

POSITIONS WANTED

Pharmaceutical. Productive individual, Ph.D. pharmacologist with research experience, seeks administrative, regulatory, or clinical position in pharmaceutical industry. Box 26, SCIENCE. X

Pharmacological Biochemist. Ph.D. Pharmaceutical research experience in pharmacokinetics, bioavailability, clinical studies, assay development. Determination of drug interaction, absorption, metabolism, elimination, and toxicity problems. Box 27, SCIENCE. X

Sex Educator (AAECT-certified): Ph.D. biology. Successful career as teacher, counselor, department chairperson, academic dean. Seeking interesting, challenging position. Box 179, Shrub Oak, New York 10588. X

POSITIONS OPEN

ANATOMIST

Able to teach gross anatomy and neuroanatomy, assistant-professor level, beginning investigator with an established, independent research program applicable to the field of dentistry. Send curriculum vitae to **Dr. Michael D. Gershon, Chairman, Department of Anatomy, College of Physicians and Surgeons, Columbia University, 630 West 168 Street, New York, N.Y. 10032.** X

ANATOMIST, ASSOCIATE PROFESSOR: Candidates must have demonstrated research and teaching ability. Position will require some teaching in gross anatomy and neuroanatomy. Preference given to a neuroscientist. Department has well-equipped research facilities and a developing graduate program. Salary is very competitive. Send curriculum vitae, bibliography, and phone numbers of three references by 15 February 1977 to: **Dr. W. Seliger, Department of Anatomy, Texas Tech University School of Medicine, Lubbock, Texas 79409.** *An Equal Opportunity Employer.*

ANIMAL BEHAVIORIST

Assistant professor, starting August 1977. Must have demonstrated abilities in experimental and theoretical ethology as evidenced by publication. Postdoctoral research experience preferred. Teaching duties include graduate and undergraduate courses in animal behavior. Send curriculum vitae, reprints, a full description of research interests, and four letters of reference before 15 March 1977 to: **Dr. Victor H. Hutchison, Department of Zoology, University of Oklahoma, Norman, Oklahoma 73019.** *An Equal Opportunity/Affirmative Action Employer.*

The Department of Biology and Institute of Molecular Biology, University of Oregon, have an opening for an **ASSISTANT (OR ASSOCIATE) PROFESSOR** to teach cell biology and collaborate in existing research programs in molecular biology. Initial appointment is for 2 years, with a 3-year extension possible. For application forms and further information write to the **Search Committee, Institute of Molecular Biology, University of Oregon, Eugene, Oregon 97403**, before 1 March 1977. *The University of Oregon is an Equal Opportunity/Affirmative Action Employer, Title IX Institution.*

The Department of Neurology at the UCLA School of Medicine is seeking qualified applicants for a full-time academic position at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. Applicants should have demonstrated abilities in clinical neurology and in neuropathology. Any interested applicant should submit a curriculum vitae and reprints to **Richard D. Walter, M.D., Chairman of the Department of Neurology, Reed Neurological Research Center, UCLA, Los Angeles, California 90024.** *UCLA is an Equal Opportunity/Affirmative Action Employer and is desirous of receiving applications from minorities and women candidates as well as other qualified persons.*

ASSISTANT PROFESSOR-BIOCHEMISTRY

Regular faculty position in the Department of Chemistry. Well-equipped research laboratory available. Postdoctoral experience required. Interest in immunochemistry, cell surface phenomena, or fast reaction enzyme kinetics preferred. Send curriculum vitae to **Earl Frieden, Department of Chemistry, Florida State University, Tallahassee, Fla. 32306.** *Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT DIRECTOR DIVISION OF SPONSORED RESEARCH UNIVERSITY OF FLORIDA

Applications are invited for the position of assistant director. Duties include direct administrative responsibility for the Program Information and Grants Administration Sections of the Division, assisting faculty in the preparation and processing of research proposals, and working with principal investigators and agency representatives in the negotiation of contract terms and conditions.

Qualifications include graduate faculty status, broad experience with academic research, administrative experience, and a doctorate or terminal degree appropriate to the field.

