the teaching of undergraduate medical students, and supervision of graduate students. Applications accepted until 1 September 1976 should include a curriculum vitae, list of publications, and the names of three references and be sent to: **Dr. R. B. Middleton, Chairman, Microbiology Search Committee, Faculty of Medicine, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1C 5S7.**

Radiation Chemistry Data Center, jointly sponsored by ERDA and the NBS Office of Standard Reference Data, requires a Ph.D. **PHYSICAL CHEMIST** with background in kinetics and/or spectroscopy for data compilation and information storage and retrieval activities. The position provides an opportunity to develop a career in computerized information and data handling. Appointment will be made to the Special Professional Faculty of the University of Notre Dame. Send résumé to: **Dr. Alberta B. Ross, Supervisor, Radiation Chemistry Data Center, Radiation Laboratory, University of Notre Dame, Notre Dame, Indiana 46556.**

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## POSITIONS OPEN

### NEUROANATOMIST/NEUROENDOCRINOLOGIST, NEUROCHEMIST

Wisconsin Regional Primate Research Center has two openings for full-time researchers at the level of assistant or associate scientist beginning as soon as possible.

**Neuroanatomist/Neuroendocrinologist**—expertise in neural ultrastructure and an interest in neuroendocrine phenomena.

**Neurochemist**—expertise and current research interests in the chemistry of neurotransmitters and in immunochemistry.

The overall mission of the Center is to conduct basic research in the areas of neural systems, endocrine physiology, and behavior. Applicants interested in brain-endocrine interactions are preferred to take advantage of opportunities for collaboration with other Center scientists. The Ph.D. is required. Interested and qualified candidates should send their curriculum vitae and names of three references by 1 September 1976 to:

**Search Committee  
Wisconsin Regional Primate Research Center  
1223 Capitol Court  
Madison, Wisconsin 53706**

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### PATHOLOGY

The Pathology Department, Yerkes Primate Center, Emory University, has an opening for a **veterinary pathologist.** Primary duty is service pathology, with time available for research. Disciplines in Department include EM, cytogenetics, clinical pathology, histopathology, and gross pathology. Salary based on qualifications and experience. Interested persons send curriculum vitae to **Dr. H. M. McClure, Yerkes Primate Center, Emory University, Atlanta, Georgia 30322.**

Scripps Institution of Oceanography is looking for a **Ph.D. in PHYSICAL OCEANOGRAPHY** with recent experience in making measurements of physical parameters in an inclusive study of the oceanography of coastal waters. Experience in the general methods of oceanography in shallow waters, as well as in scuba diving, is considered to be an important asset. Send inquiries to: **Ocean Research Division, A-020, Scripps Institution of Oceanography, La Jolla, California 92093. The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

**PHYSICAL ANTHROPOLOGISTS** sought by the University of Minnesota for one academic quarter, 1976-77, preferably for the fall quarter, to teach two undergraduate courses: human biology and methods in human biology. Candidates with advanced graduate status (all but dissertation) are encouraged to apply. *The University of Minnesota is an Equal Opportunity/Affirmative Action Employer.* Salary competitive at the assistant professor level. Send curriculum vitae to: **Professor W. Rowe, Department of Anthropology, 215 Ford Hall, University of Minnesota, Minneapolis, Minnesota 55455.**

### PHYSIOLOGIST

Position available in the Department of Basic Sciences, Peoria School of Medicine, one of the three clinical schools within the University of Illinois College of Medicine. Applicants must have a Ph.D. in physiology or an M.D. and at least 2 years of experience beyond the doctor's degree, preferably with subspecialty in the field of pulmonary or cardiovascular physiology. Duties will include teaching medical students, assisting in coordination of teaching programs, and conducting an independent research program in his/her field of expertise. Salary to be commensurate with experience and qualifications with academic rank of assistant or associate professor. Starting date as soon as possible. Interested persons should send their application to **Dr. F. J. Grundbacher, Acting Chairman, Department of Basic Sciences, Peoria School of Medicine, 1400 West Main Street, Peoria, Illinois 61606. The University of Illinois is an Affirmative Action/Equal Opportunity Employer and encourages applications from members of minority groups and women.**

