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## FERRITIN

PACKAGING AND PRICE:			
Description	Code No.	Pkg Size	Price
Ferritin, 2 X Crystallized (60-80 mg/ml) ( $<500$ mg Cadmium/ml)	96-026-1	1 g	\$39.00
Ferritin, 6X Crystallized (60-80 mg/ml) ( $<300$ mg Cadmium/ml)	96-027-1	1 g	\$70.00
Ferritin, 2 X Crystallized (60-80 mg/ml) ( $<25$ mg Cadmium/ml)	96-028-1	1 g	\$50.00
Apo ferritin, 2 X Crystallized, Horse Spleen	96-029-1	500 mg	\$49.00
Anti-Horse Ferritin Serum, Rabbit	64-122-1 64-122-2	2 ml 5 ml	\$10.00 \$20.00

## CATIONIZED FERRITIN

Cationized Ferritin is a polycationic derivative of ferritin useful for labeling of negative charges on cell surfaces. Cationized ferritin does not have the inherent disadvantages of other cationic dyes, such as Ruthenium red, Alcian blue, thorium hydroxide and colloidal iron. The labeling is carried out at physiological pH. The particles are uniform in size and shape and are easily identified due to their electron-dense iron core. The ferritin molecule has a diameter of 100 Å whereas all other cationic dyes described are larger (about 300 Å or more) thus having the obvious advantage of quantitating the surface charges with greater precision.

Description	Code No.	Pkg. Size	Price
Cationized Ferritin	91-114-1	2 ml	\$11.00
	91-114-2	5x2 ml	\$50.00
	91-114-3	10x2 ml	\$90.00



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Miles Laboratories, Inc.  
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## Journal of Solid-Phase Biochemistry

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P.O. Box 740  
S-220 07 Lund 7  
Sweden

**Pedro Cuatrecasas**

The Johns Hopkins University  
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725 North Wolfe Street  
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In the last decade, solid-phase biochemical techniques have become essential for solving problems effectively and economically in fields ranging from biophysics and biochemical engineering to immunology and pharmacology. Now for the first time, the *Journal of Solid-Phase Biochemistry* provides a cross-disciplinary forum for original research on the preservation and use of a variety of immobilized species. The journal will feature reports from the following areas:

- immobilized enzyme chemistry and technology
- immobilized whole cells and cell fragment studies
- affinity chromatography
- solid-phase synthesis and degradation of macromolecules
- solid-phase receptor and immunoassays
- solid-phase immunoabsorbents

### Call for papers

Prospective contributors are invited to submit their manuscripts, in triplicate, to the Editor in their region, or in their discipline.

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## PROJECT LEADER ORAL HEALTH

We are the R&D center of a major international consumer products corporation. We seek an accomplished professional to conduct exploratory research in our oral health program, particularly periodontal. Candidate should have approximately 5 years' experience in dental research, especially oral diseases, and a relevant PhD in the Life or Medical Sciences.

Located in Central New Jersey we offer an attractive compensation and benefits program. Send resumes including salary requirements in confidence to:

**Box 362;  
810 7th Ave., NYC 10019**

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## Personnel Placement

Only those employers who will 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 and companies take display rate for all advertising.

**DISPLAY (POSITIONS OPEN, MARKET PLACE, AND SO FORTH):** \$110 per inch, minimum (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

**Ph.D. Anatomist (teratologist).** Three years of teaching in medical schools. Desires teaching and administering, developmental biology or anatomy, in science faculty. Box 363, SCIENCE. X

**Biochemist, M.S.,** neurobiology minor, 6 years of experience in pharmaceutical research including bioavailability and analytical. Seeks research position. Box 364, SCIENCE. X

**Biologist, Ph.D.** botany/zoology. Publications. Experience in phytoplankton/zooplankton dynamics as indicators of water quality. Postdoctorate experience in algal systematics. Seeks position in related field, including research or teaching. Box 337, SCIENCE. X

**Clinical Pharmacist, Pharm.D.** (University of Michigan, 1967) with broad range of clinical and teaching experiences (including research and toxicology), seeks position with pharmaceutical company involving responsible work in drug product development. Extensive travel desirable. Box 365, SCIENCE. X

**Ph.D. E.E.** 30, optics, electromagnetics, acoustics; internationally recognized, academic and industrial experience; broad experimental and theoretical interests, will consider diversifying into related fields; seeks university/college faculty position. Box 366, SCIENCE. X

**Medical Writer/Editor.** Pharmacologist, Ph.D. Experienced in preparing clinically oriented review articles on drug therapy. Would prefer position with medical specialty society. Box 367, SCIENCE. X

**Microbiologist/Biochemist, Ph.D.** Physiology, metabolism. Experience in enzymology, microbial conversions, fermentations, radioactive syntheses. Five years of supervisory experience in production of biochemicals. Broad academic background. Very flexible and adaptable. Seeks growth position in R & D/technical administration/marketing. Box 368, SCIENCE. X

### POSITIONS WANTED

**Physiological Psychologist, Ph.D.,** 2 years of postdoctoral experience. Research interest in neural and hormonal mediation of reproductive behavior. Publications, teaching experience; desires academic position, no geographic preference, available immediately. Box 369, SCIENCE. X

**A Rare Bird: B.S., M.S.—chemistry, microbiology, biochemistry; experience—R & D biochemistry, mental retardation, clinical chemistry, analytical chemistry. Publications, creative, problem-solver. Seeks responsible, challenging position. Box 370, SCIENCE. X**

**Zoologist, Ph.D.** Desires teaching position. Interests include invertebrate zoology, limnology, aquatic microbiology, parasitology, embryology, comparative anatomy. Dr. Wilson, Rt. 2, Box 575, Russell Springs, Kentucky 42642. 8/22, 29; 9/5, 12, 19, 26

### POSITIONS OPEN

#### MARYLAND AQUATIC ECOLOGIST—ONE POSITION

The position involves full-time research with the Chesapeake Bay Institute of The Johns Hopkins University. Specific duties will initially include design and administration of aquatic programs related to the Power Plant Siting Program on the upper Chesapeake Bay. Requires Ph.D. degree plus 3 to 5 years of experience in government, industry, or academic research. A broadly based background in ecology, diversified job history, and a specific research interest in the lower trophic levels are preferred. Salary commensurate with experience. Apply by submitting a detailed résumé including a list of publications to: **Director, Chesapeake Bay Institute, The Johns Hopkins University, 34th and Charles Sts., Baltimore, Maryland 21218.**

**ASSISTANT PROFESSOR OF ANATOMY, UCLA,** to teach human gross anatomy and to develop independently an appropriate research program. We would like to fill the appointment before January, but will also consider individuals who will be ready a year from now. The level of appointment would be appropriate for someone with 1 to 2 years of postdoctoral investigation, or for an individual just completing Ph.D. work. Contact and send curriculum vitae to **Dr. Daniel C. Pease, Chairman, Department of Anatomy, University of California at Los Angeles, California 90024.** *An Equal Opportunity/Affirmative Action Employer*

#### ASSISTANT PROFESSOR OF SURGERY

Applications are being accepted for the position of Assistant Professor of Surgery in the Department of Surgery of the University of Southern California School of Medicine. Candidate must be certified by the American Board of Surgery or an active candidate for Board examination. Evidence of investigative laboratory experience is required, particularly in the field of immunology or organ transplantation. The applicant must possess a California license or be able to obtain licensure within 3 months of appointment. Please send inquiries and curriculum vitae to:

**Leonard Rosoff, M.D.  
Chairman, Department of Surgery  
University of Southern California  
School of Medicine  
1200 North State Street  
Los Angeles, California 90033**

*The University of Southern California is an Equal Opportunity and Affirmative Action Employer.*

#### BIOCHEMISTRY

Applications are invited for a full-time biochemistry faculty position at the level of associate or assistant professor. A doctorate degree and postdoctoral experience are necessary. Applicants must have strong interests in both teaching and research. Position available January 1976. Send curriculum vitae, research interests, and three letters of recommendation to **Dr. Joseph Cory, Chairman, Department of Biochemistry, University of South Florida College of Medicine, Tampa, Florida 33620.** Deadline for receipt of completed applications is 15 September 1975. *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

We are an Environmental Consulting firm seeking the following personnel:

**SENIOR BIOLOGIST**—Biological/field experience in aquatic environments to serve as consultant and supervise the quality control for analytical and biological programs. Ph.D. with experience or equivalent.

