

POSITIONS OPEN

ANATOMISTS. Tenure-track positions at the assistant professor level available in the Department of Anatomy and the Sanders-Brown Research Center on Aging. Minimum of 2 years of postdoctoral training required. Active research program essential. Grant record desirable. Research areas: general neuroendocrinology, neuroendocrinology of aging, neuroanatomy, and reproductive biology. Teaching in anatomy courses. Send curriculum vitae with detailed description of research goals and three letters of recommendation to: **Dr. M. B. Nikitovitch-Winer, Chairman, Department of Anatomy, University of Kentucky Medical Center, Lexington, Ky. 40536.** *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR—Applications are sought for two positions in the Radiobiology Section of the Department of Therapeutic Radiology. Candidates should have research interests which complement and relate to existing programs in molecular radiobiology, genetics, virology, and tumor biology. Applicants with M.D. or M.D./Ph.D. training are especially encouraged to apply. Address applications to: **William C. Summers, M.D., Ph.D., Radiobiology, Yale University School of Medicine, 333 Cedar Street, New Haven, Connecticut 06510.** Applications must be received by 1 February 1980. *Yale University is an Equal Opportunity/Affirmative Action Employer.*

VISITING ASSISTANT PROFESSORSHIPS (two positions available). Each to teach a nonmajors introductory biology course. Each to collaborate in one of two ongoing research programs: *Drosophila* genetics/biochemistry (**Dr. John Rawls**) or molluscan (*Limax*) neurobiology (**Dr. David J. Prior**). Ph.D. required. Academic year salary plus summer research support available. Reappointment possible to maximum of 4 years. Send curriculum vitae and names of three references by 1 February to either: **Dr. Prior or Dr. Rawls, c/o Search Committee, T. H. Morgan School of Biological Sciences, University of Kentucky, Lexington, Ky. 40506.** *An Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF BIOCHEMISTRY—Applicants should have a Ph.D. in biochemistry, and appropriate postdoctoral training. Research should be in the area of structural and functional organization of the eukaryotic genome, studies of nonhistone chromosomal proteins, regulation, and so forth. Applicants must be well trained in biochemistry and be able to teach medical and graduate students effectively. Send curriculum vitae, summary of present research/projected research program, and names and addresses of three people who may be contacted for reference to: **Dr. F. P. Inman, P.O. Box 19930A, College of Medicine, East Tennessee State University, Johnson City, Tenn. 37601.** Position open 1 April 1980. *An Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSORSHIPS IN BIOLOGICAL SCIENCE

Applications are sought for tenure-track positions at the assistant professor level in any area of biological science. Applicants are expected to have a commitment to undergraduate teaching and to have a strong interest and record in research. The Ph.D. degree is required and postdoctoral experience is preferred.

Send curriculum vitae, selected reprints, and telephone numbers of three references to:

**Chairman, Search Committee
Department of Biology
Texas A & M University
College Station, Texas 77843**

Deadline for receipt of applications is 28 February 1980.

Texas A & M is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR DEPARTMENT OF ORTHOPAEDIC SURGERY UNIVERSITY OF PENNSYLVANIA

Applications are being accepted for a full-time faculty position at the assistant professor level. Qualifications required are Board-certification/eligibility, training in basic research, special interest in joint reconstruction and metabolic bone disease, and willingness to spend up to one-half time in basic cartilage research. Excellent facilities, salary, and fringe benefits. For further information please contact: **Carl T. Brighton, M.D., Ph.D., Department of Orthopaedic Surgery, 3400 Spruce Street, Philadelphia, Pa. 19104; telephone: 215-662-3350.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

UNIVERSITY OF KENTUCKY SANDERS-BROWN RESEARCH CENTER ON AGING/DEPARTMENT OF BIOCHEMISTRY

A tenure-track faculty position is available as **assistant or associate professor of biochemistry** and member of the Sanders-Brown Research Center on Aging. The individual should be committed to develop a research program with a biochemical approach to the study of aging. Special consideration will be given to those with interests in brain peptides or the nutritional impact on biochemical mechanisms underlying the aging process. The individual is expected to participate in the teaching programs of the Department of Biochemistry offered to medical, graduate, and undergraduate students. The recently constituted Sanders-Brown Research Center on Aging is located in a new research building which includes a barrier animal facility designed for long-term aging studies.

Send résumé, including nature of future research interests and names of three references, to:

**Dr. R. L. Lester, Chairman
Department of Biochemistry
College of Medicine
University of Kentucky
Lexington, Kentucky 40536**

Deadline for application is 4 February 1980.

An Equal Opportunity/Affirmative Action Employer

The Department of Rhetoric and Communication at State University of New York at Albany (SUNYA) is seeking one, possibly two, qualified applicants for **ASSISTANT PROFESSOR** (tenure-track positions in communication theory/research). Salary: \$14,500 to \$18,000, depending on experience and credentials. Ph.D., publications relevant to communication science. Beginning fall 1980. Send résumé to: **David Kaufer, Assistant Professor, Chair, Search Committee, Department of Rhetoric and Communication, SUNYA, Albany, N.Y. 12222.** *SUNYA is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR, INORGANIC OR BIOCHEMISTRY, beginning 15 August 1980. Must have interest and experience in modern analytical chemistry to aid departmental teaching and research. Only recent Ph.D., or those who have fulfilled all degree requirements by the above date will be considered. Major emphasis on undergraduate teaching. Research with M.S. students expected. A résumé, three reference letters, and a summary of research plans must be received before 28 January 1980 by: **Dr. B. L. Fox, Chemistry Department, University of Dayton, Dayton, Ohio 45469.** *The University of Dayton is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF MICROBIOLOGY. Ph.D. and/or M.D. and a minimum of 2 years of postgraduate research experience required, to participate in program of instruction in bacteriology for medical students. Tenure-track position beginning August 1980; salary dependent upon training and experience. Appointee will be expected to develop an active research program and to direct graduate student research. Send résumé and names of three references to: **Dwayne C. Savage, Department of Microbiology, University of Illinois, Urbana, Ill. 61801** by 10 February 1980. *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

BIOANTHROPOLOGIST. Tenure-track assistant professorship available 1 September 1980 for bioanthropologist specializing in quantitative and/or morphological genetics. Must be prepared to teach comparative primate and human gross anatomy, and human and primate genetics. Ph.D. required. Send three letters of recommendation and curriculum vitae by 1 February to: **Donald S. Sade, Anthropology, Northwestern University, Evanston, Ill. 60201.** *An Equal Opportunity/Affirmative Action Employer.*

BIOCHEMISTRY

Anticipated openings for September 1980. Tenure-track position at assistant professor level. Research interest in nucleic acids or enzymology preferred. Teaching responsibilities may include general chemistry and organic chemistry in addition to biochemistry at undergraduate and graduate levels. Send curriculum vitae, description of research interests, and three letters of reference to: **Professor N. Tooney, Department of Chemistry, POLYTECHNIC INSTITUTE OF NEW YORK, 333 Jay Street, Brooklyn, N.Y. 11201.** *An Equal Opportunity Employer, M/F/V/H.*

POSITIONS OPEN

The **Department of Neurosciences**, School of Medicine, University of California, San Diego, is seeking qualified candidates (M.D. or Ph.D.) for a full-time tenure-track position at the **ASSISTANT PROFESSOR** level available July 1980 or 1981. Candidates will be expected to establish a strong research program in one of the following general areas: systems and developmental neuroanatomy, developmental neurobiology, neuropharmacology, or neuroendocrinology. The position requires teaching in a specialty area at the graduate level and participation in undergraduate medical student instruction. Salary is competitive nationally. Send curriculum vitae, bibliography, and an outline of professional research interests to: **Search Committee, Department of Neurosciences, M008, University of California, San Diego, La Jolla, Calif. 92093.** *The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.*

VACANCY ASSISTANT PROGRAM DIRECTOR (FISHERIES)

The Office of Research and Development, National Oceanic and Atmospheric Administration (NOAA), has announced the vacancy of **assistant program director (fisheries)** within the Division of Living Resources, Office of Sea Grant (OSG). The OSG awards federal grant funds on a matching basis to support individual projects, coherent assemblages of projects, and larger institutional programs containing projects in marine education, training, research, and advisory services. This is an exciting and challenging opportunity for an individual with demonstrated professional knowledge and expertise in either marine zoology, fisheries biology and technology, or biological oceanography. Considerable travel is involved in this position.

Salary: The salary range for the position is GS-13/14, \$29,375 to \$45,126, depending upon current status.

Application: Interested persons should send U.S. Standard Form 171, Personal Qualifications, Statement, to: **Claudia P. Brooks, Personnel Management Specialist, Office of Personnel, MB/PERLL, NOAA, 6001 Executive Boulevard, Rockville, Maryland 20852** by 2 January 1980. *The Department of Commerce is an Equal Opportunity Employer.*

AMES LABORATORY ASSOCIATE CHEMIST

Individual needed to initiate a new program developing biochemical sensors for carcinogens. A Ph.D. in biochemistry, organic chemistry, or analytical chemistry of immobilized enzymes is required. Should have at least 3 years of research experience in protein chemistry or enzymology. Preference will be given to candidates with research in luminescence spectroscopy of biochemical systems. Salary range: \$18,853 to \$27,282 per year.

Qualified applicants please submit complete résumés to:

**Personnel Office
Ames Laboratory
127 Spedding Hall
Iowa State University
Ames, Iowa 50011**

An Equal Opportunity Employer

BASIC CANCER RESEARCH SCIENTISTS

The Mid-America Cancer Center at the University of Kansas is seeking research scientists to conduct basic cancer research with particular attention to areas relating to carcinogenesis. Ample opportunities exist to interface with scientists in other disciplines involved in cancer research. Excellent research space and start-up funding available. Scientists with proven track record are invited to apply by writing and providing curriculum vitae to:

**Dr. C. C. Cheng
Chairman, Search Committee
Mid-America Cancer Center
39th and Rainbow Boulevard
Kansas City, Kansas 66103**

An Equal Opportunity/Affirmative Action Institution

BIOLOGIST—Ph.D. to teach courses in developmental biology, histophysiology, and portions of general biology. Rank of assistant professor. Curriculum vitae, transcripts, and three letters of reference should be sent before 15 February to: **Banshi D. Bhatt, Acting Chairman, Biology Department, Russell Sage College, Troy, N.Y. 12180.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

BIOCHEMIST/MOLECULAR BIOLOGIST, assistant professor, tenure-track. Beginning August 1980. Ph.D. and postdoctoral or equivalent professional experience required. Duties include graduate and undergraduate teaching and conducting research in the general area of biochemistry/molecular biology. Preference will be given to individuals who can take advantage of the Institute's role as a Midwest center for science and technology with close ties to local industry and who have basic research interests in either genetic engineering, enzymology, macromolecules, or fermentation. Candidates should submit curriculum vitae including a statement of research plans and arrange for the transmission of three letters of recommendation by 15 February 1980 to: **Professor Dale Webster, Chairman of Search Committee, Department of Biology, Illinois Institute of Technology, Chicago, Ill. 60616.**

Illinois Institute of Technology is an Equal Opportunity/Affirmative Action Employer.

THE DEPARTMENT OF BIOLOGICAL SCIENCES OF HUNTER COLLEGE, City University of New York (CUNY), welcomes applicants for a tenure-track faculty position. Applicants with expertise in any of the following areas will be favored: ecology, physiological ecology (plant or animal), population biology/evolution, and plant physiology/virology. The candidate should have postdoctoral experience and is expected to establish a research program in addition to teaching duties. Send curriculum vitae, names of three references, and a statement of career goals to: **Dr. C. Ceccarini, Chairperson, Search Committee, Department of Biological Sciences, Hunter College, CUNY, 695 Park Avenue, New York, N.Y., 10021.** An Equal Opportunity/Affirmative Action Employer.