**PHYSIOLOGY RESEARCH ASSOCIATE:** To assist in supervision of cerebral microcirculation laboratory mainly utilizing oxygen microelectrodes. Ph.D. and technical competence in circulation and electrophysiology required. Postdoctoral experience not necessary. Submit curriculum vitae to **Dr. James Halsey, Department of Neurology, University of Alabama Medical Center, Birmingham, Alabama 35294.**

## TECHNICAL EDITOR

### Multidisciplinary Natural Resources Fields

TVA needs editor for scientific papers and publications in its Division of Forestry, Fisheries, and Wildlife Development. Should have strong scientific background — Ph.D. in natural resource field preferred — with experience in editing. Salary \$16,500 to \$22,500, depending upon qualifications.

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## UNIVERSITY OF HONG KONG LECTURESHIP IN PSYCHOLOGY

Applications are invited for a Lectureship in the Department of Psychology. Applicants should be capable of contributing to teaching in a range of undergraduate courses, including learning and experimental design, but those also having expertise in physiological psychology and animal behaviour would have an advantage.

Annual salaries (superannuable) are: HK\$48,960 × 3,300—55,560 BAR 58,860 × 3,300—75,360 × 3,360—82,080. (£1 = HK\$9.00 approx.). Starting salary will depend on qualifications and experience.

Further particulars and application forms may be obtained from the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF, or the Assistant Secretary (Recruitment), University of Hong Kong, Hong Kong.

Closing date for applications is **31 July 1976.**

## POSITIONS OPEN

**POSTDOCTORAL FELLOW OR RESEARCH ASSOCIATE** to carry out investigations into the binding, metabolism, and excretion of chemical carcinogens in the pancreas. Individual must be able to function independently and to work with whole animals as well as on the molecular level. Term: 1 to 3 years. Salary: \$12,000 to \$14,000 depending on experience. Send inquiries to:

**Dr. Walter G. Levine**  
Department of Pharmacology  
Albert Einstein College of Medicine  
1300 Morris Park Avenue  
Bronx, New York 10461  
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The Norman Paterson School of International Affairs, Carleton University, intends to appoint one **POSTDOCTORAL FELLOW** for the academic year 1976-77.

Qualifications: Ph.D. recently completed or in process of completing dissertation.

Duties: To assist in the teaching and research activities of the School in the following specific fields: science, technology, and international affairs; international science and technology agreements, with particular reference to Canada.

Salary: \$10,000. Travel expenses. Apply to:

**The Director**  
The Norman Paterson School of International Affairs  
Carleton University  
Colonel By Drive  
Ottawa, Ontario  
Canada K1S 5B6

Date of appointment: no later than 1 October 1976.

Closing date for receipt of applications: 1 August 1976.

**POSTDOCTORAL POSITION—PLANT BIOCHEMISTRY.** To work on biochemical responses of plants to water stress, especially tracer studies of proline metabolism in cereal leaves. Start 1 October 1976. One-year appointment, salary \$10,200 per year or according to experience. Send applications to **Dr. Anton Lang, Director, MSU/ERDA Plant Research Laboratory, Michigan State University, East Lansing, Michigan 48824.** *Michigan State University is an Equal Opportunity Employer.*

### POSTDOCTORAL POSITION ELECTRON MICROSCOPIST

Recent Ph.D. to join developmental neurobiology laboratory studying structure and function of synapses. Previous experience in EM necessary. In addition, light microscopy and/or electrophysiology training desirable. Salary \$12,000 to \$13,000. Send curriculum vitae and names of three references to: **Dr. S. Roper, Department of Anatomy, University of Colorado Medical Center, 4200 East Ninth Avenue, Denver, Colorado 80220.**

**POSTDOCTORAL POSITION** for cell physiologist. Study of the state of water by physical methods, including NMR and thermodynamical measurements. Background in cell biology required. Experience in NMR not essential. Send résumé and two letters of recommendation to **Dr. B. M. Fung, Department of Chemistry, University of Oklahoma, Norman, Oklahoma 73019.** *The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available immediately for Ph.D. with strong background in biochemistry and molecular biology to investigate the mechanism of RNA tumor virus reverse transcription including purification and characterization of cellular factors. Send résumé and three letters of reference by 10 July 1976 to: **Dr. Kenneth F. Watson, Department of Chemistry, University of Montana, Missoula, Montana 59801.** *The University of Montana is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