**AQUATIC BIOLOGISTS**—Two individuals with expertise in either plankton ecology or fisheries biology who have proven writing ability and a working knowledge of statistics. Prefer prior consulting experience at M.S. or Ph.D. level.

**PROJECT BIOLOGIST**—Ph.D. or M.S. with 3 to 5 years of experience in fisheries and other aquatic communities of fresh water in northern United States or Canada. Proven writing ability, field/lab experience, entrainment, population dynamics, and statistical analyses. Will have technical project management responsibilities with client and regulatory agency contact. Please send résumés to:

**LAWLER, MATUSKY & SKELLY ENGINEERS**  
Personnel Department  
415 Route 303  
Tappan, New York 10983

*We are an Equal Opportunity Employer*

## CANCER CENTER OF HAWAII BASIC SCIENCE PROGRAM

Applications are invited for a **RESEARCH ASSOCIATE** in the Cancer Center of Hawaii. Qualifications: Experience in cancer research and cellular immunology. Must have at least 5 years of laboratory experience including experimental work in immunology. Must be capable of independent work, proficient in handling small laboratory animals, preparation of cell suspension, and sterile tissue culture technique and have prior experience with qualitative and quantitative aspects of radioisotopes. Please mail résumés to **Dr. Eugene Lance, Ala Moana Building, 1441 Kapiolani Boulevard, Suite 403, Honolulu, Hawaii 96814.**

## CELLULAR IMMUNOLOGIST

Position open for M.D. or Ph.D. at the Assistant Professor level. Postdoctoral experience required. Position involves basic research and teaching medical and graduate students. Correspondence to:

**Dr. Morton M. Weber**  
Department of Microbiology  
St. Louis University School of Medicine  
1402 South Grand Blvd.  
St. Louis, Mo. 63104

*An Equal Opportunity/Affirmative Action Employer*

## CELLULAR IMMUNOLOGIST

Cellular immunologist in Marmoset Research Center of Medical and Health Sciences Division will coordinate and conduct studies in experimental immunology relating to ontogenetic development of tolerance and naturally occurring and induced autoimmune phenomena. Demonstrated technical and conceptual competence in cellular immunology is required. Postdoctoral experience in transplantation or tumor immunology is desirable. Apply to **Personnel Department, Oak Ridge Associated Universities, Box 117, Oak Ridge, Tennessee 37830. An Equal Opportunity Employer.**

## MICROBIOLOGY DEPARTMENT HEAD CHAIRPERSON

Administrative and leadership capabilities plus teaching/research background. Interested persons contact **Dr. J. L. Fryer, Department of Microbiology, Nash Hall, Oregon State University, Corvallis, Ore. 97331.** Closing date: 1 November 1975. *Oregon State University is an Affirmative Action Employer and encourages applications from qualified females and minorities.*

## UNIVERSITY OF PENNSYLVANIA SCHOOL OF DENTAL MEDICINE CHAIRPERSON—BIOCHEMISTRY

Applications are invited from senior biochemists with research and teaching interests relevant to dental medicine. Preference will be given to candidates whose research interests include the chemistry of connective tissue or mineralization. Send curriculum vitae and names of at least three references to: **Dr. Richard Orskand, Biochemistry Search Committee, University of Pennsylvania School of Dental Medicine, Philadelphia, Pa. 19174. An Equal Opportunity Employer.**

## POSITIONS OPEN

### CHAIRPERSON DEPARTMENT OF ANATOMY

Applications are invited for this position at the Chicago College of Osteopathic Medicine. Send curriculum vitae and a list of references to: **Dr. A. D. Alexander, Chairman, Anatomy Search Committee, Chicago College of Osteopathic Medicine, 1122 East 53 Street, Chicago, Illinois 60615.**

*An Equal Opportunity Employer*

### CHAIRMAN—BIOLOGY UNIVERSITY OF UTAH

The Department of Biology of the University of Utah is seeking outstanding applicants for the position of **Chairman**, the position to be filled preferably by 1 July 1976.

The Department has 38 full-time faculty members of varied interests. Applicants should possess a distinguished record in both research and teaching. Administrative experience in a major university is desirable. Duties include the recruitment of quality faculty, the periodic evaluation of existing faculty, annual budget negotiation, evaluation of curriculum, and leadership of a group of active and diverse researchers/teachers.

Send applications or nominations with curriculum vitae and list of references within 1 month of the date of publication of this notice to **Dr. David R. Wolstenholme, Department of Biology, University of Utah, Salt Lake City, Utah 84112.**

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

## CHIEF RADIATION PHYSICIST OPENING

Faculty position in radiation therapy department of large medical school in Midwest. New facilities and equipment. Clinical responsibilities and teaching at postgraduate level. Requires Ph.D. in radiation physics. Salary dependent upon qualifications and experience. Send résumé and references to: **Ned B. Hornback, M.D., Department of Radiation Therapy, Indiana University School of Medicine, 1100 West Michigan St., Indianapolis, Indiana 46202. An Equal Opportunity/Affirmative Action Employer.**

## CHIEF, RADIOLOGY SERVICE

**RADIOLOGIST—BOARD-CERTIFIED** for general medical, surgical, and psychiatric hospital affiliated with the University of Kansas Medical School. Contact **Chief of Staff, Veterans Administration Hospital, Kansas City, Missouri 64128. An Equal Opportunity Employer.**

## UNIVERSITY OF MASSACHUSETTS AMHERST DEAN AND DIRECTOR

Joint position of Dean, College of Food and Natural Resources; Director, Agricultural Experiment Station; and Director, Cooperative Extension Service. Academic, administrative, and fiscal responsibility. Demonstrated administrative ability; spokesman and advocate within and without the University; program development and implementation; effecting working relationships with faculty, staff, and students; Ph.D. degree; knowledge of the Land-Grant System; professional competence. Academic appointment in appropriate department. Tenure dependent upon qualifications. Nominations or applications with curriculum vitae and three references by 15 October to **J. H. Foster, Chairman, Search Committee, Draper Hall, University of Massachusetts, Amherst, Mass. 01002. An Equal Opportunity/Affirmative Action Employer.**

## DEAN, GRADUATE SCHOOL

We invite applications for the position of Dean of the School of Graduate and Postdoctoral Studies. **Qualifications:** Candidates should have administrative and teaching experience and a background in research, and should have demonstrated strong leadership ability in previous academic positions. **Organization:** *UHS/CMS is a private, nonprofit, nonsectarian, coeducational university and an Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae to: **Chairman, Department of Physiology and Biophysics, University of Health Sciences/The Chicago Medical School, 2020 West Ogden Ave., Chicago, Illinois 60612.**

## POSITIONS OPEN

### CLINICAL BIOCHEMIST, Ph.D.

Full-time position available in our 400-bed Acute General Hospital for an individual to direct the Division of Chemistry in an expanding hospital laboratory. Teaching appointment available at local university. Competitive starting salary and excellent fringe benefit package. Send résumé in confidence to **Personnel Director, Stormont-Vail Hospital, 1500 West 10 Street, Topeka, Kansas 66606.**

### DEAN OF ENGINEERING THE OHIO STATE UNIVERSITY

Applications and recommendations are sought for the position of Dean of Engineering at the Ohio State University, Columbus, Ohio. The College of Engineering has an enrollment of 3500 undergraduate and 1100 graduate students, and 250 faculty. Considerable emphasis is placed on sponsored research. The renewable appointment would begin 1 July 1976 for a term of 4 to 5 years. The salary is open. Significant experience in administration, research, and teaching is desired. Send résumé to **Professor Odus R. Burgraff, Chairman, Search Committee, 340 Civil and Aeronautical Engineering Building, 2036 Neil Avenue, Columbus, Ohio 43210. An Equal Opportunity/Affirmative Action Employer.**

### DEAN COLLEGE OF LITERATURE, SCIENCE, AND THE ARTS THE UNIVERSITY OF MICHIGAN

The College of Literature, Science, and the Arts of the University of Michigan is seeking candidates for the position of Dean. The College is the heart of the University and is its single largest unit, with a faculty of 1,296, a student body of 15,525 (including 3,453 graduate students), and current budget of more than \$25 million. Individuals with a strong commitment to teaching and scholarship, and demonstrated potential for effective administrative leadership are desired.