BIOLOGIST, Ph.D., sought by public interest agency to provide technical assistance to professional staff. Agency analyzes data, reviews pollution permits, testifies, litigates, and publishes informative material. Salary range: \$15,000 to \$17,000. Applicant should be able to direct own efforts, be capable of critical analysis of water quality situations, and be skilled at interacting with the public, public agencies and lawyers, engineers, and conservationists. Send curriculum vitae and references to: **Richard Robbins, Lake Michigan Federation, 53 West Jackson Boulevard, Chicago, Ill. 60604.**

CELLULAR PHYSIOLOGIST. The Department of Physiology and Biophysics, in the College of Veterinary Medicine and Biomedical Sciences at Colorado State University (CSU), has a position for a regular faculty member with research interests in mammalian cellular physiology. A Ph.D. degree, or its equivalent, is required. This position will involve teaching cell physiology and cellular and molecular biology courses at the graduate and undergraduate levels and maintaining an active research program. The individual should have demonstrated excellence in teaching and research capability and be willing to collaborate with others in the department. Rank and salary will be dependent upon previous experience. Deadline for applications is 15 February 1980. Applicants should send curriculum vitae and the names of three references to: **Dr. Gordon Niswender, Chairman, Search Committee, Department of Physiology and Biophysics, Colorado State University, Fort Collins, Colo. 80523.** CSU is an Equal Opportunity/Title IX Employer. Equal Opportunity Office: 314 Student Services Building.

CHAIRPERSON Department of Biochemistry The Medical Center University of Alabama in Birmingham

Applications are invited for the position of professor and chairperson. Department of Biochemistry, Schools of Medicine and Dentistry, University of Alabama in Birmingham. This department has teaching responsibility for graduate students in biochemistry and for medical, dental, and optometry students. We seek a candidate with a distinguished record of research and teaching. Preference will be given to an individual who will provide leadership for the development of excellent research and training programs. Deadline for receipt of applications is 31 January 1980. Applications should be directed to:

**Charles E. Bugg, Ph.D., Chairman
Search Committee for the
Department of Biochemistry
Room 247, Lyons-Harrison Research Building
Birmingham, Alabama 35294**

The University of Alabama in Birmingham is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ROCHESTER INSTITUTE OF TECHNOLOGY (RIT)

BIOLOGY FACULTY POSITION—Assistant professor, Ph.D.—vertebrate physiology. Teaching experience desired. To teach comparative physiology and advanced physiology to majors and human biology courses to nonmajors. Opportunity to develop course in area of competency.

Funding anticipated for appointment starting 1 September 1980. Send curriculum vitae, three letters of recommendation, and transcripts (or course history) to:

**Head, Department of Biology
Rochester Institute of Technology
One Lomb Memorial Drive
Rochester, New York 14623**

Closing date for application: 15 February 1980.

RIT is an Equal Opportunity/Affirmative Action Employer, M/F.

BOTANIST, Ph.D., some teaching experience highly desirable. Must have strong interest in undergraduate education. Team-teach two introductory courses (plants and human affairs; foundations of the agricultural sciences); sole responsibility for two advanced courses (plant anatomy/physiology; plant pathology/mycology). Must be willing to teach other courses as departmental needs change. Send transcripts, résumé, statement of teaching competencies and research interests, and three letters of recommendation to: **Dr. Preston Adams, Department of Botany and Bacteriology, DePauw University, Greencastle, Indiana 46135.** Applications received by 1 February will receive fullest consideration.

DePauw University is an Affirmative Action/Equal Opportunity Employer.

CHAIR OF BIOCHEMISTRY

Rush University, College of Health Sciences, invites applications for the **Chair of Biochemistry**. Applicants should have an established reputation in investigation and teaching and an active ongoing research program. Ph.D. or M.D. is required. Administrative experience is desirable.

The Department of Biochemistry is part of a major academic medical center whose components include the three colleges of Rush University, Presbyterian-St. Luke's Hospital with 873 beds, the Sheridan Road Pavilion with 178 beds, and the Johnston R. Bowman Health Center for the Elderly with 176 beds. Extensive programs in research, education, patient care, and community service utilize the facilities of all Medical Center components.

The Department of Biochemistry is expected to fulfill basic and applied science expectations in the Medical Center. The department is a major site for active research in basic and clinical biochemistry; it supplies basic science instruction to students of all colleges; it is expected to develop a Ph.D. program in biochemistry within the Graduate School; it is responsible for patient care support through its management of the Medical Center's clinical chemistry laboratories.

For further information, please contact: **Dr. Paul E. Carson, Chairperson of the Biochemistry Search Committee, c/o Department of Pharmacology, Rush Presbyterian-St. Luke's Medical Center, 1753 West Congress Parkway, Chicago, Illinois 60612.**

Rush University is an Equal Opportunity/Affirmative Action Employer.

CHAIRPERSON OF MEDICINE

The University of Maryland School of Medicine seeks qualified candidates for appointment as chairperson of the Department of Medicine. Successful candidate will assume the leadership of the administration of the department's patient care, teaching, and research activities, and applicants should be suitably qualified. Letters expressing interest, accompanied by curriculum vitae, should be sent to: **Dr. Joseph Whitley, Department of Diagnostic Radiology, University of Maryland Hospital, 22 South Greene Street, Baltimore, Maryland 21201.**

An Equal Opportunity/Affirmative Action Employer

CYTOGENETICIST—To perform karyotypic analyses on cultured cells and conduct related research. Minimum requirement: Ph.D. degree and some evidence of research capability. Modern laboratory facilities and excellent fringe benefits, including fully paid hospitalization, disability, and life insurance. Send résumé and salary requirements to: **Mrs. B. A. Brandon, American Type Culture Collection, 12301 Parklawn Drive, Rockville, Maryland 20852.** Equal Opportunity Employer, M/F.

POSITIONS OPEN

BIOMEDICAL ENGINEER Department of Respiratory Therapy

B.S. required, M.S. preferred in biomedical engineering; 3 to 5 years of experience required. Will be responsible for all electromedical equipment used in patient care, including its distribution and calibration. Will interface with a variety of hospital, service, and manufacturing personnel. Will be responsible for maintenance and repair of equipment in accordance with J.C.A.H. standards. Excellent salary and comprehensive benefits are offered. For an appointment, please telephone **Catherine Risk at 617-734-6608**, or forward résumé to: **Personnel Department, CHILDREN'S HOSPITAL MEDICAL CENTER—BOSTON, 300 Longwood Avenue, Boston, Mass. 02115.** An Affirmative Action/Equal Opportunity Employer.

CHAIRPERSON

Full-time university faculty position, to assume leadership of the Department of Clinical Psychology, establish research programs in neurobiology/neuropsychology and experimental psychopathology, and actively participate in the instructional programs of the university. Candidates must have a Ph.D. in psychology. Postdoctoral training in neurobiology/neuropsychology preferred. Established research record, teaching, and clinical and administrative experience required.

Faculty rank and salary appropriate to credentials. *Affirmative Action/Equal Opportunity Employer.*

Send inquiry and curriculum vitae to:

**Michael Alan Taylor, M.D., Chairman
Search Committee
Department of Psychiatry and Behavioral Sciences
University of Health Sciences/
The Chicago Medical School
Building 50
North Chicago, Illinois 60064**

CHIEF, CHEMICAL BRANCH, RESEARCH DIVISION. The Chemical Systems Laboratory, Aberdeen Proving Ground, Md., is recruiting for a **Supervisory Research Chemist** to direct, coordinate, and conduct basic and applied research studies related to chemical defense systems. This includes organic synthesis, physical-organic chemistry, physical property determination and surface chemistry, as well as a contract program.

Candidates should have an advanced degree (Ph.D. in chemistry or equivalent) and at least 3 years of professional experience in multidisciplinary aspects of chemistry, including scientific leadership, managerial experience, publications, presentations, training, and honors.

This is a career Civil Service position at the GS-15 level; salary range: \$40,832 to \$47,500 per annum. Submit résumé or Personal Qualification Statement (SF 171) to: **Department of Army, Civilian Personnel Division, Attention: Ms. Budnick, Aberdeen Proving Ground, Md. 21005.**

An Equal Opportunity Employer

DEAN, COLLEGE OF MEDICINE. The East Tennessee State University (ETSU) College of Medicine is seeking applications and nominations for the position of Dean of the College of Medicine. To qualify for consideration the candidate should possess a doctorate in medicine and/or philosophy in an appropriate science basic to medicine (or its equivalent), and other professional recognition and experience related to medical education. Salary will depend on qualifications and experience and will be competitive with other colleges of medicine in the region and nation. The vacancy should be filled not later than 1 July 1980. Applications should include complete curriculum vitae, three references, and a short essay (no longer than four typed double-spaced pages) on your academic philosophy and the place of a strong College of Medicine in the larger university community. Review of applications will begin immediately and will continue until the position is filled. The ETSU College of Medicine is a developing community-based, primary care-oriented medical school associated with the Veterans Administration under the Teague-Cranston Health Manpower Act of 1972. A second class of 32 students is currently enrolled, and the school is planned for classes of 72 medical students plus graduate students in sciences basic to medicine. Applications and requests for further information should be directed to:

**Dr. Arthur H. DeRosier, Jr., President
East Tennessee State University
Johnson City, Tenn. 37601**

Applications of women and minority candidates are encouraged. East Tennessee State University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DEAN, SCHOOL OF PUBLIC HEALTH University of California, Los Angeles Los Angeles, Calif. 90024

The School of Public Health is a single-department school, within which there are six divisions: Behavioral Sciences and Health Education; Biostatistics; Environmental and Nutritional Sciences; Epidemiology; Health Services; and Population, Family, and International Health. The school offers four graduate degree programs (M.S., M.P.H., Ph.D., and Dr.P.H.) and one undergraduate (B.S.) for more than 600 students; it has 40 regular faculty positions.

Acting under delegated authority, the dean is responsible for the academic and administrative operation of the school, including the preparation of the school budget, allocation of resources, personnel review, student counseling, and development of programs. In addition to demonstrated interest in all areas of public health, applicants should have administrative qualifications appropriate for appointment to the rank of full professor. Salary will be commensurate with academic background and experience. The starting date is flexible, but should be as early as possible in the 1980-1981 academic year.

Please send nominations or letters of application with complete curriculum vitae, bibliography, and names of three references by 1 March 1980, to: Dean's Search Committee, c/o Ann Laughlin, 3135 Murphy Hall, University of California, Los Angeles, Calif. 90024.

The University is an Equal Opportunity/Affirmative Action Employer, M/F.

SPECTROSCOPY CENTER DIRECTOR AND PROFESSOR. The Ohio State University expects to fill a tenure-track faculty position during the 1980-1981 academic year. The person is responsible for establishing and directing a campus-wide instrumentation center to service the chemistry major instrumentation needs of several departments (for example, Chemistry, Pharmacy, and Biochemistry). The highest priorities for equipment are superconducting NMR's, mass spectrometers, and a computer network to link the instruments with the major user areas. The director's position is one-half time; in addition, the person will have a half-time appointment in the appropriate academic department. High scientific productivity in an area of spectroscopy as well as interest and excellence in teaching are essential. Preference will be given to a person with substantial research experience in either NMR or mass spectrometry. Appointment to full professor rank is expected; salary is for 12 months and competitive. All applicants should submit: (i) a résumé, (ii) a summary of research interest, (iii) reprints of representative papers, and (iv) evidence of management or administrative experience. In addition, list three persons who could be contacted for recommendations. Please submit applications to: Search Committee, c/o Dr. Jules LaPidus, Vice Provost for Research, The Ohio State University, 230 North Oval Mall, Columbus, Ohio 43210. Deadline for completed applications: 1 February 1980. *The Ohio State University is an Affirmative Action/Equal Opportunity Employer.*

ECONOMIC GEOGRAPHER. Assistant or associate professor, tenure-track, fall 1980. Must have quantitative expertise and be well grounded in spatial aspects of global economic activities. Urban and/or environmental management interests are welcomed. Ph.D. required; teaching experience preferred. Salary commensurate with qualifications. Submit curriculum vitae and names of three references by 15 January 1980 to: Tom McKnight, Chair, Geography Department, University of California, Los Angeles, Calif. 90024.

GEOMORPHOLOGIST OR CLIMATOLOGIST. Assistant professor, tenure-track, fall 1980. Remote sensing expertise is desirable. Ph.D. required; teaching experience preferred. Salary commensurate with qualifications. Submit curriculum vitae and names of three references by 15 January 1980 to: Tom McKnight, Chair, Geography Department, University of California, Los Angeles, Calif. 90024.