Salary range: \$24,000 to \$29,000. Starting date: 1 July 1977. Qualified candidates should submit a curriculum vitae and names of references who may be consulted to: **Dr. Robert Isaacson, Chairman, Search Committee, 429 Psychology Building, University of Florida, Gainesville, Florida 32611.** Deadline for receipt of applications is 15 February 1977. *An Equal Opportunity/Affirmative Action Employer*

ASSISTANT PROFESSOR. The Biology Department of Knox College is inviting applications for a position that requires the teaching of courses in histology, embryology, electronmicroscopy, and introductory biology. The ability to use the electron microscope as a teaching and research tool is necessary. Approximately one-half of the students in the histology and embryology courses are first year medical students in the Knox-Rush University Medical Program. The position is available in September 1977 and the candidate should hold the Ph.D. Please submit résumés to: **Dr. B. W. Geer, Chairman, Department of Biology, Knox College, Galesburg, Illinois 61401.** *An Equal Opportunity Employer.*

ASSISTANT PROFESSOR, Ph.D. in microbiology, postdoctoral experience in mechanisms of microbial pathogenesis. Résumé by 15 February 1977 to

**Department of Microbiology
University of Rhode Island
Kingston, R.I. 02881**

An Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR: BIOCHEMISTRY

A faculty position at the rank of assistant professor will be available 1 July 1977. The primary requirement is promise of excellence in teaching and research, but preference will be given to applicants with demonstrated competence in some aspect of the molecular genetics of eukaryotes.

Applicants should submit a curriculum vitae and list of publications, a brief description of their proposed research, and the names of three references to **Chairman, Department of Biochemistry, Duke University Medical Center, Durham, North Carolina 27710.** *Duke University is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF BIOCHEMISTRY

The Department of Biochemistry, Case Western Reserve University, School of Medicine invites applications for a position as assistant professor. Applicants should have a doctoral degree and appropriate postdoctoral experience. The appointee will be expected to establish an active and independent research program in biochemistry and to participate in the departmental teaching of undergraduate, graduate, and professional students. Applicants should send curriculum vitae including bibliography, a statement of proposed research program, and the names and addresses of three referees (please do not send letters of recommendation at this time) before 1 March 1977 to: **Dr. Howard Gershman, Search Committee for Assistant Professor, Department of Biochemistry, School of Medicine, Case Western Reserve University, Cleveland, Ohio 44106.** *Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSORSHIP. Renewable probationary appointment available 1 July for an **EXPERIMENTAL PLANT OR ANIMAL ECOLOGIST**, preferably working at the population or community level. The appointee will be expected to develop a strong graduate research program and to participate in investigation-oriented undergraduate instruction. Send full curriculum vitae by 1 March, with statement of research and teaching interests, reprints of published research, and names of three referees to: **Ecology Search Committee, Department of Biological Sciences, Brock University, St. Catharines, Ontario, L2S 3A1.**

POSITIONS OPEN

ASSISTANT PROFESSOR-BIOPHYSICS

The Physics Department of the University of Waterloo seeks, for 1 July 1977, a biophysicist. Experience at the molecular level desirable to complement ongoing research programmes at cellular level in radiobiology and cryobiology; exceptional candidates in other areas of biophysics will also be considered. Responsibilities include teaching of undergraduate and graduate courses in biophysics. Successful candidate expected to continue own research and collaborate in joint projects. Curriculum vitae, bibliography, names of suggested referees, and a description of research interests to: **Dr. J. Kruuv or Chairman, Department of Physics, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1.**

THE UNIVERSITY OF TORONTO DEPARTMENT OF BOTANY

Applications are invited for the post of assistant professor in the Department of Botany. Preference will be given to candidates with a research record in soil microbial ecology, although other experimental and quantitative aspects will be considered. A doctoral degree will be required, with commensurate research and teaching experience. The appointment will be made on an annual contractual basis, commencing 1 July 1977. Starting salary will be from \$15,000, with higher salaries dependent upon experience.