Applications and nominations should be directed in writing, by 2 September, to **Professor Angus Campbell, Search Chairman, Institute for Social Research, The University of Michigan, Ann Arbor, Michigan 48104.**

*The University is a nondiscriminatory, Affirmative Action Employer.*

### UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE DEPARTMENT OF PATHOLOGY

In accordance with University principles of fair-practice employment, applications are invited for position of **Director of Clinical Laboratories** at the hospital of the University of Pennsylvania. Applicants must be Board-certified in clinical pathology. Board-certification in pathologic anatomy is desirable but not required.

Applications, including curriculum vitae and four references, should be sent to:

**Dr. Nicholas K. Gonatas**  
Chairman, Search Committee  
Division of Neuropathology  
University of Pennsylvania School of Medicine  
447 Johnson Pavilion/G3  
Philadelphia, Pennsylvania 19174

**ELECTRON MICROSCOPE TECHNICIAN** wanted. Must be experienced in all routine procedures and preferably Philips 301 microscope. Opportunity for independent or collaborative research. Excellent living and working conditions. Salary open. Write, giving details of background, to: **Dr. S. H. Vernick, Department of Pathology, Eastern Virginia Medical School, Mowbray Arch, Norfolk, Va. 23501.**

**GRADUATE ASSISTANTSHIPS.** The Nuclear Engineering Department at Kansas State University has graduate assistantships available on a competitive basis for students desiring M.S. or Ph.D. degrees. Current research areas include reactor safety, environmental radiation, radiation effects, nuclear fuel cycle, neutron transport, heat transfer, and neutron activation analysis. Excellent physical and experimental facilities, including a TRIGA Mk II research reactor, are available. For further information contact: **Head, Department of Nuclear Engineering, Kansas State University, Manhattan, Kansas 66506. An Equal Opportunity Employer.**

## POSITIONS OPEN

### ELECTRON MICROSCOPIST

Position open for electron microscopist in the Department of Microbiology. The level of the position and salary are open and depend upon training and experience. Send curriculum vitae to: **Chairman, Department of Microbiology, Vanderbilt University School of Medicine, Nashville, Tenn. 37232. Telephone: 615-322-2087. An Equal Opportunity/Affirmative Action Employer.**

**EXTENSION ENTOMOLOGIST.** Two-year position for assistant specialist with interests in urban insect management, including shade tree insects. Ph.D. required. Curriculum vitae, transcript, and three letters of recommendation to **Professor John A. Lofgren, 226 Entomology, Fisheries, and Wildlife Building, University of Minnesota, St. Paul, Minn. 55108, by 15 September 1975. University of Minnesota is an Equal Opportunity Employer.**

### ELECTRONIC DESIGNER TECHNICIAN

Familiar with modern analog and digital techniques, interfacing instruments with digital computers and devices. Interest in neurophysiological instrumentation.

### MARICULTURIST

Familiar with the culture of marine organisms, particularly invertebrates. Developmental biological methods. Knowledge of biochemical and tissue culture techniques desirable.

### COMPUTER PROGRAMMER AND APPLIED MATHEMATICIAN

Capable of writing programs for analysis of scientific data. Familiarity with high-level statistical methods and modern numerical analysis desirable. Knowledge of higher level languages (Fortran, Algol), assembly languages, computer logic, and digital electronic techniques desirable.

Closing date for the receipt of applications is 15 September 1975. Submit all information to **H. P. Smith, Marine Biological Laboratory, Woods Hole, Mass. 02543. An Equal Opportunity Employer.**

**AMERICAN HEALTH FOUNDATION** seeks the following professionals for new research facility, the Naylor Dana Institute for Disease Prevention, 30 miles north of New York City.

**RESEARCH ASSOCIATE** to study bile acid cholesterol and steroid metabolism.

**POSTDOCTORATE FELLOWS/RESEARCH ASSOCIATES:** One organic chemist to do small-scale synthesis of isotopically labeled chemicals for metabolism and one biochemist to study metabolism of environmentally important chemicals.

**VETERINARIAN/Laboratory Animal Medicine** oriented to manage brand new SPF Research Animal Facility.

Send curriculum vitae, including bibliography, to: **Dr. J. H. Weisburger, American Health Foundation, Naylor Dana Institute, Valhalla, New York 10595. An Equal Opportunity Employer.**

**FACULTY POSITION.** One opening at any rank for a Ph.D. chemist in any area of specialty including analytical, biochemistry, inorganic, organic, or physical fields. Postdoctoral experience preferred. Duties include graduate and undergraduate instruction, and establishing a vigorous research program in a 20-member department. Send résumé and three letters of recommendation to:

**Faculty Search Committee  
Department of Chemistry  
Box 3C  
New Mexico State University  
Las Cruces, New Mexico 88003**

*New Mexico State University is an Equal Opportunity/Affirmative Action Employer.*

### MEDICAL MICROBIOLOGIST

Faculty position. Immediate opening for assistant professor. Postdoctoral experience required with training in host parasite relationships and a strong background in either immunology or microbial physiology. Responsibilities include teaching medical students development of a course in host parasite relationships and an independent research program. Send curriculum vitae and names of three references to: **Dr. Thomas E. Shockley, Chairman, Department of Microbiology, Meharry Medical College, Nashville Tenn. 37208.**

## POSITIONS OPEN

### FERMENTATION BIOCHEMIST GROUP LEADER

The Biochemical Research Department of the Corporate R & D Laboratory is seeking a person with at least 5 years of postdoctorate practical experience in fermentation technology. Knowledge of product recovery procedures is desirable.

We are evaluating opportunities in the areas of enzyme technology, microbial fermentation, and biotransformation. Our laboratory research program includes the use of novel parameters to increase productivity of selected fermentations.

This position requires a "hands-on" individual who will also have the opportunity to function as a group leader in the department.

Location in northeastern Pennsylvania. Salary open. Please forward résumé with salary history to **Box 373, SCIENCE.**

**BIOCHEMISTRY DEPARTMENT HEAD:** The University of Mississippi Medical Center invites applications for the position of professor and chairperson of the Department of Biochemistry. The department teaches medical, dental, and graduate students and is involved in extensive research activities. Send a current curriculum vitae and the names of three referees to **Dr. William O. Berndt, Chairperson, Biochemistry Search Advisory Committee, Department of Pharmacology and Toxicology, University of Mississippi Medical Center, 2500 North State Street, Jackson, Miss. 39216. Application deadline is 20 October 1975. Equal Opportunity Employer, Male/Female.**

### HEAD, DEPARTMENT OF BIOCHEMISTRY

The University of Illinois College of Medicine invites applications and nominations for the position of Head, Department of Biochemistry, in the School of Basic Medical Sciences. The Department is presently constituted of 15 faculty with research programs.