LECTURER IN ECOSYSTEM ANALYSIS AND CONSERVATION. One-year appointment with possibility of renewal. Fall 1980. Salary is approximately \$17,000. Ph.D. required. Applications invited from biogeographers, ecologists, and physical geographers. Submit curriculum vitae and names of three references by 15 January 1980 to: Tom McKnight, Chair, Geography Department, University of California, Los Angeles, Calif. 90024.

POSITIONS OPEN

FACULTY POSITION

DIRECTOR, DIVISION OF COMPARATIVE PATHOLOGY (change in application deadline). The University of Florida, Department of Pathology, serving the Colleges of Veterinary Medicine and Medicine, seeks a director for its Division of Comparative Pathology. Division has responsibility for service pathology and teaching programs of College of Veterinary Medicine, joint graduate programs, research, and research training in experimental pathology. Applicants should have D.V.M. degree, established research productivity in some area of experimental pathology, and appropriate leadership skills. Recruiting deadline is 1 January 1980 or thereafter until a qualified candidate is identified. Rank and salary are dependent upon training and experience. Apply to: Richard T. Smith, M.D., Department of Pathology, Box J-275, College of Medicine, University of Florida, Gainesville, Florida 32610.

Equal Opportunity/Affirmative Action Employer

DIRECTOR, GRAY FRESHWATER BIOLOGICAL INSTITUTE

Applicants must have an internationally recognized research program dealing with fundamental biological processes pertinent to freshwater environments. The specific area of research is open, but preference will be given to those candidates whose research involves a combination of molecular and ecological perspectives. The applicant must have substantial integrative and administrative skills. He/she will be expected to hire at least one more permanent faculty member and to attract to the institute visiting scholars and postbaccalaureate students. It is expected that the overall research effort at the Gray Institute will be developed by the successful applicant in a fashion that takes advantage of existing, unique strengths in molecular approaches to freshwater research while building bridges to ecological, limnological, and other researchers throughout the University of Minnesota. Skill at participating in, or otherwise fostering, effective interaction with the public for educational and fund-raising purposes is also desired.

Applications and nominations (including curriculum vitae, names of references, and a list of publications) should be sent to: Office of the Dean, College of Biological Sciences, University of Minnesota, 1475 Gortner Avenue, St. Paul, Minn. 55108.

An Equal Opportunity Educator and Employer

OPPORTUNITY FOR RESEARCH EMPLOYMENT IN GREECE

Applications are invited for the position of **DIRECTOR** of the Institute of Organic Chemistry of the National Hellenic Research Foundation (NHRF), Athens, Greece.

Candidates should be leading authorities in the field of organic chemistry with substantial research records and must be experienced in the administration of R & D.

The salary of the directors of Institutes of the NHRF corresponds to that of full professors of Greek universities.

Deadline for applications is 4 January 1980. Detailed curriculum vitae should be sent to: Professor A. Kontaratos, Administrating Director, National Hellenic Research Foundation, 48 Vassileos Constantinou Avenue, Athens 501/1, Greece.

EDITOR

For staff of multidiscipline, monthly scientific journal. Ph.D. or equivalent in some field of physical or biological science and at least 2 years of independent research experience required. Some editorial experience preferred. Excellent command of English essential. Send curriculum vitae to: Dr. B. K. Forscher, Managing Editor, Proceedings Office, National Academy of Sciences, 2101 Constitution Avenue, NW, Washington, D.C. 20418. *An Equal Opportunity Employer.*

ENVIRONMENTAL MONITORING

An individual with a background in biological or physical sciences or engineering is wanted to direct the environmental monitoring program for the laboratories of the Frederick Cancer Research Center. Candidates should have demonstrated research competence, and should be experienced in sampling and analytical techniques for biological or chemical agents, preferably both.

Please send a résumé with the names of three references to: R. A. Pendleton, Environmental Control and Research Laboratory, Frederick Cancer Research Center, P.O. Box B, Frederick, Md. 21701.

POSITIONS OPEN

DIRECTOR VACANCY OFFICE OF ATMOSPHERIC PROGRAMS

The Office of Research and Development, National Oceanic and Atmospheric Administration (NOAA), has announced the vacancy of **director** for its Office of Atmospheric Programs in Rockville, Maryland. The Office of Research and Development is responsible for administering an integrated program of research, technology, and advanced engineering development and transfer relating to the oceans, the Great Lakes, the U.S. coastal waters, the lower and upper atmosphere, and the solar and terrestrial environment to increase understanding of the environment and human impact thereon, and thus provide the scientific basis for improved services.

This is an exciting and challenging opportunity for an individual with demonstrated knowledge of various scientific disciplines pertinent to NOAA atmospheric research programs. These research fields include: the solar-terrestrial environment, the stratosphere, weather, atmospheric remote sensing, weather modification, climate, and technology transfer. In addition, the incumbent must have national reputation in atmospheric sciences or related fields and significant experience in the management of atmospheric science programs. The incumbent will serve as principal staff adviser to the assistant administrator for research and development on all atmospheric R & D activities in NOAA.

Salary: this position will be filled under the new Senior Executive Service (SES). Application: interested persons should send U.S. Standard Form 171, Personal Qualification Statement, to: Claudia Brooks, Personnel Management Specialist, Office of Personnel, AD-411, NOAA, 6001 Executive Boulevard, Rockville, Maryland 20852, by 31 December 1979. *The Department of Commerce is an Equal Opportunity Employer.*

Position open in research laboratory for experienced and creative **EM TECHNICIAN** who would enjoy mixing routine work with the development of specialized techniques. GS-7 to GS-9 (\$14,000 to \$17,000 per year); U.S. citizens only. Telephone or write: E. Reaven, Ph.D. (182B), VA Medical Center, 3801 Miranda Avenue, Palo Alto, Calif. 94304; telephone: 415-497-5534.

UNIVERSITY OF CINCINNATI COLLEGE OF MEDICINE FACULTY APPOINTMENT IN MOLECULAR GENETICS

The Department of Biological Chemistry is presently recruiting a faculty member with outstanding qualifications in the area of eukaryotic molecular genetics. The position is at the assistant or associate professor level, depending upon experience.

All applicants should have at least 2 years of postdoctoral training, proven research ability, and experience and interest in teaching biochemistry. Applicants will be expected to develop independent research programs and supervise the training of Ph.D. candidates. In addition to fundamental research, excellent opportunities exist for collaboration with clinical colleagues on medically oriented problems.

Applicants should send a résumé and a detailed outline of future research plans to: Dr. Harry Rudney, Director, Department of Biological Chemistry (522), University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, Ohio 45267.

We are an Equal Opportunity Employer

TWO FACULTY POSITIONS IN PLANT GENETICS

Position 1: rank and salary open, commensurate with experience. Position 2: assistant to associate professor, commensurate with experience. Ph.D. in plant genetics with past record indicating excellence and productivity required. Teaching responsibilities in the departmental curriculum. Both positions are 75 percent research and 25 percent teaching; position 1 with responsibility for processing tomato genetics and breeding program; position 2 with responsibility for lettuce genetics and breeding program. Preferred research areas include basic plant genetics, genetics of host-parasite interactions, molecular genetics of development, and physiological genetics of stress. Submit curriculum vitae with complete lists of publications and courses taught, reprints, statement of career goals, any position preferences, and the names of three references with areas competent to evaluate to: Dr. L. Rappaport, Chair, Department of Vegetable Crops, University of California, Davis, Calif. 95616 prior to 15 March 1980. *The University of California is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.*

POSITIONS OPEN

Department of Environmental Engineering Sciences
University of Florida
Gainesville, Florida 32611

ENVIRONMENTAL CHEMIST. Visiting assistant professor position available 7 January to 6 September 1980. Doctorate in environmental chemistry or closely related field with academic background or experience in environmental engineering required. Teach courses in environmental chemistry and water and wastewater analysis. Research interest in water and wastewater treatment processes, trace organic or chemistry of natural waters desirable. Application deadline: 4 January 1980. Send résumé and three recommendations to: **P. L. Brezonik.**

Affirmative Action/Equal Opportunity Employer

FACULTY POSITIONS— OCCUPATIONAL SAFETY, ERGONOMICS, NOISE EVALUATION AND CONTROL, INDUSTRIAL VENTILATION

The Institute of Environmental Health, University of Cincinnati, has three tenure-track positions in occupational safety and in industrial hygiene available immediately. Appointments may be at the **assistant** or **associate professor** level, depending upon qualifications. Applicants should have an advanced, preferably a doctoral degree; however, appropriate experience will be considered.

The Institute of Environmental Health (the Kettering Laboratory) encompasses a multidisciplinary research and training effort involving a full-time faculty of 60 scientists. The program in industrial hygiene and safety includes graduate training leading to the M.S. or Ph.D. degree, short courses, seminars and workshops for practitioners, and training for workers and employers. The applicant will be expected to participate in research programs of the Institute and develop his/her own research. Laboratory space and funding for research will be provided.

The Institute is a designated Educational Resource Center of the National Institute for Occupational Safety and Health, has a New Directions Grant from the Occupational Safety and Health Administration, and is a Center for the Study of the Human Environment supported by the National Institute of Environmental Health Sciences.

Salary will be negotiated, commensurate with qualifications and experience. Candidates should send curriculum vitae and supporting material to: **Dr. Klaus Willeke, Chairman, Search Committee, Institute of Environmental Health, University of Cincinnati, 3223 Eden Avenue, Cincinnati, Ohio 45267.**
An Affirmative Action/Equal Opportunity Employer

FACULTY POSITION UNIVERSITY OF WATERLOO

EPIDEMIOLOGIST at assistant to associate professor level. Ph.D., M.D., or equivalent, and substantive interests in the biological mechanisms underlying disease processes as applied to primary/secondary disease prevention. Applicants should have an established research record and be willing to teach one or more of the following at the undergraduate and graduate level: epidemiology, disease process, and community health. The Department of Health Studies has active, interdisciplinary programs which focus on the study of health behavior, determinants of risk factors, health behavior modification, and evaluation of health behavior change programs. Appointment to start, pending funding, 1 September 1980 or sooner. Apply to: **J. A. Best, Ph.D., Chairman, Department of Health Studies, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1.**

INFORMATION SCIENTIST

The Florida Institute of Phosphate Research, an agency of the state of Florida, has a challenging opportunity for an information scientist. The applicant must have a B.A. or B.S. degree in a scientific or engineering discipline. In addition, 3 years of relevant job experience and/or graduate training in the information sciences is required.

This individual will be responsible for establishing and administering the Information Clearing House and Library of the Institute and coordinating the public dissemination of the Institute's printed material.

Application deadline: 31 January 1980. Please submit detailed résumé to: **Dr. D. P. Borris, Executive Director, Florida Institute of Phosphate Research, P.O. Box 877, Bartow, Florida 33830.**

Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

FACULTY POSITION—Applications are invited for persons with a Ph.D. degree in animal breeding. Responsibilities include graduate and undergraduate teaching, and research in swine breeding and population genetics. An understanding of swine production and supporting work in physiology are desirable. A strong interest in teaching and research along with good communication skills are essential. Apply with résumé to: **Dr. S. A. Ewing, Head, Department of Animal Science, Iowa State University, Ames, Iowa 50011.**

Affirmative Action/Equal Opportunity Employer

GROSS ANATOMIST DEPARTMENT OF BIOMEDICAL SCIENCES

Southern Illinois University at Edwardsville (SIUE), School of Dental Medicine, invites applications for a full-time faculty position, open 1 July 1980, in the Section of Anatomical Sciences of the Department of Biomedical Sciences. Salary and rank commensurate with training and experience. Ph.D. or equivalent in the human health sciences, with demonstrated research ability required. The individual filling this position will assume the major responsibility for teaching gross anatomy to dental students with the Anatomy Section comprised also of a neuroanatomist, an histologist, and a developmental anatomist, and will be expected to actively pursue research of own choice.

Applications will be received until 1 February 1980.