### THE UNIVERSITY OF MICHIGAN SURGEON

Surgeon, Board-qualified, for full-time position in Section of General Surgery. Should be interested in academic surgery, with special training or expertise in specific clinical or investigative area in general surgery. Rank and salary commensurate with qualifications. Code #100BJ. Send résumé to **Box 312, SCIENCE.** *A Nondiscriminatory, Affirmative Action Employer.*

## POSITIONS OPEN

### POSTDOCTORAL POSITION

Postdoctoral position to participate in research on the role of cyclic nucleotides in the control of oncornavirus gene expression. Experience in biochemistry and/or molecular biology desired. Available immediately; salary \$10,000. Send curriculum vitae and names of three references to **Dr. Kenneth D. Somers, Department of Microbiology, Eastern Virginia Medical School, P.O. Box 980, Norfolk, Va. 23501.** *An Equal Opportunity/Affirmative Action Employer.*

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.**

### POSTDOCTORAL—TUMOR IMMUNOLOGY

Postdoctoral position available immediately for a period of 1 to 2 years for a Ph.D. or M.D. to assist in applied and original research leading to identification and purification of human tumor-associated antigens. Experience in cell culture, cell separation, and cell-mediated immune assays preferred. Familiarity with tumor antigen isolation and characterization desirable. Salary is \$12,000 per year. Submit curriculum vitae and three letters of recommendation to: **Dr. George L. Wright, Jr., Department of Microbiology and Immunology, Eastern Virginia Medical School, P.O. Box 980, Norfolk, Va. 23501.** *An Equal Opportunity/Affirmative Action Employer.*

### RESEARCH ASSOCIATE (MEDICINE)

Immediate opening for a person with strong background in epidemiology and biostatistics to assist in the evaluation of hospital medical care. One-year position. Responsibilities involve creation of research protocols, supervision of audit of medical records, analysis of data (using SPSS), and preparation of research reports. Send résumé to **Box 24Z, Waterman Building, University of Vermont, Burlington, Vermont 05401.**

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### RESEARCH ASSOCIATE OR POSTDOCTORAL FELLOW

Experience in membrane physiology, biophysics, or electrophysiology (including some knowledge of electronics and computers) preferred but not required. Choice of projects in epithelial transport ranging from fluctuation analysis, intercellular coupling, intracellular potential measurements to tracer fluxes. Send two copies of curriculum vitae and letter of application to **Professor Thomas U. L. Biber, Department of Physiology, Medical College of Virginia, Virginia Commonwealth University, MCV Station Box 608, Richmond, Va. 23298.** *An Equal Opportunity Employer.*

**RESEARCH INSTRUCTORSHIP IN BIOCHEMISTRY.** Temporary faculty position to be filled for the 1976-77 academic year. Duties include teaching and research on lipid antioxidants from neoplastic cells. Second year of full-time research is negotiable. Send résumé and references emphasizing teaching experience to **Dr. Richard M. Arneson, Department of Biochemistry, University of Tennessee Center for the Health Sciences, 800 Madison, Memphis, Tenn. 38163.**

### THE UNIVERSITY OF MICHIGAN STAFF PSYCHIATRIST

Child psychiatrist to participate half time on interdisciplinary project in child advocacy for abuse, neglect, and so forth. Involves law, pediatrics, psychiatry, and social work students. Purpose is to develop teaching materials and methods in this field. Appointment in Department of Psychiatry. Salary to match experience. Send résumé to **Box 309, SCIENCE.** *A Nondiscriminatory, Affirmative Action Employer.*

## POSITIONS OPEN

### POSTDOCTORAL RESEARCH ASSOCIATE

To participate in research on neural control of behavioral circadian rhythms. Familiarity with staining and recording from molluscan neurons, and some EM experience, desired. Available 1 July 1976. Salary range: \$11,000 to \$12,000 per year. Send curriculum vitae, summary of current research, and names of two references to **Dr. P. G. Sokolove, Department of Biological Sciences, University of Maryland Baltimore County, 5401 Wilkens Avenue, Catonsville, Maryland 21228.**

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### SCIENTIST

Recent Ph.D. with several years of experience. Will participate in an ongoing coordinated program in the molecular biology and biochemistry of tumor viruses and should be acquainted with laboratory techniques applicable to such research.