Applicants should possess a distinguished record in both research and teaching, as well as administrative ability.

Send nominations and applications to: **Dr. G. di Mayorca, Chairman, Search Committee, Department of Microbiology, 835 South Wolcott Avenue, Chicago, Illinois. Mailing address: P.O. Box 6998, Chicago, Illinois 60680.**

*The University of Illinois is an Affirmative Action Employer.*

### INSTRUCTOR, DEPARTMENT OF PATHOLOGY THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

Applications are being accepted for a research position in lipoprotein biochemistry. Applicant should have Ph.D. in biochemistry or related field, preferably with postdoctoral experience. Candidate will participate in long-term atherosclerosis research program and be expected to develop own research interests. Send résumé before 1 September 1975 to **Henry C. McGill, Jr., M.D., The University of Texas Health Science Center at San Antonio, San Antonio, Texas 78284.**

*An Equal Opportunity/Affirmative Action Employer*

### NEUROBIOLOGIST

Faculty position available at Bryn Mawr College in the fall of 1976. Candidates with doctoral degree and strong background in physiology should have an active interest in undergraduate teaching, in the direction of master's and doctoral students, and in the pursuit of a vigorous research program. Appointment will be made at the Assistant Professor level. Send curriculum vitae and three references to **Box 371, SCIENCE.**

*An Equal Opportunity Employer*

**NEUROSCIENTIST POSTDOCTORAL.** A position having both research and teaching duties is being offered for the academic year 1975-76. Research in the laboratory is focused on biochemical studies of cultured nerve cells. Teaching responsibility is the organization of a graduate laboratory course to complement a lecture course on "The Biochemistry of Behavior." Qualified individuals should submit curriculum vitae, graduate transcripts, and three letters of reference to **Dr. J. R. Sheppard, Dight Institute for Human Genetics, University of Minnesota, Minneapolis, Minnesota 55455. Applications from minorities and women are encouraged. An Equal Opportunity Employer.**

## POSITIONS OPEN

### FACULTY POSITION—PEDIATRIC HEMATOLOGIST

Board-certified pediatric hematologists, qualified for teaching position, are invited to submit credentials and references to **Dr. Ira M. Rosenthal, Head, Department of Pediatrics, Abraham Lincoln School of Medicine, University of Illinois College of Medicine, 840 South Wood St., Chicago, Illinois 60612.**

*An Equal Opportunity Employer*

### HEALTH SERVICES RESEARCH EXPERT

Immediate opening at University of Vermont College of Medicine and Medical Center Hospital for qualified M.D. and/or Ph.D. with demonstrated skills and experience to serve as research director for major, well-funded 2-year evaluation of computerized, problem-oriented record system. Position requires solid working knowledge of experimental design, methods of evaluating health care quality, and familiarity with problems involved in conducting health services research in busy patient-care setting.

Salary competitive, study resources and staff present, exact academic appointment negotiable. Earliest possible starting date desired no later than 1 October 1975. For details write or call: **Chairman, Department of Medicine, University of Vermont College of Medicine, Burlington, Vermont 05401, or telephone 802-656-2574.**

*An Equal Employment Opportunity/Affirmative Action Employer*

### BERMUDA BIOLOGICAL STATION FOR RESEARCH

#### MARINE ECOLOGIST

to head a small research team investigating "The Environmental Quality of Bermuda Inshore Waters," and

#### POSITION IN MARINE OIL POLLUTION RESEARCH

preferably chemical, microbiological, or physiological aspects.

**Qualifications:** Ph.D.; some postdoctoral experience is desirable. Both positions are for 1 year, with possible extension. Salary according to qualifications. Forward résumé and two letters of recommendation to:

**Director  
Bermuda Biological Station for Research, Inc.  
St. George's West 1-15, Bermuda**

### MARINE ZOOPLANKTOLOGIST Woods Hole Oceanographic Institution

Applications are invited for a position as Assistant Scientist in Biological Oceanography, beginning in January 1976, to conduct field and laboratory studies in marine zooplankton patchiness and swimming behavior. Experience required in the field sampling of small-scale zooplankton distributions and its associated equipment. Familiarity with laboratory culturing of marine zooplankton and interest in graduate student training is desirable. Persons selected for similar positions in the Institution would typically have a Ph.D. and 1 to 5 years of subsequent experience but these are not mandatory requirements. Send detailed résumés, reprints of publications, and names of references to: **Dr. George D. Grice, Chairman, Biology Department, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543. An Equal Opportunity Employer.**

### MAYO CLINIC DEPARTMENT OF MOLECULAR MEDICINE

Postdoctoral fellowship or research assistant positions available in the following areas: chemical modification of proteins, steroid chemistry, hormone action, gluconeogenesis, chemical carcinogens. Please indicate area of interest and send curriculum vitae and references to **Dr. R. J. Ryan, Chairman, Department of Molecular Medicine, Mayo Clinic, Rochester, Minnesota 55901.**

**PHYSICIAN** with specialty interest and experience in tissue typing serology and newer histocompatibility techniques. Cross appointment with the Medical Research Council Transplantation Group (University of Alberta) or Department of Clinical Medicine is envisaged for suitable applicants. Please reply to: **Dr. H. E. Bell, Chairman, Department of Laboratory Medicine, University Hospital, Edmonton, Alberta, Canada T6G 2B7.**

## POSITIONS OPEN

### INSTRUCTOR OR ASSISTANT PROFESSOR DEPARTMENT OF PEDIATRICS

The University of Michigan Medical School is seeking M.D. Board-eligible or certified in pediatric hematology-oncology involving patient care, teaching, and research, available January 1976. Code #1500FO. Send résumé to Box 372, *SCIENCE. A Nondiscriminatory, Affirmative Action Employer.*

### PHYSIOLOGIST/CELL BIOLOGIST

Research position available for recent Ph.D. to work on physiologic and morphologic problems of epithelial transport. Send curriculum vitae and names of two references to: Vincent A. DiScala, M.D., Chief, Renal Service, U.S. Public Health Service Hospital, Staten Island, New York 10304.

### POSITION AVAILABLE

Experienced scientific glassblower needed in Chemistry Department. Nonroutine glassblowing, design and construction on all types of chemical equipment. Well-equipped one-man glass shop. Salary commensurate with experience. Excellent fringe benefits and retirement plan. Send résumé and three letters of reference to: Executive Officer, Department of Chemistry, State University of New York at Buffalo, 110 Acheson Hall, Buffalo, N.Y. 14214.

**POSTDOCTORAL POSITION** available at once for studies on the role of mitochondrial monoamine oxidase in the metabolism of biogenic amines. Experience in mitochondrial or membrane biochemistry and/or in biogenic metabolism is essential. Knowledge of and experience in ultrastructural approaches to membrane structure/function are desirable. Send curriculum vitae and letters of recommendation to: John W. Greenawalt, Professor and Head, Department of Biochemistry, The University of Tennessee, Knoxville, Tenn. 37916. *Affirmative Action/Equal Opportunity Employer*

**POSTDOCTORAL POSITION** available to study components of tumor cell membranes involved in ion transport. Strong chemistry/biochemistry background and/or previous experience in this or related areas is desirable. Salary for first year is \$10,000. Applicants should submit a curriculum vitae and names of three references to Dr. Charles Levinson, Department of Physiology, The University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, Texas 78284. *An Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITION

Postdoctoral research position available immediately for research on physiological mechanisms of visual adaptation. Prefer someone with background in visual pigment photochemistry or sensory electrophysiology. Salary \$9,000 to \$10,000. Send curriculum vitae and two letters of reference to Dr. Bruce Goldstein, Department of Psychology, University of Pittsburgh, Pittsburgh, Pennsylvania 15260.