As an Affirmative Action Employer, SIUE offers Equal Employment Opportunity without regard to race, color, creed or religion, age, sex, national origin, or handicap. Send curriculum vitae to: **Dr. Henry M. Cherrick, Dean, School of Dental Medicine, Southern Illinois University at Edwardsville, Edwardsville, Ill. 62026.**

The University of Texas Medical Branch at Galveston, Texas, is seeking a **HEALTH PHYSICIST** to conduct the radiation safety program for a large medical center. The applicant should have a M.S. degree in health physics or a related field and several years of pertinent experience in a medical institution. Teaching experience is highly desirable. Salary is negotiable, depending on qualifications. We are an Equal Opportunity/Affirmative Action Employer, M/F/H. Reply to: **Personnel Office, P.O. Box 146, University of Texas Medical Branch, Galveston, Texas 77550, attention: Leo Wade, Jr., Ph.D.**

INSTRUCTOR OF BIOCHEMISTRY. To teach biochemistry and collaborate in research localizing and characterizing cytoskeletal elements and contractile proteins in brain subcellular fractions. Experience with Ca^{2+} , synaptosomal, or muscle biochemistry desirable. Send curriculum vitae and names of three references by 31 January 1980 to: **Dr. Joseph A. Babitch, Chemistry Department, Texas Christian University, 2900 South University Drive, Fort Worth, Texas 76129.** *Texas Christian University does not discriminate on the basis of race, creed, color, national origin, sex, age, or handicap. Women and minorities are encouraged to apply.*

LABORATORY CHIEF needed in active Clinical Pharmacology Unit to develop and supervise performance of drug assays for research and special patient care projects; and to participate in originating, conducting, and reporting clinical pharmacology research studies. Ph.D. in a scientific discipline relevant to clinical pharmacology required, with some experience in performing and/or supervising drug assay work, including analysis experience (that is, fluorometry, gas chromatography, radioimmunoassays, and so forth). Salary commensurate with qualifications. Excellent employee benefits. Send detailed résumé with salary requirement in confidence to: **Dr. Roger K. Ferguson, M.D., Room 502 Main Building, Thomas Jefferson University Hospital, 11th and Walnut Streets, Philadelphia, Pa. 19107.** *Equal Opportunity Employer.*

MICROBIAL ECOLOGIST

The Institute of Marine Science at the University of Alaska will fill at the rank of assistant professor a tenure-track position in one of the several areas related to marine microbial processes. The successful applicant will provide evidence of a strong background in fundamentals and of experience related to natural processes. Participation in interdisciplinary studies is encouraged. A letter of application, curriculum vitae, and the names of three references should be sent to: **Dr. Vera Alexander, Acting Director, Institute of Marine Science, University of Alaska, Fairbanks, Alaska 99701.** *The University of Alaska is an Affirmative Action/Equal Opportunity Employer.* Closing date: 6 January 1980.

POSITIONS OPEN

MICROBIAL PHYSIOLOGIST

The Department of Zoology/Microbiology, University of Wisconsin-Milwaukee, is recruiting for an **assistant professor** tenure-track position starting 27 August 1980. A doctoral degree with postdoctoral experience is required. All candidates with experience in microbial physiology will be considered; research interests in the area of photo- or chemolithotrophy are desirable. Responsibilities include supervising M.S. and Ph.D. students, developing an active research program and seeking extramural support, participation in teaching undergraduate courses, and developing an advanced course in his/her area of expertise. Curriculum vitae, a summary of research goals, transcripts, and three letters of professional recommendation may be sent to: **Professor Ethel Sloane, Chairperson, Personnel Committee, Department of Zoology, P.O. Box 413, University of Wisconsin-Milwaukee, Milwaukee, Wis. 53201.** Closing date is 15 February 1980.

The University of Wisconsin-Milwaukee is an Equal Opportunity/Affirmative Action Employer and welcomes applications from all qualified candidates.

Microbiologist, Parasitologist, Universidad del Valle Medical School, Colombia, to help direct teaching and research programs. M.D. or Ph.D. degree, and some Spanish fluency preferred. Colombian wages, but will need outside funding for research activities. Research opportunities in nearby infectious and parasitic disease endemic areas. State teaching hospital, equipped laboratories, auxiliary personnel. Write: **Dr. Alvaro Dueñas, Depto. de Microbiología, Universidad del Valle, A.A. 2188, Cali, Colombia.**

NEUROBIOLOGIST

ASSISTANT PROFESSOR, Ph.D., tenure-track; 15 August 1980. Postdoctoral experience desirable. Research interests in neural basis of behavior. Teaching responsibilities include courses in biology and physiology and graduate course in neurobiology. Send by 15 February, curriculum vitae, reprints, and three letters of reference to:

**Robert Patterson, Chairman
Search Committee
Department of Zoology
Arizona State University
Tempe, Arizona 85281**

Affirmative Action/Equal Opportunity Employer

NEUROSCIENTISTS (two)—VISUAL PHYSIOLOGIST experienced in single unit recording and **NEUROCHEMICAL PHARMACOLOGIST** wanted for interdisciplinary program stressing cellular and functional synaptic pharmacology and development of the brain. Both positions can carry assistant professor appointments at the University of Southern California (USC), depending upon qualifications, and start fall 1980. Applications, including curriculum vitae and names and addresses of three references, should be addressed to: **George N. Donnell, M.D., Professor and Chairman, Department of Pediatrics, USC School of Medicine at Childrens Hospital of Los Angeles, P.O. Box 54700, Terminal Annex, Los Angeles, California 90054.**

USC and Childrens Hospital are Equal Opportunity/Affirmative Action Employers.

ORNITHOLOGIST. The Department of Zoology at North Carolina State University has an opening at the assistant professor level for an ornithologist with research interests in community or population ecology. Ph.D. required and postdoctoral experience preferred. To apply, send résumé, reprints, three letters of recommendation, transcripts, and a statement of research interests to: **Dr. William W. Hassler, Department of Zoology, North Carolina State University, Raleigh, N.C. 27650** by 15 February 1980.

PHYSIOLOGIST, ANATOMIST, NEUROBIOLOGIST. Two or three tenure-track positions anticipated for August 1980, in a department with 37 biology faculty in a university of 22,000 on-campus students. The Ph.D. is required, and productive personal research and the direction of graduate students is expected. To teach some combination of two of these courses per year: human physiology, advanced human physiology, human anatomy and physiology, gross human anatomy, human neurobiology, and neurophysiology. Closing date for applications is 1 February 1980. Send curriculum vitae, statement of research goals, and names and addresses of at least three references to: **Jerrold H. Zar, Chairman, Department of Biological Sciences, Northern Illinois University, DeKalb, Ill. 60115.** *The University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

PHYSICAL OCEANOGRAPHER

Faculty teaching and research position. Institute of Marine Science, University of Alaska, Fairbanks. Research interests should include estuarine, coastal, or open ocean investigations in subpolar or polar oceanography. Participation in interdisciplinary studies is encouraged. Ph.D. degree in physical oceanography is preferred (or its equivalent in training or experience). Rank and salary will be determined by experience. Candidates should send résumés and names of three references to: **Dr. Vera Alexander, Acting Director, Institute of Marine Science, University of Alaska, Fairbanks, Alaska 99701.** *The University of Alaska is an Affirmative Action/Equal Opportunity Employer.* Closing date: 6 January 1980.

POSTDOCTORAL AWARDS IN OCEAN SCIENCE AND ENGINEERING

Woods Hole Oceanographic Institution invites applications for 1-year postdoctoral scholar awards from new and recent doctorates in fields of biology, chemistry, engineering, geology, geophysics, mathematics, meteorology, and physics, as well as oceanography. Recipients of awards are selected on a competitive basis, with primary emphasis placed on research promise.

Fellowship stipend is \$16,500. Appointees are eligible for group health insurance and a modest research budget. Recipients are encouraged to pursue their own research interests independently or in association with resident staff. Completed applications must be received by 1 February 1980 for 1980-1981 awards. Awards will be announced 1 March 1980. Write for application forms to: **Fellowship Committee, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543.**

Equal Opportunity/Affirmative Action Institution

VACANCY EXECUTIVE DIRECTOR RESEARCH AND DEVELOPMENT NOAA

The Office of Research and Development, National Oceanic and Atmospheric Administration (NOAA), has announced the vacancy of **Executive Director to the Assistant Administrator for Research and Development** in Rockville, Maryland.

The Office of Research and Development is responsible for administering an integrated program of research, technology, and advanced engineering development and transfer relating to the oceans, the Great Lakes, the U.S. coastal waters, the lower and upper atmosphere, and the solar and terrestrial environment to increase understanding of the environment and human impact thereon, and thus provide the scientific basis for improved services.

This is an exciting and challenging opportunity for an individual with demonstrated knowledge of various administrative and scientific disciplines pertinent to NOAA research programs. The executive director will be responsible for the day-to-day operations and management of the Office of Research and Development, exercising delegated authority, to interpret and implement policy, including making decisions of a precedent nature and making "de facto" policy without review of the assistant administrator, Research and Development.

The incumbent must have experience in research management, preferably in the fields of atmospheric or oceanic science.

Salary: this position will be filled under the new Senior Executive Service (SES).

Application: interested persons should send U.S. Standard Form 171, Personal Qualifications Statement, to: **Claudia Brooks, Personnel Management Specialist, Office of Personnel, AD-411, NOAA, 6010 Executive Boulevard, Rockville, Maryland 20852** by 14 January 1980. *The Department of Commerce is an Equal Opportunity Employer.*

POSITIONS OPEN

PLANT PHYSIOLOGIST. Research associate to investigate tissue culture propagation of southern pines. One-year appointment with possible renewal. Requires a Ph.D. in botany or a related science and plant tissue culture experience. Available 1 January 1980; salary negotiable. Send résumé and three letters of reference to: **Dr. H. V. Amerson or Dr. R. L. Mott, Department of Botany, North Carolina State University, Raleigh, N.C. 27650.** *An Affirmative Action/Equal Opportunity Employer.*

POPULATION/COMMUNITY ECOLOGIST

Tenure-track assistant professor or instructor position for population/community ecologist with demonstrated excellence in experimental field (or field and laboratory) research. Candidates should be competent in mathematical aspects of ecology and will be expected to present an upper-level course in ecological theory. Other teaching responsibilities will relate to the candidate's area of expertise in association with a graduate/undergraduate program in ecology and evolutionary biology. Candidates must have a Ph.D., potential for excellence in teaching, and ability to develop an independently funded research program and integrate productively with faculty in ecology and evolutionary biology. Applicants should submit a résumé, including research and teaching experience, future research plans, and a list of publications, and have three letters of reference sent by 15 February 1980 to: **Dr. D. H. Morse, Division of Biology and Medicine, Brown University, Providence, R.I. 02912.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS, BIOCHEMISTRY. Two positions to study: (i) oxidative phosphorylation and (ii) glycerophosphate acyltransferases in mitochondria and microsomes in cultured cells and transplantable tumors. Laboratory training in membrane biochemistry and RIA technique [position (i)] and in lipid biochemistry and mammalian cell culture [position (ii)] desirable. Salary: \$12,000 to \$14,000. Please send curriculum vitae, names of three references, and statement of interests to: **M. E. Pullman, The Public Health Research Institute, 455 First Avenue, New York, N.Y. 10016.**

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE, Ph.D. in biochemistry with specialization in enzyme kinetics and/or protein chemistry. Send résumé to:

**Professor ChoKyun Rha
Department of Nutrition and Food Science
Room 56-137
Massachusetts Institute of Technology
Cambridge, Mass. 02139**

Massachusetts Institute of Technology is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL ASSOCIATE

A position is immediately available for nuclear magnetic resonance studies on enzyme structure and function. Relaxation parameters will be used in the presence and absence of paramagnetic ligands for the estimation of ligand and sidechain motion and for measurement of distances between nuclei in bound ligands and in sidechains from paramagnetic probes. Ph.D. in chemistry or biochemistry required and experience in NMR is essential. Background in relaxation theory and its application an advantage. Salary: \$13,000 per year. Send curriculum vitae and names of three references to: **Job Service of Iowa, 1810 Lower Muscatine Road, Iowa City, Iowa 52240, attention: David Seibel.** *The University of Iowa is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOW/PHYSIOLOGY/ NEUROENDOCRINOLOGY

Applications are invited for a position to study physiological relationships between brain and pituitary blood flow with a multidisciplinary team consisting of Dr. R. A. Hawkins, Dr. R. Page, and Dr. M. Hernandez-Perez. Currently emphasis is on the study of regional pituitary and cerebral blood flow and metabolism as it relates to physiological function.