Further particulars can be obtained from **Professor T. C. Hutchinson, Chairman, Department of Botany, University of Toronto, Toronto M5S 1A1, Canada**, to whom applications and the names and addresses of three referees should be sent before 15 February 1977.

ASSISTANT PROFESSOR POSITIONS IN ECOLOGY AND VERTEBRATE PHYSIOLOGY

Both positions include teaching and research responsibilities and the direction of graduate student research beginning 15 August 1977. Applicants for the physiology position should have Ph.D. training in vertebrate systems physiology and a strong background in zoology. The primary research and teaching responsibilities will be in vertebrate physiology. Applicants for the ecology position should have Ph.D. training in community structure and function. Teaching responsibilities include ecology and participation in freshman instruction. Please submit transcripts, a curriculum vitae, and details of research and teaching interests to: **Ecology or Physiology Search Committee, Department of Zoology and Physiology, Louisiana State University, Baton Rouge, La. 70803.** Deadline: 1 March. *An Equal Opportunity Employer.*

ASSISTANT OR ASSOCIATE PROFESSOR—PLANT TISSUE CULTURE. Teaching (20 percent); research (80 percent). To initiate program on fundamental problems in tissue culture, and to provide interdisciplinary leadership. Applicants should have a Ph.D. in horticulture, botany, biology, or plant physiology and have demonstrated interest and ability to conduct research in plant cell and tissue culture. An ability to communicate effectively and to direct graduate students is expected. Twelve-month appointment; salary competitive and commensurate with training and experience. Applications accepted through 1 March 1977 or until position is filled. Send biographical information, reprints of pertinent publications, transcripts, and names of four references to:

**Professor Joe M. Cherry
Chairman, Search Committee
Horticulture Department
Purdue University**

West Lafayette, Ind. 47907
Equal Access/Equal Opportunity Employer

ASSISTANT PROFESSOR

Persons highly qualified in organic chemistry are invited to apply for a tenure-track appointment as assistant professor. The position will require the ability to organize and present, effectively, courses at both the graduate and undergraduate levels. Moreover, potential candidates are expected to have a solid record of accomplishment in research and to show promise of developing vigorous, independent programs of scholarly investigation. To apply, submit a brief biographical sketch, a publication list, three letters of recommendation, and a short résumé of ideas for the development of teaching and research programs. Deadline for applications is 1 February 1977. Please apply to: **E. H. Cordes, Chairman, Department of Chemistry, Indiana University, Bloomington, Ind. 47401.** *Indiana University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ZOOLOGY—ASSISTANT PROFESSOR. Area of aquatic quantitative population biology. Teach undergraduate courses in general ecology, general zoology, and physiology. Develop and teach graduate course in special interest area. Carry on active research program. Qualifications: Ph.D. Position begins 1 September 1977. Send résumé, before 15 February 1977, to **Dr. Arthur Borrer, Chairperson, Search Committee, Department of Zoology, University of New Hampshire, Durham, N.H. 03824.** The University is an Affirmative Action/Equal Opportunity Employer.

IOWA STATE UNIVERSITY Department of Zoology

Two or more positions, beginning September 1977, are open at the rank of **ASSISTANT PROFESSOR** for persons with interests from among the following areas: cell physiology, ecological physiology, molecular and developmental biology, neurobiology, and evolutionary biology. Candidates must have a Ph.D. and have demonstrated excellence in research. Postdoctoral experience is highly desirable. Responsibilities include the establishment of a vigorous research program and teaching at the undergraduate and/or graduate levels. Applicants should submit, by 15 February, a detailed curriculum vitae, three letters of recommendation, and a letter describing their research interests and plans to **J. R. Redmond, Department of Zoology, Iowa State University, Ames, Iowa 50011.**