### POSTDOCTORAL POSITION IN BIOCHEMISTRY—NUTRITION

Research on amino acid metabolism in miniature pigs. Send résumé promptly and two letters of recommendation to: Dr. Robert L. Wixom, Department of Biochemistry, University of Missouri, Columbia, Mo. 65201. *The University of Missouri is an Equal Opportunity Employer.*

### POSTDOCTORAL POSITIONS

Opportunity available for postdoctoral training in normal and pathological cardiovascular physiology. Areas of special emphasis will include: (i) cardiac electrophysiology (voltage clamp); (ii) skinned fiber techniques; (iii) biochemistry of contractile proteins; (iv) mechanics of cardiac and smooth muscle contraction including length and tension clamping and pseudorandom noise analysis of viscoelastic components; (v) thermodynamic measurements in heart muscle; and (vi) the CNS control of arterial blood pressure. Contact:

Dr. Norman R. Alpert  
Department of Physiology and Biophysics  
University of Vermont College of Medicine  
Given Medical Building  
Burlington, Vermont 05401

*An Equal Opportunity/Affirmative Action Employer*

## POSITIONS OPEN

**NEUROBIOLOGY POSTDOCTORAL** position for fall 1975, involving research on neuron function and protein synthesis. An opportunity to gain biochemical and electrophysiological experience while working on a fundamental neurobiological problem. Salary \$9000 per year. Candidate should have research experience in neuroscience or molecular biology and should submit a curriculum vitae and letters of recommendation to Dr. David Wilson, Department of Physiology and Biophysiology, School of Medicine, University of Miami, Box 520875, Miami, Fla. 33152. *An Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** in biophysics available on 1 September 1975. Research involves the study of the visual pigments using the resonance Raman effect. Applicants should have a background in spectroscopy and biochemistry sufficient to handle these samples. Send curriculum vitae and letters of recommendation to Professor Robert Callender, Physics Department, City College of New York, New York, N.Y. 10031.

### POSTDOCTORAL POSITION

A postdoctoral position will be available starting 1 October 1975 for 2 years to conduct studies on a variety of topics involving bacterial plasmids. Individuals with backgrounds in biochemistry are preferred. Please send curriculum vitae to Dr. Joseph Inselburg, Department of Microbiology, Dartmouth Medical School, Hanover, New Hampshire 03755.

**POSTDOCTORAL POSITION** immediately available for studies on the mode of action of bacterial DNA directed RNA polymerase, with emphasis on techniques such as steady state and nanosecond fluorescence spectrometry. Applicants should have interest in application of physicochemical techniques to study of enzyme structure in solution and experience in one or more of the following: isolation of template directed polymerases, isolation and characterization of enzymes, DNA transcription or replication. The position, \$11,000 per annum, is for a period of 1 year with excellent possibility for renewal. Send résumé and references to Dr. M. J. Kronman, Biochemistry Department, State University of New York, Upstate Medical Center, 766 Irving Avenue, Syracuse, New York 13210. *Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available in September 1975 for development and application of radioimmunoassays. Experience in organic synthesis preferred. Salary to \$11,000 per annum depending on qualifications. Submit curriculum vitae and three (3) letters of recommendation to Dr. S. Cernosek, Biochemistry Department, University of Arkansas for Medical Sciences, Little Rock, Ark. 72201. *UAMS is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION:** Available immediately for research on molecular biology of extracellular matrix during chondrogenesis. Résumé and three references to Dr. Paul F. Goetinck, Animal Genetics, University of Connecticut, Storrs, Conn. 06268. *An Equal Opportunity Employer.*

**POSTDOCTORAL POSITION:** Recent Ph.D. in biochemistry or chemistry to study folate enzymology and the interaction of anticancer drugs with target enzymes. Available immediately; salary \$10,000; 2-year appointment. Send résumé and names of three references to Dr. R. Bruce Dunlap, Department of Chemistry, University of South Carolina, Columbia, S.C. 29208.

### POSTDOCTORAL POSITION

Postdoctoral position available 1 September 1975 for research on the biochemical effects of halogenated antibacterial agents on mammalian systems, primarily their interactions with proteins, enzymes, and biological membranes. Applicants must have a Ph.D. in biochemistry. Salary up to \$11,000 for 12 months. Applications with curriculum vitae naming three references should be sent to:

Dr. Donald R. Buhler  
Department of Agricultural Chemistry  
Oregon State University  
Corvallis, Oregon 97331

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## POSITIONS OPEN

### POSTDOCTORAL POSITION—ENTOMOLOGY

One-year research position conducting acoustical studies with bark beetles. Candidate must have Ph.D. in entomology with experience in acoustical-pheromone interactions. Closing date 1 September 1975; starting date 1 October 1975. For further information contact:

Dr. C. S. Koehler  
Department of Entomology  
Oregon State University  
Corvallis, Oregon 97331

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

**POSTDOCTORAL POSITION** in insect pathology for in-depth study of either a cytoplasmic polyhedrosis virus or microsporidian pathogens of blackflies. Research to be integrated into an overall program aimed at developing microbial agents for blackfly control. Experience with pathogens of biting Diptera highly desirable. Send letter of application including résumé and names of three referees to: Dr. Marshall Laird, Director, Research Unit on Vector Pathology, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1C 5S7.

### POSTDOCTORAL POSITION

Opportunity for research in connective tissue biochemistry, with focus on collagen biosynthesis and processing period. Position available immediately. Apply to Dr. Marvin L. Tanzer, Department of Biochemistry, University of Connecticut Health Center, Farmington, Conn. 06032.

### POSTDOCTORAL FELLOW

Opportunity for recent Ph.D. with background in immunogenetics and immunochimistry. Pioneering studies of transplantation immunity/immunologic phylogeny in tropical marine animals as well as genetically defined mice. Salary: approximately \$12,000. Apply to: Dean William Hildemann, Hilo College, University of Hawaii, Hilo, Hawaii 96720. Telephone: 808-961-9300. *An Equal Opportunity Employer.*

University of California, Irvine. Several positions available for **POSTDOCTORAL FELLOWS**, beginning 15 September 1975, in the Center for Pathobiology. Recent Ph.D. required, preferably in the area of cell biology, developmental biology, or genetics. Candidates to work on problems of pattern formation, determination or morphogenesis in hydra (with Drs. R. D. Campbell or H. R. Bode), *Drosophila* (with Drs. P. J. Bryant or H. A. Schneiderman), or amphibian appendages (with Dr. S. V. Bryant). *Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.* Send résumé, the names of three references, and a brief description of research interests to: Dr. S. V. Bryant, Center for Pathobiology, University of California, Irvine, Irvine, Calif. 92664, by 31 August 1975.

### POSTDOCTORAL RESEARCH ASSOCIATE

Available immediately for recent Ph.D. in biochemistry, microbiology, or molecular biology. Starting salary \$12,000 per year. Research on structure and function of bacterial ribosomes. Send curriculum vitae and two letters of recommendation to Dr. S. Marvin Friedman, Department of Biological Sciences, Hunter College of City University of New York, 695 Park Ave., New York, N.Y. 10021. *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL RESEARCH ASSOCIATES.** Applications for postdoctoral training in toxicology are solicited. A general program in toxicology based in the Departments of Physiology and Pharmacology and of Biochemistry is offering a unique program of research and training. Close cooperation and additional training at NIEHS, EPA, and other Research Triangle organizations involved in toxicology provides one of the best opportunities available. Specific areas are drug metabolism (in vivo and in vitro), heavy metal metabolism, oxygen toxicity, air pollution, inhalation toxicology, teratology, and neurotoxicology (integrative, biophysical, and molecular). Other areas will be considered if preceptors are available. Applications for these National Research Service Awards should include a transcript, GRE, thesis abstract, and curriculum vitae. A statement of the proposed area of training and three letters of support should be included. *Duke University is an Equal Opportunity Employer.* Send applications to the director no later than 30 September 1975. Dr. D. B. Menzel, Director, Post Doctoral Training Program in Toxicology, Duke Medical Center, P. O. Box 3709, Durham, North Carolina 27710.