Applications consisting of curriculum vitae and the names and addresses of two referees should be sent to: **Dr. Richard Hawkins, Department of Physiology, The Milton S. Hershey Medical Center, The Pennsylvania State University, Hershey, Pa. 17033.** Salary will be commensurate with qualifications.

An Equal Opportunity Employer

POSTDOCTORAL TRAINING/NUCLEIC ACIDS RESEARCH

Biochemical and genetic approaches are being used to study the structure, function and metabolism (transcription, replication, recombination, repair) of nucleic acids using uracil-containing DNA. Beginning in 1980 or 1981 traineeship appointment for one year, renewable for a second year with Dr. Bruce Duncan. Send curriculum vitae and names of references to:

**M. T. DIXON
PROFESSIONAL STAFFING**

**The Institute for
Cancer Research
7701 Burholme Avenue
Philadelphia, PA 19111**

An Equal Opportunity Employer

DIRECTOR University of California California Primate Research Center Davis, California

Applications and nominations are invited for the directorship of the California Primate Research Center (CPRC), which will become available 1 June 1980. The director is responsible for management of laboratory with 49 core and affiliate doctoral-level scientists, 75 collaborating scientists, and 80 graduate students; overall management of research programs; and negotiation of funding support through contract between the University of California and the Division of Research Resources, National Institutes of Health, and 26 extramural grants and contracts. CPRC research programs relate to selected human health problems for which the nonhuman primate is the animal model of choice and have a common theme of effects of environmental influences. Major programs are in behavioral biology, perinatal biology and reproduction, and respiratory diseases. Primate medicine and primate pathology have research, teaching, and service functions. The colony consists of approximately 2000 nonhuman primates, mainly three species of macaques, two species of baboons, and two New World species.

Each applicant should have demonstrated success in administration, be a scientist of stature who has made significant contributions in a biomedical field, and have an intent to remain active as an investigator. A background in some aspects of primatology is beneficial, but not essential. The director is expected to qualify for and will be appointed to a professorial title in an appropriate department on the Davis Campus.

The University of California is an Affirmative Action/Equal Opportunity Employer. Applicants should submit curriculum vitae with the names of three references to: **Dean W. R. Pritchard, School of Veterinary Medicine, University of California, Davis, Calif. 95616.**

Applications will be accepted through 31 January 1980 or until a suitable candidate is identified.

POSITIONS OPEN

The **DEPARTMENT OF PHARMACOLOGY** at Oral Roberts University is recruiting faculty, preferably at the full or associate professor level. The department desires applicants who are highly qualified to teach both preclinical and clinical pharmacology, and who will engage in research with extramural funding. *The University is an Equal Opportunity/Affirmative Action Employer and a nondenominational private Christian institution.* Ph.D.'s, M.D.'s, and Ph.D.-M.D.'s are invited to send letters of inquiry and curriculum vitae to: **Clinton N. Corder, Ph.D., M.D., Chairman, Department of Pharmacology, Oral Roberts University, 7777 South Lewis, Tulsa, Oklahoma 74171; telephone: 918-492-6161, extension 2332.**

LUNAR AND PLANETARY INSTITUTE POSITIONS AVAILABLE

The Lunar and Planetary Institute is a center for research and research support activities within the lunar, planetary, and terrestrial sciences community, and NASA.

In the near term, the Institute will be filling several permanent and visiting staff science positions in the geosciences. The Institute is located adjacent to the Johnson Space Center (JSC). Opportunities exist for cooperative research or use of JSC facilities and capabilities. Interactions with other NASA centers are also encouraged.

The visiting scientist positions will be filled, in part, as a result of individual research proposals. Visits up to 1 year may be proposed and may be renewable for a second year.

For further information write:

**Director
Lunar and Planetary Institute
3303 NASA Road 1
Houston, Texas 77058**

UNIVERSITY OF CALIFORNIA, IRVINE

Several positions available for **POSTDOCTORAL FELLOWS**, beginning summer 1980, 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, morphogenesis, and stem cell differentiation in hydra (with Dr. H. R. Bode), *Drosophila* (with Dr. P. J. Bryant), or amphibians (with Dr. S. V. Bryant). *The University of California is an Affirmative Action Employer.* Arrange for three letters of reference to be sent, and submit résumé and brief description of research interests and experience to: **Dr. S. V. Bryant, Center for Pathobiology, University of California, Irvine, Irvine, California 92717.**

POSTDOCTORAL FELLOWS to assist the Scientific Committee on Problems of the Environment in studies in one of the following fields: global cycles of nitrogen, biogeochemical cycles, ecotoxicology, or land transformation. The fellow would initially work in Boulder, Colorado, with a longer period of time elsewhere under a SCOPE senior scientist. Non-renewable appointments will be made for 6, 12, or 18 months to begin spring 1980 and must expire by 30 June 1982. Applicants must be U.S. citizens and hold a Ph.D. related to one of the above activities. Further information and application forms may be obtained from: **Gilbert F. White, IBS #6, University of Colorado, Boulder, Colo. 80309.** Applications must be submitted by 15 January. *The University of Colorado is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION in photochemistry and photobiology available for studies of direct and photosensitized ultraviolet light damage to cell membranes and DNA. Ph.D. in organic chemistry and/or biochemistry required. Send curriculum vitae and letters of reference to: **Dr. L. C. Harber, Department of Dermatology, College of Physicians and Surgeons, Columbia University, 630 West 168 Street, New York, New York 10032.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION: Cell Biology. Available 1 April 1980 for study of regulation of DNA replication and functions of tumor antigens in mammalian cells. Background in cell culture required. Training in molecular biology of nucleic acids, animal virology, or somatic cell genetics helpful. Recent Ph.D. preferred. Group includes other postdoctoral fellows and graduate students. Opportunity available for interaction with other groups interested in nucleic acids research. Send curriculum vitae and references to: **Dr. Roger Hand, McGill Cancer Centre, 3655 Drummond, Montreal, Quebec, Canada H3G 1Y6.**

POSITIONS OPEN

Clinical Chemistry Postdoctoral Training Program. The Department of Laboratory Medicine and Pathology, University of Minnesota, has a **POSTDOCTORAL POSITION** available to begin July 1980 which will involve training in all aspects of clinical chemistry service and research, leading to American Board of Clinical Chemistry certification. Applicants should submit curriculum vitae, transcripts, three letters of recommendation, and a short statement of career goals to: **Dr. Larry D. Bowers, Department of Laboratory Medicine and Pathology, University of Minnesota, 420 Delaware Street, SE, Minneapolis, Minn. 55455.** Applications should be received prior to 31 January 1980. *The University of Minnesota is an Equal Opportunity Educator and Employer.*

POSTDOCTORAL POSITION available early 1980 to work on RNA sequence analysis: mitochondrial RNA in mammalian and insect cells; bacterial ribosomal and transfer RNA; animal virus messenger RNA. Salary: \$12,000 to \$15,000. Respond with curriculum vitae and names of three references to: **Dr. Donald T. Dubin, Department of Microbiology, College of Medicine and Dentistry of New Jersey—Rutgers Medical School, P.O. Box 101, Piscataway, New Jersey 08854.** *An Equal Opportunity/Affirmative Action Employer, M/F.*

POSTDOCTORAL POSITION

Immediate opportunity for a Ph.D. biochemist with experience in lipid metabolism to study phospholipid metabolism in the arterial wall and/or bacterial sterol transformations. Send résumé with names of three references to:

**Personnel Office
Attention: Dr. Glen E. Mott, Ph.D.
The University of Texas Health Science Center
at San Antonio
7703 Floyd Curl Drive
San Antonio, Texas 78284**

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION available immediately for research in regulation of protein synthesis by bacteriophage T4; primarily translational control. Background in microbial genetics, immunology, protein purification, or in vitro translation desirable. First-year salary: \$13,000 plus benefits. Send résumé plus three letters of recommendation to: **Dr. John Wiberg, Department of Radiation Biology and Biophysics, University of Rochester School of Medicine, Rochester, N.Y. 14642.** Telephone: 716-275-3841. *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately for research in biological membrane structure employing electron microscopy and selected biophysical techniques. Interest in low-dose, three-dimensional reconstruction by computer analysis desirable. Stipend: \$10,000 to \$13,200. Send curriculum vitae and names of three references to:

**J. D. Robertson, M.D., Ph.D.
Department of Anatomy
Duke University Medical Center
Durham, North Carolina 27710**

POSTDOCTORAL POSITION—PSYCHOPHARMACOLOGY at Temple Medical School, available immediately for a 2-year period for work on the stimulus properties of drugs. Emphasis in laboratory work probably be on improved drug discrimination methods. Localization of discriminable drug action in brain characterization of PCP and on actions of drugs as CSs. Send curriculum vitae and names of references to: **D. A. Overton, EPPI, 3300 Henry Avenue, Philadelphia, Pa. 19129.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION. Immediate opening for Ph.D. in biochemistry, immunology, or a related field to study granulocyte function and the regulation of granulocyte locomotory responses. Starting stipend: \$14,000. Send résumé and names of three references to: **Betty Garrison, Personnel Department, Hartford Hospital, Hartford, Conn. 06115.** *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available to engage in research exploring cell surface receptors for hormones and drugs and the molecular mechanisms for receptor-effector coupling. A Ph.D. in biochemistry or related area is required. Send curriculum vitae and three letters of recommendation to: **Dr. Lee E. Limbird, Department of Pharmacology, Vanderbilt University, Nashville, Tennessee 37232.** *Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITION. Protein chemistry, enzymology. Send detailed résumé and three letters of reference to: **I. B. Wilson, Department of Chemistry, University of Colorado, Boulder, Colorado 80309.** *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately. Research in **molecular mechanism of recombination.** Experience in bacterial and phage genetics or nucleic acid and enzyme biochemistry is desirable. Send résumé and names of three references to: **Gerald R. Smith, Institute of Molecular Biology, University of Oregon, Eugene, Oregon 97403.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION to compare the mechanism of action of fish and bovine chymotrypsins. Available immediately. Experience in transient and steady-state kinetics desirable. Salary: \$12,000 to \$13,000 per annum. Send résumé and three letters of reference to: **Dr. H. O. Hultin, University of Massachusetts Marine Station, Box 128 Lanesville Station, Gloucester, Mass. 01930.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available 1 January 1980 for studies on the development of Na,K-ATPase in brine shrimp nauplii. Applicants should have experience in immunochemistry, isolation of messenger RNA for a specific protein, cell-free protein synthesis, and membrane protein biochemistry. Send curriculum vitae and two letters of recommendation to: **Dr. Lowell E. Hokin, Department of Pharmacology, University of Wisconsin Medical School, Madison, Wisconsin 53706.**

POSTDOCTORAL POSITION available to work for 1 to 2 years on estrogens and progesterone regulation of proliferation and differentiation of cultured endometrial cells. Research will involve applying techniques of cell culture, protein analysis, RIA, cell kinetics, histology, and hormone receptors. Candidates with experience in reproductive biology, experimental endocrinology, and protein chemistry are welcome. Salary: \$11,500 to \$14,000. Send curriculum vitae and names of references to: **Dr. L. E. Gerschenson, Department of Pathology—B216, University of Colorado Health Sciences Center, Denver, Colorado 80262.** *The University of Colorado is an Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE/PHARMACOLOGY—Position available for Ph.D. pharmacologist to investigate the effects of lead in drinking water on energy metabolism and ion transport in kidney tissues in vitro. Will be expected to develop and conduct the experimental work independently. Competitive salary plus excellent benefits. Reply to: **George Van Rossum, Ph.D., Professor, Department of Pharmacology, Temple University Medical School, 3420 North Broad Street, Philadelphia, Pa. 19140.** *Equal Opportunity Employer, M/F*

POSTDOCTORAL RESEARCH ASSOCIATE position available immediately for studies on the structure of fibrinogen and plasma fibronectin (cold-insoluble globulin), their interactions with one another, and with macrophages. A background in biophysics and protein chemistry is desirable. This is a challenging opportunity for an individual who is capable of independent investigation in a programmatic setting. Opportunity for graduate school teaching. Starting salary: \$15,000 plus, depending on experience. Send curriculum vitae plus statement of background and interests to: **Michael W. Mosesson, M.D., Professor of Medicine and Biochemistry, State University of New York, Downstate Medical Center, Brooklyn, N.Y. 11203.**

POSTDOCTORAL RESEARCH POSITION IN NUTRITION

The University of Pennsylvania has a postdoctoral research position available immediately for an individual trained in nutrition research and in the analysis of macro- and micronutrients. This individual will work within an innovative multidisciplinary research team to evaluate trace element requirements and interactions in individuals receiving chemically defined parenteral and enteral nutrition support for a variety of nutrition related diseases. Salary: \$12,000 to \$14,000. Please send curriculum vitae and three letters of recommendation to: **Dr. Lon Crosby, Executive Director, Clinical Nutrition Center, Box 559, University of Pennsylvania Hospital, 3400 Spruce Street, Philadelphia, Pennsylvania 19104.**

The University of Pennsylvania is an Affirmative Action Employer.