Equal Opportunity/Affirmative Action Employer

ASSOCIATE CHIEF OF STAFF OF RESEARCH

The Veterans Administration Hospital, Cincinnati, Ohio, is seeking an associate chief of staff of research. The Cincinnati VA Hospital is an integral part of the University of Cincinnati Medical Center and staff members are appointed to the faculty of the College of Medicine. The hospital is committed to improving its research program, which currently has a research building (17,000 square feet), 14 funded investigators, and 25 full-time research employees. The associate chief of staff of research would be a senior staff position and primary duties would be to administer, guide, and oversee the research program. Clinical responsibilities are possible. Preference will be given to candidates with an M.D. degree and some administrative experience. *The VA Hospital is an Equal Opportunity Employer.* Please send curriculum vitae or letters of inquiry to:

Raymond John Lipicky, M.D.
Chairman, Search Committee for Associate Chief of Staff of Research
Division of Clinical Pharmacology
5502 Medical Science Building
231 Bethesda Avenue
Cincinnati, Ohio 45267

ASSOCIATE PROFESSOR—PHARMACOLOGY

Proven research record and eager to share in the teaching responsibilities of the division. While applications are invited from all pharmacologists, individuals with the following expertise will receive preference: (i) CNS, electrophysiology; (ii) respiration; (iii) morphology; or (iv) immunopharmacology. Prefer 1 September 1977 start. Ph.D. in pharmacology highly preferred. Modern, well-equipped physical facilities in the university health center complex. Salary negotiable, commensurate with experience and qualifications. Send résumé and the names of three references by 1 March to: **Dr. Michael C. Gerald, Division of Pharmacology, College of Pharmacy, The Ohio State University, Columbus, Ohio 43210.**

Marquette University School of Dentistry is seeking a **BIOCHEMIST** for its basic science faculty. Must have Ph.D. responsibilities including teaching and research. Send curriculum vitae to **Dr. Joseph Abramowitz, Associate Dean, Marquette University School of Dentistry, 604 North 16th Street, Milwaukee, Wisconsin 53233.** Applications will be accepted until 1 March 1977. *An Equal Opportunity Employer.*

Marquette University School of Dentistry is seeking a **CHAIRPERSON** for its Department of Basic Sciences. The department includes all of the health-related sciences. Interested individuals must have interest and ability in administration. Research orientation and interest in teaching are desirable. Send curriculum vitae to **Dr. Joseph Abramowitz, Associate Dean, Marquette University School of Dentistry, 604 North 16th Street, Milwaukee, Wisconsin 53233.** Applications will be accepted until 1 March 1977. *An Equal Opportunity Employer.*

POSITIONS OPEN

BIOCHEMISTRY FACULTY POSITION. Assistant professor, University of Arizona College of Medicine, to teach medical, graduate, and some undergraduate students. Research area open, but applicants should have demonstrated capacity for excellence in both teaching and research. Applicants should send curriculum vitae, bibliography, two- to three-page statement of research plans, and names of at least three references to **Dr. Christopher K. Mathews, Department of Biochemistry, University of Arizona College of Medicine, Tucson, Arizona 85724.** An Equal Opportunity/Affirmative Action Employer under state and federal laws and regulations including Title IX, 1972 Education Amendments.

BIOCHEMIST. We are seeking an outstanding scientist to develop an innovative, vigorous research program in an area of biochemistry relevant to agriculture. This faculty appointment will be at the assistant or associate level. Send complete curriculum vitae, brief description of research plans, and a list of three references by 15 February 1977, to **Frank A. Loewus, Chairman, Department of Agricultural Chemistry, Washington State University, Pullman, Wash. 99164.** Washington State University is an Equal Opportunity/Affirmative Action Employer. *Minority and women applicants are urged to identify themselves.*

BIOLOGY. Two positions open at assistant professor level: comparative animal physiologist to teach introductory course in animal form and function and at least one advanced course in comparative animal physiology with other duties open. Also a 1-year appointment to teach microbiology and cell biology, with an interest in genetics desirable. Submit curriculum vitae and names of references to **Dr. Eli C. Minkoff, Biology Search Committee, Bates College, Lewiston, Maine 04240** by 1 February 1977. *An Equal Opportunity/Affirmative Action Employer.*

Ph.D. BIOLOGIST

Individual will plan and carry out activities related to forest tree improvement and genetic selection using tissue culture techniques. Qualified candidates will have advanced training in plant physiology and biochemistry with interest and experience in plant tissue culture methods. Please submit résumés and requirements to:

Personnel Selection and Recruitment
Owens-Illinois, Inc.
P.O. Box 1035
Toledo, Ohio 43666

CELL BIOLOGIST—Leading veterinary manufacturer is seeking a cell biologist for our Production Support Unit with background in mammalian cell culture. M.S., Ph.D., or D.V.M. with 5 to 10 years appropriate technical experience. Supervisory experience and an interest in the application of advanced cellular techniques to virus production desired. Knowledge of Food and Drug Administration or U.S. Department of Agriculture regulations helpful. Excellent salary and benefits. Send detailed résumé including salary requirements to: **C. F. Moore, Personnel Manager, JENSEN-SALSBERRY LABORATORIES, Division of Richardson-Merrell, Inc., P.O. Box 167, Kansas City, Missouri 64141.** An Equal Opportunity Employer, M/F.

CHAIRMANSHIP of the Department of Orthopedic Surgery at the University of California, San Francisco. Candidates must have a substantial background in academic medicine with interest and experience in teaching, research, patient care, and administration. *The University of California, San Francisco is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.* Please address all inquiries to: **Roger Boles, M.D., Search Committee Chairman, University of California, Room 495 U, San Francisco, California 94143.**

CLINICAL CHEMIST, assistant or associate professor, California Polytechnic State University, San Luis Obispo, California 93407. Effective fall 1977. Ph.D. degree required. Prefer candidates with background in biochemistry, medical lab experience, and California Professional License or equivalent. In addition to teaching courses in clinical chemistry, duties will include courses in undergraduate biochemistry and general chemistry. Closing date is 15 February 1977. Please have four letters of recommendation supplied by references. Send résumé including a statement of professional goals to **Dr. Harold J. Watson, Acting Head, Chemistry Department, Affirmative Action/Equal Opportunity/Title IX Employer.**

POSITIONS OPEN

CELL BIOLOGIST DEPARTMENT OF BIOLOGY BOSTON UNIVERSITY

ASSISTANT PROFESSOR in cell biology/cell physiology fall 1977. Teaching introductory, advanced, and graduate level. Teaching experience, postdoctoral training, and significant publications preferred. Experience with electron microscopy desirable. Submit curriculum vitae, pertinent publications, and three letters of recommendation to arrive by 28 February 1977, to **Chairman, Department of Biology, 2 Cummington Street, Boston, Mass. 02215.** The University is an Equal Opportunity/Affirmative Action Employer.

University of Chicago. **CHIEF OF MEDICAL PHYSICS** in the Radiology Department. Full-time position with active Ph.D. medical physics program at associate professor or professor level available summer 1977 in university teaching hospital. Facilities include medical cyclotron and research laboratories in physics and biology. Clinical facilities include megavoltage accelerators. Desirable qualifications: (i) ability to direct broad program in physics and biology; (ii) proven excellence in teaching in all aspects of clinical physics; and (iii) research experience. *From the time of its original charter, the principle of the University of Chicago has been to appoint scholars without regard to race, color, religion, sex, or national origin.*

Interested persons please send complete curriculum vitae, bibliography, names and addresses of references to:

M. L. Griem, M.D.
Medical Physics Search Committee
University of Chicago
950 East 59th Street
Chicago, Illinois 60637

DEAN, College of Science, Marshall University. To develop smooth transition from division under arts and sciences to newly established college. Departments: biological sciences, chemistry, geology, mathematics, physics. Doctorate in natural, mathematical sciences. Administrative experience departmental level or higher. Demonstrated competence in research, budget, grants procurement. Commitment to service function of sciences. Salary negotiable. Begins 1 July 1977 or earlier. Apply before 15 February to **Dean Paul D. Stewart, Chairperson, Search Committee for Dean, College of Science, Marshall University, Huntington, West Virginia 25701.**