## POSITIONS OPEN

**POSTDOCTORAL—MICROCALORIMETRY**, ultracentrifugation, protein isolations. Bioluminescence and energetics of protein reactions. Immediate opening. Send résumé to Neal Langerman, Utah State University, Department of Chemistry-UMC 03, Logan, Utah 84322.

*Equal Opportunity Employer M/F*

### POSTDOCTORAL RESEARCH ASSOCIATE

Opening now available for recent graduate with experience in cell-free protein synthesis. Experience with eukaryotic, tissue-cultured cells helpful. Project involves study of posttranscriptional regulation of immunoglobulin synthesis. Salary negotiable. Please send résumé, publications, and three references to Dr. R. M. Dowben, University of Texas Health Science Center, 5323 Harry Hines Blvd., Dallas, Texas 75235.

*An Equal Opportunity/Affirmative Action Employer*

**POSTDOCTORAL AND PREDOCTORAL TRAINING IN TUMOR CELL BIOLOGY AT UCLA.** The Molecular Biology Institute at the University of California, Los Angeles, has received an award from the National Cancer Institute to support interdisciplinary training in tumor cell biology focusing on (i) tumor cell surfaces and (ii) chromosome structure and regulation. This program is restricted to U.S. citizens and permanent residents. Candidates for predoctoral training should apply directly to the Institute for admission by writing Professor David Eisenberg, Molecular Biology Institute, University of California, Los Angeles, Calif. 90024. Candidates for postdoctoral training should hold either the M.D. or Ph.D. degree and may request information on fellowships available 1 January 1976 by writing Professor C. F. Fox, Department of Bacteriology, University of California, Los Angeles, Calif. 90024.

### POSTDOCTORAL TRAINING IN DENTAL CARIES RESEARCH

Positions available in an NIH-supported multidisciplinary program in cariology. Ph.D., D.D.S., M.D., or equivalent degree required. Training will involve integrated studies in selected combinations of areas including: epidemiology and clinical trials; microbiological, biochemical, and immunological investigations on the microbial etiology of caries; animal research involving experimentally produced caries; oral anatomy and physiology studies; saliva function including saliva composition and protection against caries. Program involves 19 faculty members with expertise in anatomy, biochemistry, biostatistics, genetics, health ecology, microbiology, oral biology, oral pathology, and physiology. Appointments for up to 3 years with starting stipends ranging from \$10,000 to \$13,200. Send résumé or requests for additional information to: Dr. Charles F. Schachtele, 18-228 Health Sciences Unit A, School of Dentistry, University of Minnesota, Minneapolis, Minnesota 55455.

Three **POSTDOCTORAL TRAINEESHIPS** available immediately in the following research areas: neurochemistry; membrane receptor biochemistry and biophysics; biochemistry of l-carbon cycle; molecular neurobiology; sleep research; schizophrenia research; behavioral pharmacology. Apply with curriculum vitae to Training Program Director, Neurosciences Program, University of Alabama in Birmingham, University Station, Birmingham, Alabama 35294. *An Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL VIROLOGIST

Research position available immediately with group studying viral genomes in human cell cultures of rheumatoid synovial membrane. Full-time faculty appointments in preclinical and clinical departments and teaching opportunities. Candidate must be able to carry on independent research. Salary open depending on experience. Send curriculum vitae to and obtain further information from:

**Dr. David Hamerman**  
**MONTEFIORE HOSPITAL**  
**AND MEDICAL CENTER**

111 East 210 Street  
Bronx, N.Y. 10467

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Affirmative Action*

## POSITIONS OPEN

**POSTDOCTORAL/RESEARCH ASSOCIATE.** Position available for research on eukaryotic transcriptional and/or translational control mechanisms. Salary \$9,000 to \$12,000. Send curriculum vitae and names of three references to Dr. H. M. Schulman, Lady Davis Institute for Medical Research, 3755 Cote Ste. Catherine Rd., Montreal, P.Q., Canada H3T 1E2.

**POSTDOCTORAL RESEARCH ASSOCIATE** in neurophysiology, beginning September 1976. Training in intracellular electrophysiological techniques desirable. To collaborate in ongoing research on junctional and synaptic transmission at the cellular level. *The University of Colorado is an Equal Opportunity Employer.* Applicant should send curriculum vitae and names of three referees to: Dr. A. R. Martin, Department of Physiology, University of Colorado Medical School, Denver, Colorado 80220.

## ANNOUNCEMENT POST- DOCTORAL TRAINEESHIPS IN ENVIRONMENTAL AND GENETIC FACTORS IN NEOPLASIA

under an institutional national research service award from the National Cancer Institute to Brookhaven National Laboratory and the State University of New York at Stony Brook. For further details and a list of sponsors and their research areas write to Dr. R. B. Setlow, Biology Department.

**Brookhaven National  
Laboratory**  
Associated Universities, Inc.

**Upton, Long Island  
New York 11973**

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Employer M/F*

### PROFESSOR AND DIRECTOR OF SURGERY

The Charleston Division of the West Virginia University Medical Center is accepting applications for the position of Professor and Director of Surgery. Applicants must be interested in medical students, house staff, and other health professional training and education. Qualified and interested applicants should contact: Hartwell G. Thompson, M.D., Dean, Charleston Division, West Virginia University Medical Center, P.O. Box 2867, Charleston, West Virginia 25330. *An Equal Opportunity/Affirmative Action Employer.*

## UNIVERSITY OF LONDON READERSHIP IN ANATOMY AT UNIVERSITY COLLEGE

The Senate invites applications for the above Readership. Salary scale under review; at present £4707 to £5976 plus £399 London Allowance and threshold payments. Applications (11 copies) should be received not later than 4 November 1975 by the Academic Registrar, University of London, Senate House, London WC1E 7HU, England, from whom further particulars may be obtained.

## POSITIONS OPEN

### SR. RESEARCH SCIENTIST (Immunochemistry)

Armour Pharmaceutical Company's R & D Department has a unique research position open for a Sr. Research Scientist experienced in Immunochemistry.

The ideal candidate will possess a Ph.D. in Biochemistry with 2 years of postdoctorate experience or equivalent in research or teaching. Familiarity with protein isolation, characterization, and modification with specific experience working with immunoglobulins is required. The successful candidate will have experience in research involving immunoglobulin isolation, adjuvant-antigen interaction, and the in vivo inductive synthesis of immunoglobulins.

Armour Pharmaceutical offers a competitive salary plus a unique fringe benefit package. Those candidates who are interested in this new and challenging position are invited to send their curriculum vitae, plus salary history, in confidence to:

**D. W. Eckert**  
**ARMOUR**  
**PHARMACEUTICAL CO.**

**Box 511**  
**Kankakee, Ill. 60901**  
**(815) 932-6771**  
*An Equal Opportunity Employer M/F*

### RECEPTOR BIOLOGIST NORTHWESTERN UNIVERSITY

Full-time faculty position available for 1 September 1976 in the Department of Biological Sciences. Salary and academic rank (Instructor or Assistant Professor) to depend on qualifications.

Send curriculum vitae and names of three referees to: Neena Schwartz, Department of Biological Sciences, Northwestern University, Evanston, Illinois 60201.

*Northwestern University is an Equal Opportunity Employer.*

### INTERNATIONAL WHALING COMMISSION Appointment of Secretary

A senior biological scientist with administrative ability is required to fill the post of full-time Secretary for the International Whaling Commission. The Commission's office will be at Cambridge, England.