Neuropharmacologist / Neurophysiologist Assistant

The Upjohn Company has an opening for a laboratory assistant in the area of Central Nervous System diseases. This individual will assist in neurophysiology and/or neuropharmacology studies to find drugs with useful central nervous system activities. The work will entail surgical preparation of animals, recording of electrical signals and the operation of neurophysiological instruments.

The successful candidate will have an M.S. in Pharmacology or Physiology or a B.S. and a minimum of two years' related experience. Previous experience with electrophysiological techniques, single unit recording, and microiontophoresis is highly desirable.

Kalamazoo is a mid-sized Southwestern Michigan community offering an excellent mix of cultural/recreational opportunities including lakes, nearby college and a four-season climate. Excellent salary, benefits, and a relocation plan are available.

Please send a resume in confidence to:
William J. Hall (11384-H)

Upjohn

The Upjohn Company
7171 Portage Road
Kalamazoo, MI 49001

An Equal Opportunity Employer M/F

10TH ANNIVERSARY

FACULTY OF HEALTH SCIENCES
McMASTER UNIVERSITY

May 4 - 8, 1980
Hamilton, Ontario

The Faculty of Health Sciences Tenth Anniversary celebration will draw speakers and participants from around the world to focus their involvement and thoughts on the current theme and issues as stated below. A variety of methods will be utilized — block presentations, small group sessions, keynote speakers, poster presentations, plenary meetings, and resource sessions.

THEME

To consider, from an international perspective, the basic requirements for health sciences programmes in education, research and service related both to community and institutional health care.

ISSUES

1. How is a health sciences network developed?
2. How are faculty motivated? (Full time university and part-time community).
3. What are the problems of research in a community oriented health sciences network?
4. How does a faculty develop education in a health sciences network?
5. Can a co-ordinated system of evaluation of programs, of students, and faculty be set up in a health sciences network?

Please join us!

For further information, please contact:

Mr. S. Winn
Health Sciences Centre, Room 2E15
McMaster University
Hamilton, Ontario, Canada. L8S 4J9

MICROBIOLOGY LAB MANAGER

Abbott Laboratories seeks an individual with a Ph.D. or equivalent to manage the activities of our sophisticated microbiology research laboratory.

The person we seek will be actively involved in specialized research directed to the diagnosis of infectious diseases. Will direct a staff of 12-15 scientists in various phases of research projects with responsibility for furthering all aspects of scientific discovery.

At least 5-10 years of independent research experience in the field of microbiology with specialized skills in bacteriology or virology will be essential. Strong scientific leadership skills are also important.

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Chris Gude
Corporate Placement

ABBOTT
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UNIVERSITY OF WAIKATO New Zealand

HILARY JOLLY PHD SCHOLARSHIP IN LIMNOLOGY

(Vacancy A79/21)

Under the terms of a bequest from the late Dr. V.H. Jolly, the University of Waikato offers an annual scholarship for doctoral work in limnology, for a period of up to three years. Limnological work in the University is centred in the Biological Sciences Department, where the main emphasis at present is on small dystrophic lakes. Work is in progress on their plankton, benthos and palaeolimnology. Opportunities are available for work in these and other freshwater habitats in the Waikato Valley.

The scholarship will carry remuneration of NZ\$4,020 per annum for up to three years. An allowance for expenses incurred during the fellowship of up to NZ\$750 in any one year may be available. No financial assistance however will be payable to an appointee in taking up the scholarship.

Further information on conditions of appointment and method of application is available from the Registrar, University of Waikato, Private Bag, Hamilton, New Zealand, or from the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF. Enquiries of an academic nature may be addressed to Dr. M.A. Chapman, Reader in Biological Sciences, in the University.

Applications should be in the hands of the Registrar by: **12 January 1980.**

POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE position available immediately, until 1982. Position involves studying the role of plant membranes in relation to winter cereal cold hardiness. Experience in preparation of cell membranes, protein and lipid characterization and/or electron microscopy is desirable. Send résumé and two references to: **Dr. L. V. Gusta, Crop Science Department, University of Saskatchewan, Saskatoon, Saskatchewan, Canada S7N 0W0. Telephone: 306-343-2980.**

POSTDOCTORAL/RESEARCH FELLOW positions available (two):

- 1) To study the chemistry of the actomyosin systems of brain. Experience in protein isolation and purification required.
- 2) To study by immunocytochemical techniques the distribution of the actomyosin proteins in developing nervous tissue. Experience in immunocytochemistry required. EM experience would be desirable.

Please send curriculum vitae and names and addresses of three references (indicate which position you are applying for) to: **Dr. Soll Berl, Department of Neurology, THE MOUNT SINAI SCHOOL OF MEDICINE, One Gustave L. Levy Place, New York, N.Y. 10029. An Equal Opportunity Employer.**

The Scripps Institution of Oceanography, Ocean Research Division, invites applications for a 1-year **POSTGRADUATE RESEARCH POSITION** in physical oceanography. The contract supported position involves theoretical examination of upper ocean dynamics, particularly those associated with lateral variability. Demonstrated background in these areas preferred. Salary commensurate with background. For further information, address: **Chairman, Ocean Research Division A-020, Scripps Institution of Oceanography, La Jolla, Calif. 92093. The University of California is an Equal Opportunity/Affirmative Action Employer.**

PRINCIPAL STAFF OFFICER for ionizing radiation studies at the National Research Council, National Academy of Sciences. M.D. or Ph.D. required, with 10 years of experience in radiation field and evidence of significant research publications. Candidates must also have demonstrated ability to conceptualize scientific problems and delineate approaches to them, write and speak effectively, and manage administrative and technical affairs of study committees, plus a background knowledge of government areas dealing with matters related to ionizing radiation. Appointee will be responsible for the management of studies on the biological effects of ionizing radiation.

Forward letter of interest with curriculum vitae to: **Daniel L. Weiss, M.D., Executive Secretary, Division of Medical Sciences, National Research Council, 2101 Constitution Avenue, NW, Washington, D.C. 20418. An Equal Opportunity Employer.**

The University of California at Davis invites applicants for the position of **PROFESSOR AND CHAIR**, Department of Internal Medicine. Applicants should have distinguished records in investigation, teaching, clinical service, and should have proven ability and experience in administration. Must be able to provide leadership for a large and diverse faculty of ten sections operating in a university hospital with VA and community hospital affiliations. Individuals should be licensable in California. Applications will be received until position is filled. Send curriculum vitae and bibliography, plus names of at least four references, to: **Hamilton S. Davis, M.D., Chair, Search Committee, c/o Department of Anesthesiology, TB 170, University of California, Davis, Calif. 95616. An Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSOCIATE. A postdoctoral position starting 1 July 1980 or thereafter is open for a developmental biologist or biochemist for work on chromosomal proteins. Please send curriculum vitae and have references sent to: **Irvin Isenberg, Department of Biochemistry and Biophysics, Oregon State University, Corvallis, Oregon 97331. An Affirmative Action/Equal Opportunity Employer in compliance with Section 504 of the Rehabilitation Act of 1973.**

RESEARCH STAFF POSITION. Research in cancer and virus chemotherapy. Experience required in enzyme isolation and enzyme kinetics. Previous experience with mammalian cell culture techniques is advantageous. Position available now. Salary and rank are negotiable. Send detailed résumé and three letters of reference to: **Dr. W. Prusoff, Department of Pharmacology, Yale University School of Medicine, New Haven, Conn. 06510. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

A RADIATION BIOLOGIST position at the assistant professor level (tenure-track) is anticipated for teaching and research in radiation biophysics and related programs in the biological sciences. Expertise required for teaching courses in instrumentation for radiation detection and tracer methodology (as well as others in the applicant's field of training). Preference will be for individuals with research interests that complement and reinforce existing research programs devoted to elucidating the molecular, genetic, or metabolic bases for the production and/or modification of lesions produced by radiation and perhaps in combination with other agents. A Ph.D. is required and postdoctoral experience is desirable. Starting date is 15 August 1980. Minimum salary: \$15,500 per 9 months. More details will be sent upon request. Send applications, statement of research interests, and three supporting letters by 15 February 1980 to: **John D. Zimbrick, Radiation Biophysics, University of Kansas, 140 NRC, West 15 Street, Lawrence, Kan. 66045. An Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSISTANT PROFESSOR OF UROLOGY

The Department of Urology at the University of Pennsylvania is seeking pharmacologist (Ph.D.) with at least 6 years of experience in biochemical and molecular pharmacology for a nontenured faculty position. Applicant must have a proven ability to organize and conduct a basic research program and have extensive experience in applying basic research techniques to clinical urological problems.

Applicants should submit curriculum vitae, bibliography, a two-page outline of proposed research objectives, and three letters of recommendation to: **Alan J. Wein, M.D., Urology, 5-Silverstein, Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, Pa. 19104.**

An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE—Immunologist. Ph.D. knowledgeable in the methodologies of humoral and cell-mediated immunity to study the effects of gut-derived antigens in human and experimental liver disease. Experience in cell culture and biochemical procedures necessary. Salary from \$20,000 per annum. Send curriculum vitae, reprints, and three letters of recommendation to: **Dr. H. Gans, VA Medical Center, Danville, Illinois 61832. An Equal Opportunity Employer.**

RESEARCH ASSOCIATE IN STEROID METABOLISM—Postdoctoral position available immediately to study mechanism of action of aldosterone and regulation of aldosterone metabolite synthesis. Use of HPLC, in vitro synthetic techniques, and animal physiology desirable. Send curriculum vitae and three letters of recommendation to: **Dr. David J. Morris, Department of Laboratory Medicine, The Miriam Hospital, 164 Summit Avenue, Providence, R.I. 02906. A Brown University-affiliated hospital.**

RESEARCH FACULTY POSITION IN ENVIRONMENTAL MODELING

Research faculty position in environmental modeling available immediately in the Joint Institute for Advancement of Flight Sciences (JIAFS). The Joint Institute is a cooperative research and education program between The George Washington University and the NASA Langley Research Center and is located at NASA-Langley, Hampton, Virginia. Position includes teaching and research at the graduate level. Ph.D. or equivalent required. Background and research interest in theoretical tropospheric photochemistry, atmospheric radiation for climate studies, or stratospheric modeling necessary. Salary and rank commensurate with qualifications. Send résumé to: **Dr. J. L. Whitesides, Assistant Director, JIAFS, George Washington University, NASA Langley Research Center, MS 169, Hampton, Va. 23665. The George Washington University is an Equal Opportunity/Affirmative Action Employer.**

RESEARCH POSITION available 1 July 1980, for studies on central neural control of circulation. Applicant must have doctorate and previous experience in electrophysiology of brainstem, spinal cord and/or autonomic ganglia and be available for at least 2 years. Salary and rank negotiable, dependent upon qualifications and experience. Send curriculum vitae and two references to: **Dr. Gerard L. Gebber, Department of Pharmacology and Toxicology, Michigan State University, East Lansing, Michigan 48824. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

RESEARCH ASSOCIATE. Pharmacology of CNS control of cardiovascular system. Experience in cardiovascular measurements and sympathetic nerve recording in rats and cats. Starting date: January 1980. **Dr. E. Mills, Department of Pharmacology, Box 3813, Duke University Medical Center, Durham, N.C. 27710. Telephone: 919-684-4276. Duke University is an Equal Opportunity/Affirmative Action Employer.**

TWO RESEARCH ASSOCIATE positions in biophysical chemistry available immediately to study chromatin and DNA systems. Experimental methods include quasi-elastic and electrophoretic light scattering, sedimentation, and the use of ligands to probe chromatic structure. Biochemical or biophysical background and/or experience in dynamic light scattering is necessary. Salary: \$13,000. Send letters of inquiry, curriculum vitae, and two letters from referees to: **Dr. Kenneth S. Schmitz, Department of Chemistry, University of Missouri-Kansas City, Kansas City, Mo. 64110.**

RESEARCH FACULTY POSITION

Full-time (nontenured) research assistant professor position is available starting 1 October 1980 for 1 year. Candidate must have postdoctoral experience and demonstrated ability for research in immunological and chemotherapeutic aspects of experimental myeloma and osteosarcoma. Salary: \$20,000 to \$27,000, depending upon experience. Send curriculum vitae and three letters of recommendation to: **Box 348, SCIENCE. Deadline to receive applications is 1 February 1980. An Affirmative Action/Equal Opportunity Employer.**

RESPIRATORY PHYSIOLOGIST. The Department of Physiology is seeking candidates to apply for the position of assistant professor. Successful candidate will join group of basic and applied scientists in the field of respiratory mechanics. Research mainly in chest wall mechanics, actions of respiratory muscles, and mechanical factors in the control of breathing in animals and humans; collaboration with groups studying lung defense mechanisms, occupational health, and adult and pediatric chest medicine. Candidates should possess a good background in math and physics with several years of postdoctoral research experience in respiratory physiology. Interested applicants should send curriculum vitae, three letters of recommendation, and selected reprints to: **Jere Mead, M.D., Professor, Department of Physiology, Harvard School of Public Health, 665 Huntington Avenue, Boston, Mass. 02115.**

Harvard is an Equal Opportunity/Affirmative Action Employer.