An Equal Opportunity/Affirmative Action Employer

DIRECTOR INSTITUTE OF ENVIRONMENTAL SCIENCES

Applications are invited for the position of director of an interdisciplinary Institute of Environmental Sciences (IES) which offers a professional master's degree program in environmental science with emphasis on problem-solving, community service, and mission-oriented research experience (for example, practicum, internship, or thesis). The IES has its own administrative staff, facilities, field stations, curriculum, and a graduate student enrollment of 60. It also interacts with approximately 100 faculty members from 30 departments across campus. Applicants should have an established reputation in interdisciplinary education and research. Curriculum vitae and references should be submitted to:

W. Robert Gump, Chairman
Search Committee for Director of the
Institute of Environmental Sciences
Miami University
Oxford, Ohio 45056

An Equal Opportunity/Affirmative Action Employer

Indiana University School of Medicine seeks applicants for **DIRECTOR** of the Muncie Center for Medical Education at Ball State University. One of eight centers offering complete first year and development of the second year of our medical curriculum. Applicants must be experienced in medical education, eligible for senior faculty rank with an M.D. and/or Ph.D. degree in basic or clinical sciences. *Indiana University is an Affirmative Action/Equal Opportunity Employer.* Send curriculum vitae and references by 21 January 1977 to **Charles Clark, M.D., Chairman Search and Screen Committee, 1100 West Michigan Street, Indianapolis, Indiana 46202.**

POSITIONS OPEN

DEAN College of Graduate Studies Medical University of South Carolina

The Medical University of South Carolina, located in Charleston, S.C., and having an enrollment of 2300 students, is seeking candidates for the position of dean of the College of Graduate Studies. Currently there are 123 graduate students in either the master of science or doctor of philosophy degree program. The dean is directly responsible to the vice president for academic affairs. Requirements: nominee or applicant must have an earned doctoral degree and demonstrated ability in academic pursuits. Closing date: applications and nominations will be accepted if received prior to 1 February 1977. Effective date: the dean will assume duties as of 1 July 1977. Salary: commensurate with qualifications and responsibilities. Mail nominations and curriculum vitae to: **Dr. E. Bagwell, Chairman, Search Committee for Dean of the College of Graduate Studies, Department of Pharmacology, Medical University of South Carolina, Charleston, S.C. 29401.** *Affirmative Action and Equal Opportunity Employer.*

DIRECTOR OF LABORATORIES: Immediate opening for an academically oriented M.D. or D.O. Board-certified pathologist to develop and supervise all laboratory diagnostic services in a new \$18.1-million university-based ambulatory care center. In addition to direct supervision of the activities of the central laboratory, this faculty member will also be expected to coordinate ancillary support services. He/she would also be expected to teach medical students, graduate students, residents, and post-doctoral students, and will have the opportunity to develop a research program. This is an excellent opportunity for a person who would enjoy the challenge of developing a new laboratory in an academic setting. *Michigan State University is an Equal Opportunity/Affirmative Action Employer.* Contact: **Joan C. Mattson, M.D., Chairman, Search Committee, Department of Pathology, Michigan State University, East Lansing, Mich. 48824.**

DIRECTOR, GORGAS MEMORIAL LABORATORY, PANAMA—Senior scientist, administrator for private nonprofit international research organization to direct aggressive expanding research and training programs in Latin America. Emphasis on diseases of the tropics; program areas include ecology, virology, parasitology, bacteriology, epidemiology, and immunology. Research and management experience required. Proficiency in Spanish desirable. Salary commensurate with training and experience. Starting dates between April 1977 and September 1977 will be considered at this time. Please send curriculum vitae, three letters of recommendation, and copies of major publications to: **Jack W. Millar, M.D., President, Gorgas Memorial Institute of Tropical and Preventive Medicine, Inc., 2007 Eye Street, NW, Washington, D.C. 20006.** *Equal Opportunity Employer.*

POSITION OF EXECUTIVE DIRECTOR THE ARCTIC INSTITUTE OF NORTH AMERICA

An opportunity exists for a scientist with executive ability to join the staff of the Arctic Institute of North America at its headquarters in Calgary.