The Secretary will be responsible for the administration of the Commission's work and for the promotion of scientific programs relating to its responsibilities. He will encourage and help to coordinate scientific studies and investigation of cetaceans, particularly the large whales, by member nations and by other nations and agencies. In particular the Secretary will assemble and assist in the assessment of scientific and statistical data and will work closely with the Scientific Committee of the Commission. He will edit scientific reports for publication and will represent the Commission at international meetings.

The administrative duties of the Secretary will include the preparation of the annual budget, the drafting of the annual report and of the regulations made by the Commission under the International Whaling Convention, and arranging all meetings of the Commission and its Committees. He will be assisted by a small staff including an executive officer. Candidates must hold a degree in a biological science and have experience and proven ability in administration. Knowledge and preferably practice in the acquisition, storage, and retrieval of biological data would be an advantage as would experience in other fisheries ecological and wildlife research. A good knowledge of English is essential. Salary will be within the range of £10,000 to £12,000 per annum (about \$25,000), after taxes.

Further information may be obtained from:

**Dr. William Aron**  
**Director, Office of Environment and Ecology**  
**National Oceanic and Atmospheric Administration**  
**Department of Commerce**  
**Washington, D.C. 20230**  
**Telephone: 202-967-5181**

Applications containing full details of qualifications and experience and the names and addresses of two references should be sent to:

**Mr. R. Stacey**  
**International Whaling Commission**  
**Room 276**  
**Great Westminster House**  
**Horseferry Road**  
**London SW1P 2AE, England**

Applications must arrive not later than 30 September 1975.

## ENGINEER / BIOMEDICAL ENGINEER

The National Institutes of Health in Bethesda, Maryland is recruiting for Chief of Biomedical Engineering and Instrumentation Branch, Division of Research Services. The Branch, a national focal point for biomedical engineering, has 110 professional and support staff, and provides direct and consultative engineering support to clinical and biomedical research programs including systems analysis, research design, development, fabrication, equipment maintenance and repair. The position requires either major competence in engineering (preferably at the doctorate level) with a biomedical background or biomedical science background with in-depth engineering experience; demonstrated managerial expertise; demonstrated ability to communicate with individuals at all organizational levels and with varying educational experience; and sensitivity to the aspirations of minorities and women. Salary range of \$34,607 to \$36,000 dependent upon qualifications. Applicants should contact Rebecca Wilner, Personnel Officer, Division of Research Services, by calling collect at 301-496-5621.

### NATIONAL INSTITUTES OF HEALTH

Public Health Service

An Equal Opportunity Employer M/F

## HEALTH SCIENTIST ADMINISTRATOR

\$21,816-\$25,581  
(GS-601-13/14)

The National Institutes of Health, National Institute of General Medical Sciences, has a position available for a Ph.D. or MD level scientist with administrative experience. Emphasis should be in either Anesthesiology, Cardiovascular Physiology, or Pulmonary Physiology. The selected candidate will be responsible for scientific development, administration and evaluation of national research grants, research training grants and research fellowships utilized in the National Institute of General Medical Sciences.

Send Bibliography and Curriculum Vitae describing experience in these or related fields to:

### NATIONAL INSTITUTES OF HEALTH

Public Health Service

National Institute of General Medical Sciences  
Personnel Office, Building 31, Room 4A-33,  
9000 Rockville Pike, Bethesda, Md. 20014

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### PROGRAM ANNOUNCEMENT

#### NATIONAL INSTITUTES OF HEALTH NATIONAL HEART AND LUNG INSTITUTE

#### DIVISION OF LUNG DISEASES

##### Young Investigator Pulmonary Research Grant

The Division of Lung Diseases, National Heart and Lung Institute invites national competition for Young Investigators Pulmonary Research Grants. This program is intended to foster the pulmonary research interests of young scientists and physicians by providing them with modest, independent support for a project of their own design. It is also designed to encourage young investigators who are in basic science disciplines to channel their interests into pulmonary-related research. At the same time, it welcomes participation by investigators in various clinical departments.

Applicants must be below age 35, and must hold a doctorate in a field relevant to the purpose of the grant. Grants will not be available to anyone who is or has been a principal investigator in an NIH-supported center, program project, regular research grant or contract; or a recipient of an NIH Special Research Fellowship or a Research Career Development Award.

Applications must be received prior to November 1, 1975 for review at the March meeting of the National Heart and Lung Advisory Council. Awards will be made with a beginning date prior to July 1, 1976. Application folders with all necessary information may be obtained by writing to:

Manager, Manpower Program  
Division of Lung Diseases  
**NATIONAL HEART AND LUNG INSTITUTE, NIH**  
The Westwood Building—Room 6A15  
5333 Westbard Avenue  
Washington, D. C. 20016

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- ☐ **Subscriber rates**

- ☐ \$50 USA ☐ \$57 Canada, PUAS ☐ \$58 Foreign
- ☐ \$80 Airlift to Europe, North Africa, Near East

- ☐ Payment enclosed ☐ Bill me later

Name Please print

Address

City State Zip MT08

**ATTACH  
LABEL  
HERE**

## POSITIONS OPEN

### Ph.D. RESEARCH BIOCHEMIST

Position available August 1975 to study interactions of pollution related compounds with DNA. Experience in binding measurements and enzyme assays preferred. Send curriculum vitae to **L. Crumplar, Laboratory of Nuclear Medicine and Radiation Biology, 900 Veteran Avenue, Los Angeles, California 90024.** We are an *Equal Opportunity/Affirmative Action Employer. Applications from minorities and women are encouraged.*

**RESEARCH FELLOW OR ASSOCIATE—CARDIAC ELECTROPHYSIOLOGY.** M.D. or Ph.D. wanted immediately. Experience in electrophysiology research desirable. Send curriculum vitae and two references to: **Jaok Han, M.D., Professor of Medicine, Albany Medical College, Albany, N.Y. 12208.**

**RESEARCH INSTRUCTOR IN PATHOLOGY—**Ph.D. in Biology with training and experience in electron microscopy and tumor immunology. Work with induction melanoma in animals. Send résumé to **Ms. O. Kushch, Temple University Health Sciences Center, 3401 North Broad St., Philadelphia, Pa. 19140.** *Equal Opportunity/Affirmative Action Employer.*

### SCIENTIST

M.D. or D.V.M. experimental **Pathologist** for career in collaborative research with scientists in a variety of biomedical disciplines. Should be scientifically creative and productive. Qualified applicants should send detailed résumé in confidence to **Linda Neely, Litton Biometrics, Inc., 5516 Nicholson Lane, Kensington, Md. 20795.** *EOE/M-F.*

### WOODS HOLE OCEANOGRAPHIC INSTITUTION

Applications are invited for a Senior Administrative position at the Woods Hole Oceanographic Institution, having prime responsibility for marine and shore-side facility operations. A thorough knowledge of research ship and submarine activities is a prerequisite. Candidate must have sea-going experience, preferably aboard research ships. Send résumé and names of at least three references to: **Dr. A. E. Maxwell, Provost, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543.** *An Equal Opportunity Employer.*

### UNIVERSITY SENIOR PROGRAMMER

Excellent opportunity in well-equipped biophysical software development laboratory. Equipment includes a 32K PDP-12/40. College degree or equivalent and 2 years of assembly language experience on the PDP-8 family of computers. Apply by résumé to: **E. J. Podszwa, Personnel Officer, West Virginia University Medical Center, Morgantown, West Virginia 26506.** *An Equal Opportunity/Affirmative Action Employer M/F.*

### TECHNICAL WRITER

A recent graduate with a physics or chemistry major and some acumen with words will find a challenging career opportunity translating our research scientists' technical jargon into descriptive literature, review articles, and advertising material of articulate prose for the benefit of our scientific colleagues and the purpose of wooing their patronage of our products.