Qualified candidates should send résumés with references to:

**M. L. Knill—Recruitment—Department H-350  
FREDERICK CANCER RESEARCH CENTER  
Litton Bionetics, Inc.  
P.O. Box B  
Frederick, Md. 21701**

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Amersham/Searle, a leader in radiopharmaceuticals and radiochemicals, is seeking a chemist with communications and problem-solving skills to answer technical inquiries from customers. Primary responsibility: inquiries on custom labeling of compounds with carbon-14 and tritium. Also, on LSC cocktails, solubilizers, and as backup on radiochemicals. Salary to upper teens; excellent work environment; good benefits. Requirements: B.S. (prefer M.S.) in chemistry, biochemistry, or related fields, with good knowledge of organic chemistry, practical experience with radiochemicals, including LSC and in customer service, desired. Send résumé, including salary history, to: **Amersham/Searle Corporation, 2636 South Clearbrook Drive, Arlington Heights, Illinois 60005.**

## FELLOWSHIPS

### POSTDOCTORAL FELLOWSHIP

Psychophysics and physiological optics. Two-year fellowship beginning fall 1976. Postdoctoral training in color vision and assessment of vision in clinical population. Stipend: \$10,000 first year. Send curriculum vitae and supporting material to:

**Joel Pokorny, Ph.D.  
University of Chicago  
Department of Ophthalmology  
950 East 59 Street  
Chicago, Illinois 60637**

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**GRADUATE FELLOWSHIPS** are available immediately and in September 1976 for study in physical and analytical chemistry of acid-base reactions; chemical studies on primitive motile and sensory systems; molecular adaptations to extreme environments by living systems; molecular mechanisms of enzyme action. Stipend \$3000 per year. Write **Program in Physical and Organic Chemistry, School of Graduate Studies, State University of New York Downstate Medical Center, 450 Clarkson Avenue, Brooklyn, New York 11203.**

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## About breast cancer and x-rays

### A hopeful message from industry on a sober topic

One of every fifteen girls born will develop breast cancer, according to statistics. There is little evidence of change in this over the years.

In the sixties, x-ray mammography was introduced. Previously 90% of breast cancers were found by the patient herself noting a lump. By the time a lump is noticeable, in 50 to 60% of cases, the cancer has spread to the lymph glands of the armpit. With spread to these glands, 36% of the women live another 10 years, as compared with 76% if medical intervention occurs when the cancer is still localized in the breast. (Obviously, self-examination is far better than no examination at all.)

On November 6, 1975 in New York the American College of Radiology and other interested groups briefed the press. The failure rate in mammography for women under 50 was reported to be about 10%; for women over 50, about 17%. One participant expressed the personal opinion that mammography can itself induce breast cancer, and

stated the risk is small but not zero. On the basis of a mass screening program now in progress, he estimated that out of one million mammographic examinations, 20 cancers will be induced and 2500 existing cancers will be discovered at a stage where, with treatment, more than 85% of the women can expect to be alive five years later. This might be considered a benefit-to-risk ratio of 125:1.



The day after the press conference, at a medical symposium on breast cancer in Madison, Wisconsin, we announced a new film for mammography and a fluorescent screen with emission matched to the film sensitivity. The new film requires one-ninth the exposure of our previous mammography film. The film bears emulsion on only one side. The emulsion yields high contrast at low density. Only one screen is used, not a pair. Those improvements enhance the ability of film to show early calcifications and fibrous structures.

We mortals in industry would like to think we can help build that 125:1 ratio even higher.

### For some subjects, one simply pours on the roentgens

For the national birthday party, we and another firm offered to radiograph the Liberty Bell before it was moved for better display. The offer was accepted. We used a 670-curie cobalt-60 source and exposed the entire Bell and yoke for 7½ hours one night. This necessitated flashing lights around Independence Hall and reinforced patrols by the Forest Service to keep nocturnal passers-by at a proper distance.