SCIENTIFIC GLASSBLOWER

The Ohio State University is seeking an individual to fabricate, modify, design, and repair scientific glass apparatus. Other duties include consulting with scientific and engineering personnel on design specifications, assisting with inventory and shop control records, maintaining the shop, and providing customer assistance.

Candidates must have several years of glassblowing experience and skill in operating a variety of glassblowing equipment. Salary: \$12,840 to \$18,480. Candidates may send résumés to:

**Roger Stovall
Stores**

**The Ohio State University
103 Central Service Building
2009 Millikin Road
Columbus, Ohio 43210**

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SYSTEMATIC ENTOMOLOGIST. Applications are invited for position of **Assistant Curator** in the Division of Insects, Field Museum of Natural History; specialist in *Coleoptera* preferred. Career-track, full-time appointment, with both research and curatorial responsibilities to begin August 1980. Applicants must have Ph.D. with primary interest in and commitment to an active research program in systematic entomology and the curation of a major entomological collection. Other duties may include participation in exhibition and education functions of Field Museum. Opportunities exist for work with graduate students. Salary dependent on qualifications and experience. Send curriculum vitae, description of research experience, future plans, reprints of publications, and letters from three referees by 1 February 1980 to: **Dr. Robert F. Inger, Chairman, Search Committee, Department of Zoology, Field Museum of Natural History, Roosevelt Road at Lake Shore Drive, Chicago, Illinois 60605. An Equal Opportunity Employer.**

RADIO- IMMUNOASSAY TECHNICIAN/ SUPERVISOR

Radioimmunoassay technician/supervisor position available 1 January 1980. Challenging opportunity for well-organized individual who has at least 2 years of experience in RIA and biochemical research. B.S. in biological sciences required with an M.S. preferred. Successful candidate must be able to work independently.

Excellent starting salary and benefits. If qualified send résumé to:

Dr. H. J. Chen
Division of Neurobiology
Barrow Neurological
Institute
St. Joseph's Hospital and
Medical Center
P.O. Box 2071
Phoenix, Arizona 85001

Equal Opportunity Employer

Neuroscience Research Associate

The Medical Research Division of American Cyanamid Company has an immediate opening for a Ph.D who is enthusiastic about establishing a career, or gaining experience, in Central Nervous System Pharmacology Research. Training and expertise in behavioral testing procedures and one or more additional techniques in neurochemistry, neurophysiology or neuropharmacology are essential. Major responsibility involves working with existing team of researchers in ongoing program to assist in the development of new animal models and the testing of new CNS drugs. Initially, primary emphasis will focus on Geriatric Psychopharmacology with additional work in other areas of psychotropic drug development.

We offer competitive salary, liberal fringe benefits and potential for professional recognition. Our location in an attractive country setting thirty miles from New York City offers a broad range of recreational and cultural activities.

Send resume, representative reprints and salary history in confidence to Ms. S.L. Johnson,

MEDICAL RESEARCH DIVISION



American Cyanamid Company

Lederle Laboratories, Pearl River, New York 10965

An equal opportunity employer, male/female

TERATOLOGIST

The Upjohn Company is seeking a Teratologist to design, conduct and evaluate reproduction, teratology and perinatal studies. The scientist will determine potential adverse effects of drugs and product candidates, develop new test methods or improve current methods, provide professional consultation and conduct basic research.

You should have 1) a Ph.D. in Teratology, Anatomy, or related Biological Science and three years of industrial experience conducting teratology studies; or 2) an M.S. Degree with a minimum of five years' industrial experience in teratologic testing.

This position is located in Kalamazoo, a medium-sized Southwestern Michigan community, with excellent cultural and recreational advantages. Excellent company benefits are offered. Send a resume in confidence to: Kent S. Morgan.

Upjohn

The Upjohn Company
7171 Portage Road
Kalamazoo, MI 49001

An Equal Opportunity Employer M/F

The National Science Foundation is seeking qualified candidates for the position of **HEAD, ASTRONOMY RESEARCH SECTION**, on a permanent or temporary (rotational) basis. The incumbent is responsible for the overall planning and management of the Astronomy Research Section. Also coordinates and supervises the work of program directors and support staff in galactic and extragalactic astronomy, stars, and stellar evolution, stellar systems and motions, solar system astronomy, and astronomical instrumentation and development. This position is in the Senior Executive Service. Essential qualification requirements are: (i) experience in the planning of scientific programs, (ii) experience in evaluating and balancing available resources between ongoing programs and new programs, (iii) managerial and supervisory experience, (iv) Ph.D. or equivalent experience in the physical sciences, (v) substantial experience in conducting research in astronomy/astrophysics. Desirable qualifications include experience in: long and short range planning, management of large-scale scientific research involving several disciplines, and substantial record of publication. The salary ranges from \$44,756 to \$50,100 per annum. Competitive status is not required, veterans preference does not apply, and there are no time-in-grade restrictions. New appointees are required to serve a 1-year probationary period. The individual selected will be required to file a "Financial Disclosure Report" in accordance with The Ethics in Government Act of 1978.

HOW TO APPLY: those interested in a noncareer or temporary (rotational) appointment should apply to: **announcement EMPB 79-35**. Those interested in a career or permanent appointment should apply to: **announcement EMPB 79-25**. Applicants must submit a Standard Form 171, Personal Qualifications Statement. The application must clearly state the announcement for which you are applying. The announcement number should be clearly marked on the application and any attachments. A supplemental qualifications narrative should also be submitted addressing to what extent the applicant's skills, knowledge, and abilities satisfy the qualification requirements.

Applications should be submitted to: **Executive and Managerial Personnel Branch, Division of Personnel and Management (to the attention of the announcement number), National Science Foundation, Washington, D.C. 20550**. Applications must be received by 5 p.m., 4 January 1980. For additional information, contact: **Teddy Haessig-Dyer, telephone: 202/632-4124**.

POSITIONS OPEN

RESEARCH ASSOCIATE. A postdoctoral position starting 1 August 1980 or thereafter, is open for a biochemist, molecular biologist, or microbiologist for work on chromosomal proteins of yeasts. Please send curriculum vitae and have references sent to: **Irvin Isenberg, Department of Biochemistry and Biophysics, Oregon State University, Corvallis, Oregon 97331.** An Affirmative Action/Equal Opportunity Employer in compliance with Section 504 of the Rehabilitation Act of 1973.

RESEARCH TECHNOLOGIST for biochemistry laboratory. Perform coagulation, assays, and protein isolations. Send résumé to: **Ruth Straub, Office of Personnel, American Red Cross, 18th and E Streets, NW, Washington, D.C. 20006.** Equal Opportunity Employer, M/F.

The Woodrow Wilson School of Public and International Affairs is seeking candidates with strong interest in **SCIENCE TECHNOLOGY AND PUBLIC POLICY** for appointment to the faculty. Junior and mid-level candidates are being sought who have either strong technological backgrounds and interest in public policy or a social science background which has been applied to public policy problems with a major scientific or technological component. *Princeton University is an Equal Opportunity/Affirmative Action Employer; applications from women and minority candidates are particularly welcome.* Letters of application, résumés, recommendations, and research papers should be sent to: **Dean, Woodrow Wilson School, Princeton University, Princeton, N.J. 08544.**

**University of California, Berkeley
College of Engineering
Institute of Transportation Studies
POSITION AVAILABLE**

SPECIALIST, to support development of expanded Institute of Transportation Studies program and actively engage in technological, environmental, and energy research. The incumbent would be expected to tract literature and opportunities of interest and activities consistent with their interests. Requires Ph.D. degree or equivalent in transportation planning, engineering, an energy-related field, or an environmental-related field (an appropriate advanced degree will suffice), and demonstrated experience in organization and the execution of high-quality research subsequent to receiving the advanced degree. Without a degree in transportation, broad transportation research experience is required. Experience with relevant federal agencies will be important. Salary range: \$25,356 to \$39,168 per annum, depending on qualifications. This is a 5-year position, with reappointment subject to availability of extramural funds. Applicants should send curriculum vitae and names of three references to: **Professor W. L. Garrison, Director, Institute of Transportation Studies, 109 McLaughlin Hall, University of California, Berkeley, Calif. 94720,** by 30 days from publication date. *The University of California is an Affirmative Action Employer.*

SUPERVISOR-REAGENT PRODUCTION—A leader in biological products seeks individual capable of overseeing the preparation and control testing of antigens, antisera, chemicals, and in-process reagents from raw materials through final packaging. Prefer M.S. in biology, microbiology, or biochemistry. Knowledge and practical experience in protein chemistry is essential. Training in immunology, clinical analysis, or radiochemistry combined with industrial supervisory experience is very desirable. Connaught offers a very attractive salary and fringe benefit program. Send résumé and salary history to: **D. H. Gattone, Personnel Manager, Connaught Laboratories, Inc., Swiftwater, Pa. 18370.** Equal Opportunity/Affirmative Action Employer.

Wanted: **TISSUE CULTURIST**, preferably with virological experience, for a research project on specialized virus isolation. Master's or doctoral level preferred. Salary according to experience. Contact: **Dr. John Hotchin, Division of Laboratories and Research, New York State Department of Health, Empire State Plaza, Albany, N.Y. 12201.**

FELLOWSHIPS

POSTDOCTORAL RESEARCH FELLOWSHIP available for biochemist/molecular biologist to work on mechanism of action of male sex steroids. Contact: **Carlo M. Veneziale, M.D., Mayo Medical School, Rochester, Minnesota 55901.**

Mayo Foundation is an Equal Opportunity/Affirmative Action Institution.

FELLOWSHIPS

**POSTDOCTORAL RESEARCH FELLOWSHIPS
Simpson Memorial Research Institute
University of Michigan Medical School**

NIH training positions available July 1980, for M.D.'s or Ph.D.'s in broad field of hematology/oncology. Major research programs in: (i) immunology (macrophage/lymphocyte studies), (ii) leucocyte biochemistry, (iii) hematopoiesis, (iv) clinical and laboratory pharmacology, (v) tumor cell kinetics and biochemistry, (vi) gene expression in normal and malignant cells, (vii) corticosteroid receptor modulation in lymphoid cells, (viii) coagulation, (ix) platelet function and metabolism, (x) red cell biochemistry, (xi) hemoglobinopathies, and (xii) biochemical mechanisms of immunodeficiency states.