Chief among the latter are instruments for analytical chemists. If you are not affronted by our base objectives—selling more of them—send us a brief résumé and a sample of writing which may be some previous work or whatever else you may wish to devise to attain an interview.

**SPEX INDUSTRIES, INC.**  
Box 798  
Metuchen, N.J. 08840  
Attention: Harriet Mitteldorf

### TOXICOLOGY CHEMICAL CARCINOGENESIS

Applications are invited from doctorate-level individuals with experience and/or training in mammalian toxicology to head a program in Environmental Carcinogenesis. Experience in inhalation toxicology desirable. Opportunity to develop an independent research program will be provided.

Please submit curriculum vitae, including bibliography, to: **Dr. John C. Landon, President, Mason Research Institute, Harvard Street, Worcester, Mass. 01608.**

*An Equal Opportunity Employer M/F*

## POSITIONS OPEN



### MCV/VCU CANCER CENTER

We are seeking a senior investigator with demonstrated experience and interest in the biochemistry and mechanism of action of antitumor agents. The position would serve as a bridge between the basic and clinical sciences, and closely collaborate with our clinical oncology group. A person with an M.D. degree would be preferred although this is not a requirement. A proven scientific and funding record is essential. Adequate facilities, space, and some technical assistance will be made available to the successful candidate. Interested applicants should send a curriculum vitae, list of publications, and names of three references to: **L. S. Harris, Chairman, Department of Pharmacology, Medical College of Virginia, Virginia Commonwealth University, Box 27, Richmond, Virginia 23298.**

*An Equal Opportunity/Affirmative Action Employer*

### VERTEBRATE ECOLOGIST

Three-year research associate position now open with the Illinois State Museum Society to work with interdisciplinary research team investigating post-glacial human adaptation in the western Ozark Highland of Missouri. Ph.D. in zoology with background in vertebrate ecology, biogeography, and computer research. Experience with archeozoology desired. Salary: \$14,000 per year with 5 percent per annum cost of living increase. Send curriculum vitae to **Dr. R. Bruce McMillan, Assistant Museum Director, Illinois State Museum, Springfield, Ill. 62706.**

*An Equal Opportunity/Affirmative Action Employer*

### VETERINARY PATHOLOGIST

Independent contract research laboratory has an immediate opening for a pathologist experienced in gross and microscopic pathology of dogs, primates, and rodents. Specific experience in toxicologic pathology desirable. Salary commensurate with experience. We are located in a very desirable area of southwestern Michigan just 10 miles from Kalamazoo, which offers excellent living conditions and cultural activities. Send detailed résumé to: **J. M. Ragen, Director, Personnel, International Research and Development Corp., Mattawan, Michigan 49071.** *An Equal Opportunity Employer.*

## FELLOWSHIPS

**POSTDOCTORAL FELLOWSHIP IN HUMAN BIOCHEMICAL GENETICS** available immediately for Ph.D. or M.D. to study lysosomal function in somatic cell hybrids. Experience in enzymology, tissue culture, electron microscopy desirable. Send curriculum vitae, background experience, research interests, and names of three references to: **M. C. Rattazzi, M.D., Division of Human Genetics, Department of Pediatrics, State University of New York at Buffalo, 86 Hodge Ave., Buffalo, N.Y. 14222.**

### POSTDOCTORAL FELLOWSHIPS

Two (2) NRSA postdoctoral fellowships available in vision research. Appointments could begin August 1975 to June 1976. Preference given to candidates with a strong background in biochemistry, developmental biology, electron microscopy, or neurobiology. Two-year appointment, \$10,000 per annum. Send statement of background and research interest with three references to: **Dr. Gunter K. von Noorden, Department of Ophthalmology, Baylor College of Medicine, Houston, Texas 77025.**

### POSTDOCTORAL FELLOWSHIPS CLINICAL PHARMACOLOGY— JOHNS HOPKINS

Research positions in clinical pharmacology are currently available for qualified M.D.'s or Ph.D.'s. Areas of faculty research include: mechanism of action and toxicity of chemotherapeutic agents, pharmacokinetics, hormone receptor interactions, developmental pharmacology, cardiovascular pharmacology, and drug metabolism. Salaries are provided through NIH stipends. Applicants should send a curriculum vitae, list of publications, and names of three references to: **Dr. Paul S. Lietman, Director, Division of Clinical Pharmacology, Johns Hopkins University School of Medicine, Baltimore, Maryland 21205.**

## FELLOWSHIPS

Research Fellowship. **PATHOLOGY OF MEMBRANES AND ORGANELLES.** Position will involve research in mitochondrial bioenergetics, structure, and function of subcellular organelles in both physiological and pathological conditions. Requirements are basic biochemical techniques and some experience in isolation of subcellular organelles and spectrophotometric and fluorescence measurements. Send curriculum vitae and three references to **Dr. Britton Chance, Director, Johnson Foundation, D-501 Richards Building/G4, University of Pennsylvania, Philadelphia, Pa. 19174.**

Research Fellowship. **PATHOLOGY OF MEMBRANES AND ORGANELLES.** Position will involve research in smooth muscle and requires an individual with experience in ion transport and basic biochemical techniques for the isolation and fractionation of cell membranes and organelles. Send curriculum vitae and three references to **Dr. Andrew P. Somlyo, Director, Pennsylvania Muscle Institute, Presbyterian-University of Pennsylvania Medical Center, 51 North 39 St., Philadelphia, Pa. 19104.**

### POSTDOCTORAL FELLOWSHIPS IN ENDOCRINOLOGY AND METABOLISM

Inquiries are invited from M.D.'s and recent Ph.D.'s who wish to pursue research in the field of endocrinology and metabolism. Research opportunities include mechanisms of polypeptide hormone action and release, lipid, lipoprotein, and amino acid metabolism, catecholamines, steroids, endocrine tumors, and neuroendocrinology. Applicants should write to: **Dr. Simon Margolis, Department of Medicine, The Johns Hopkins University School of Medicine, Baltimore, Md. 21205.** Only U.S. citizens or permanent residents of the United States are eligible.

## PROCEEDINGS

### PROCEEDINGS OF THE INTERNATIONAL WORKSHOP ON HORMONES AND PROTEINS

Edited by T.A. Bewley,  
L. Ma, J. Ramachandran

*A Collaboration of  
the Hormone Research Laboratory  
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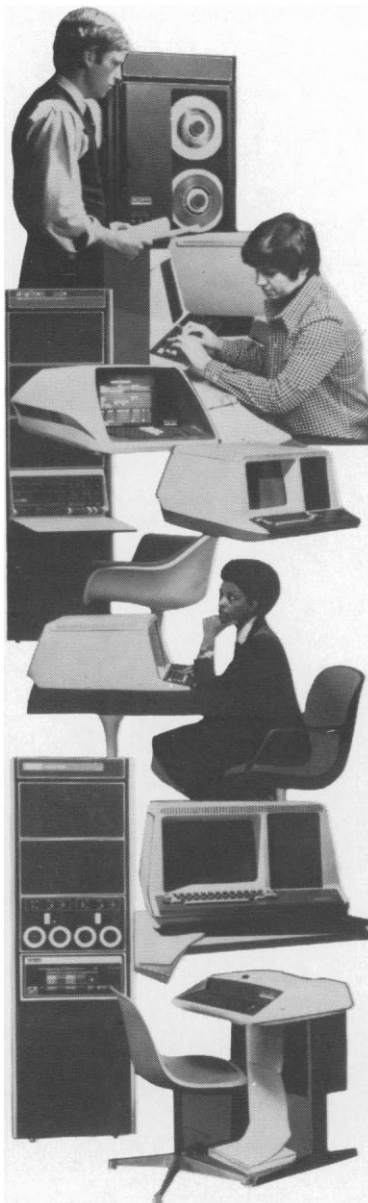
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