Applications should include curriculum vitae, two letters of recommendation, and indication of major research interests. Send application or letter of inquiry to: **Dr. Albert F. LoBuglio, Simpson Memorial Research Institute, University of Michigan, 102 Observatory Road, Ann Arbor, Mich. 48109.**

A nondiscriminatory, Affirmative Action Employer

POSTDOCTORAL FELLOWSHIP—Applications are invited for a National Research Science Award training program in research in red blood cell diseases. Holders of M.D. degrees with 3 years of appropriate clinical training or Ph.D. degrees in a basic science with less than 3 years of postdoctoral experience who are U.S. citizens or permanent residents and who evidence a commitment to an academic health science-related career are eligible. Stipends will be in accord with NRSA and college policies. Additional information and directions for making applications may be obtained from: **Ernst R. Jaffe, M.D., Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, N.Y. 10461.** An Equal Opportunity Employer.

PREDOCTORAL FELLOWSHIPS. The Graduate Program in Molecular Cell Biology invites applications from highly qualified students interested in an interdisciplinary Ph.D. program. Major areas of emphasis include animal virology, bacterial and somatic cell genetics, cancer biology, cellular immunology and immunochemistry, connective tissue and protein biochemistry, infectious diseases and host defense, membrane biochemistry, nucleic acid synthesis, and research involving the cause and prevention of dental caries. All students admitted to the program receive stipends of \$5,100 plus tuition and fees per year. Contact: **Dr. Roy Curtiss, Co-Director of Graduate Studies, Department of Microbiology, University of Alabama in Birmingham, Medical Center, Birmingham, Alabama 35294.**

POSTDOCTORAL FELLOWSHIPS. Two positions are available in the Center for Reproductive Sciences at Columbia University College of Physicians and Surgeons. Salary: \$13,380 to \$17,040, depending on experience. M.D. or Ph.D. required. Must be U.S. citizen or have permanent visa. *Equal Opportunity Employer.* Contact: **Dr. G. Jagiello, Center for Reproductive Sciences, Columbia University College of Physicians and Surgeons, 630 West 168 Street, New York, N.Y. 10032.**

**POSTDOCTORAL RESEARCH FELLOWSHIPS
IN PRIMATE REPRODUCTIVE
ENDOCRINOLOGY**

Current studies emphasize neuroendocrine control of gonadotropin secretion and related systems in the rhesus monkey. Stipends, provided by NIH and Ford Foundation training grants, depend on years of postdoctoral experience at time of entry.

E. Knobil, Department of Physiology, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania 15261.

ASSISTANTSHIPS

GRADUATE ASSISTANTSHIPS IN LIFE SCIENCES up to \$5,300 per year are available for master's (thesis) and Ph.D. candidates with research interests in animal, aquatic, physiological and plant ecology, bacterial and physiological genetics; medical microbiology; comparative, endocrine, and sensory physiology; cellular biology; immunobiology; medical technology; mycology; neurobiology; parasitology; and virology. Research fellowships from NIH and NSF supported faculty research grants are available. Contact: **Chairperson, Department of Life Sciences, Indiana State University, Terre Haute, Indiana 47809** for applications and information. *Indiana State University is an Equal Opportunity/Affirmative Action Employer.*

SYMPOSIUM

**RADIOPHARMACEUTICALS: STRUCTURE—
ACTIVITY RELATIONSHIPS**
Invited speakers, discussions
21 to 23 March 1980 in Hartford, Conn.

For information contact:

**Dr. Richard P. Spencer
Department of Nuclear Medicine
University of Connecticut Health Center
Farmington, Conn. 06032
Telephone: 203-674-3120**

TRAINEESHIPS

POSTDOCTORAL TRAINEESHIPS IN CLINICAL CHEMISTRY available 1 July 1980, in a program for Ph.D. chemists or biochemists interested in a hospital clinical chemistry career in an academic setting. The 2-year appointments offer clinical, laboratory, research, and management training. Address inquiries to: **Dr. Margaret Kenny, Department of Laboratory Medicine, SB-10, University of Washington, Seattle, Wash. 98195.** The University of Washington is an Equal Opportunity/Affirmative Action Employer.

TRAINING PROGRAM

**NEUROBEHAVIORAL SCIENCES
POSTDOCTORAL POSITIONS**

Applications are invited for an interdisciplinary neuropsychobiological research training program. The program objectives are to facilitate the development of investigators who are familiar with integrated concepts of neurobiology and behavior as well as their individual anatomical, biochemical, pharmacological, physiological, psychological, or clinical specialties. In addition to the intensive research experience in one or more laboratory disciplines, the conceptual basis of neurosciences as it relates to an understanding of the normal and maladaptive development of human neurobiology and behavior is emphasized in a series of seminars and symposia. Deadline for receipt of completed applications is 15 February 1980. For further information and application forms contact: **Dr. Everett Ellinwood, Neurobehavioral Sciences Research Training Program, Duke University Medical Center, P.O. Box 3870, Durham, N.C. 27710.**

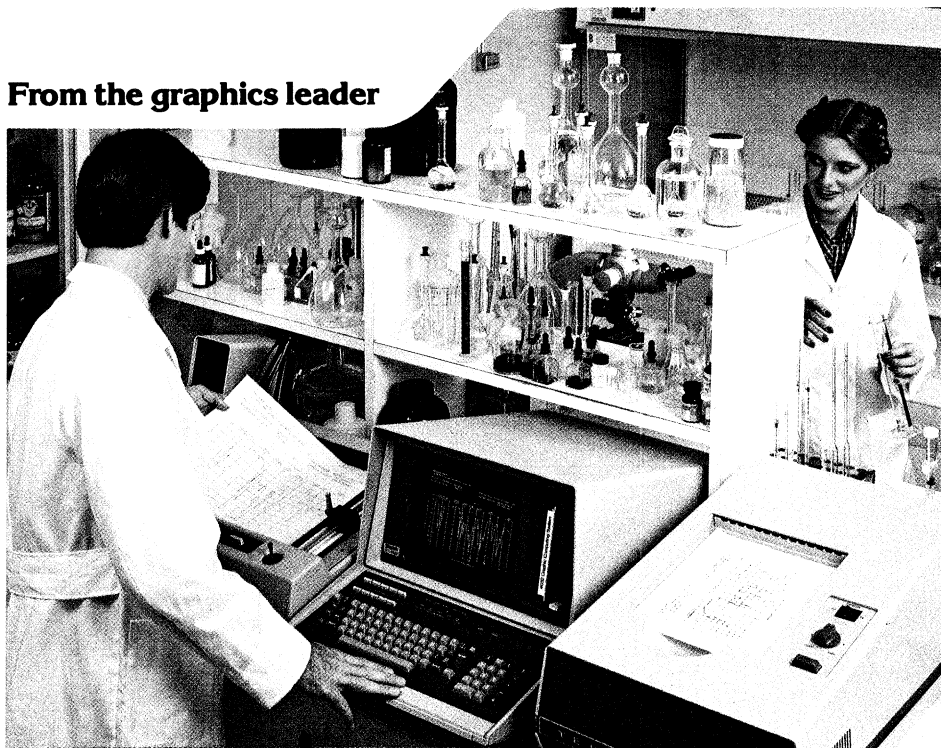
GRADUATE STUDY

AN INTERDISCIPLINARY GRADUATE PROGRAM IN CELL AND MOLECULAR BIOLOGY has been established at Saint Louis University School of Medicine. Research areas under investigation by the faculty include animal virology, immunobiology, eukaryotic protein synthesis, membrane-associated functions in microorganisms, mechanisms of hormone action, chemotaxis, physical biochemistry and biogenesis of eukaryotic membranes and cell surfaces, cellular differentiation, molecular mode of action of vitamins, microtubules, mitochondrial molecular biology, contractile proteins, alkaloids in higher plants and brain, regulation of bacterial viruses, electrophysiology and ultrastructure of neuromuscular transmission, and others. Applications are accepted at any time during the year but are preferred by 15 April for entrance during the following September. Fellowships are available for qualified trainees. Contact: **Dr. Arnold Kaplan, Saint Louis University, Room 405, 1402 South Grand Boulevard, St. Louis, Mo. 63104.**

**GRADUATE STUDY IN
ENVIRONMENTAL HEALTH**
School of Public Health
Harvard University

Traineeships available for M.S. degree candidates in industrial hygiene and occupational health, air pollution control, radiation protection, environmental health management, and medical radiological physics. Candidates for doctoral studies in these same fields are invited to apply for Leslie Silverman Fellowship which will be awarded for the 1980-1981 academic year. Traineeships and fellowship provide tuition plus monthly stipend of \$350. Deadline for applications is 1 February 1980. Contact: **Dade W. Moeller, Harvard School of Public Health, 665 Huntington Avenue, Boston, Mass. 02115.** Affirmative Action Employer.

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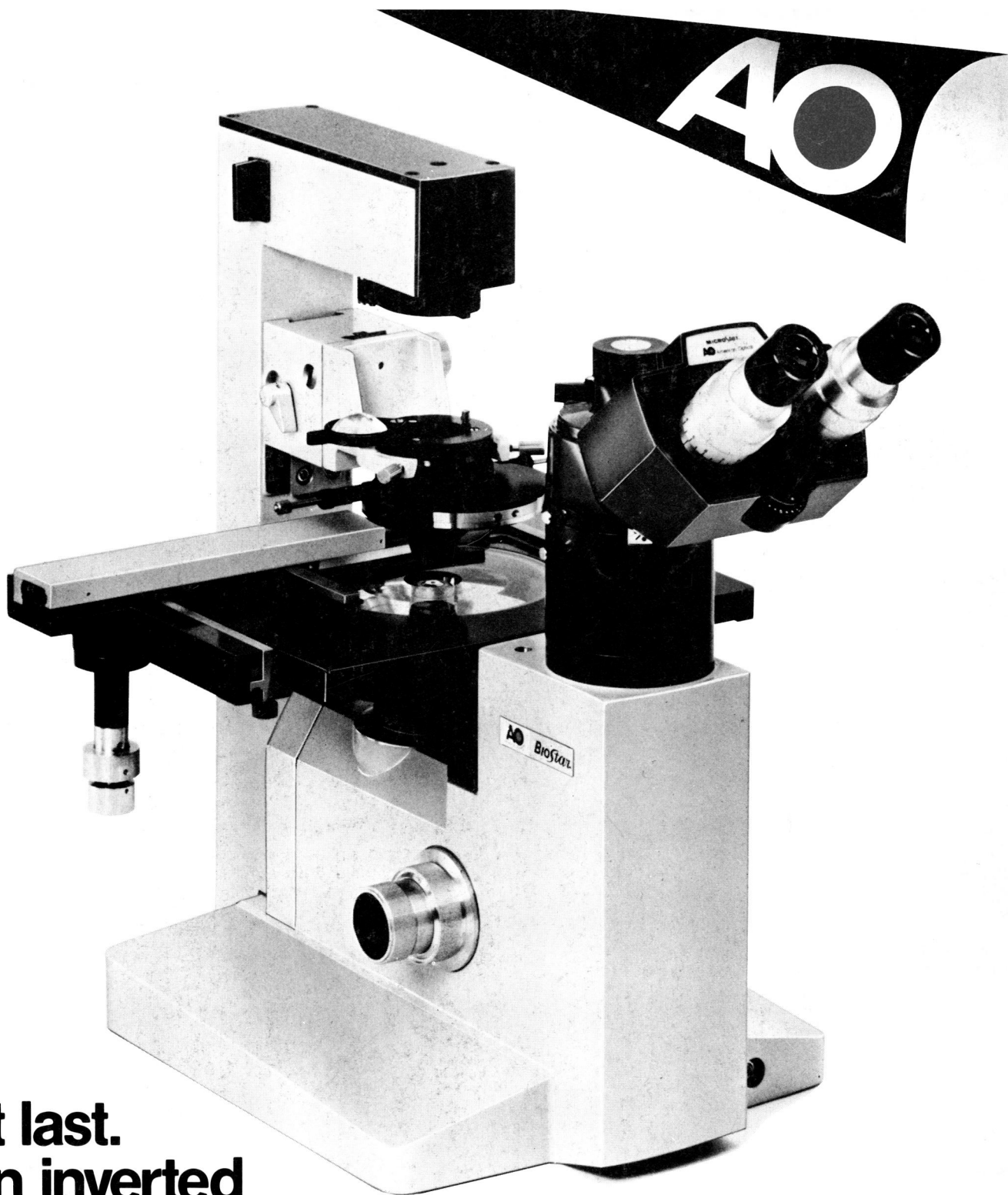
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