The successful applicant should have an established scientific background in any of the life sciences, earth sciences, or social sciences. A proven ability is desired in programme management, staff supervision, financial management, fund raising, liaison with government, universities, and industry.

The executive director is the senior administrative officer of the Arctic Institute and is responsible for implementation of policies set by a board of 25 governors of international composition. Salary range is \$25,000 to \$35,000 per year depending on experience. Teachers Insurance Annuity Association pension plan is available. Appointment is for 3- to 5-year term. Renewable by mutual consent.

Interested individuals should send application and complete résumé including statement of Arctic experience and names of three references to:

**Chairman, Search Committee
Arctic Institute of North America
University Library Tower
2920 24th Avenue, NW
Calgary, Alberta T2N 1N4
Canada**

Applications should be received by 1 March 1977.

POSITIONS OPEN

DIRECTOR OF VIVARIUM

Director will have responsibility for providing laboratory animals for the research and teaching programs of the Medical School, Dental School, and Graduate School. Excellent opportunities for independent and collaborative research. Qualifications include experience in managing laboratory animal services for a medical or other professional school and ability to work with diverse departments and researchers. D.V.M. degree desirable. Applicants are invited to submit a résumé of education and professional experience to **Dr. Sven O. E. Ebbesson, Associate Dean Biomedical Sciences, School of Medicine, Medical Sciences Campus, University of Puerto Rico, G.P.O. Box 5067, San Juan, Puerto Rico 00936.** *An Equal Opportunity/Affirmative Action Employer.*

ENTOMOLOGIST

The Department of Environmental, Population and Organismic Biology at the University of Colorado at Boulder expects to fill a position in entomology, probably at the assistant professor level, beginning 1 September 1977. Teaching responsibilities will include a course in general entomology, periodic participation in general biology, and periodic offering of an advanced course in insect taxonomy. Research interests may lie in systematics, biogeography, ecology, evolution, or behavior of insects. Development of an active research program is expected. Applicants should send curriculum vitae, transcripts, three letters of reference, and publications to **Professor Paul Winston, Environmental, Population and Organismic Biology Department, University of Colorado, Boulder, Colorado 80309.** Deadline for application is 21 February 1977. *The University of Colorado is an Equal Opportunity/Affirmative Action Employer.*

ENTOMOLOGISTS

ASSISTANT—ASSOCIATE PROFESSOR. Ph.D. required, postdoctoral experience preferred. Applications are invited from persons qualified to assume leadership in an on-going research program in urban entomology directed toward development of pest management systems for roaches and ornamental pests in urban environments and to do part-time teaching in undergraduate general entomology courses. Candidates should have strong training in ecology, insect behavior, biocontrol, and statistics. Also, must have demonstrated potential in basic research combined with ability to communicate findings to the Texas pest control industry and homeowners.

RESEARCH ENTOMOLOGIST. Ph.D. required. A full-time research position in The Texas Agricultural Experiment Station has been opened for a veterinary entomologist to work on the biology, ecology, and control of cattle ticks as part of an on-going program. Person selected will work as part of a team led by a senior scientist. Must have strong training in ecology, population dynamics, pest management, statistics, and veterinary entomology. Initial appointment will be for 1 year with option for renewal. Position has potential for developing into permanent research-teaching appointment.

Send curriculum vitae, transcripts, reprints, and names of five references to **Dr. P. L. Adkisson, Head, Department of Entomology, Texas A & M University, College Station, Texas 77843.** Closing date is 15 February 1977.

An Equal Opportunity/Affirmative Action Employer

THE UNIVERSITY OF MICHIGAN FACULTY POSITION BIOLOGY/BIOPHYSICS

The Division of Biological Sciences and the Biophysics Research Division invite applications for an assistant or associate professor. Responsibilities include the development of an independent research program in the general area of energy transducing reactions associated with biological membranes and participation in the research and teaching programs. Postdoctoral experience expected. Applications should include curriculum vitae, relevant reprints, a brief of future research plans, and complete names and addresses of three references sent to the address below by 15 March 1977.

**Dr. James A. Fee
Chairman, Search Committee
Biophysics Research Division
Institute of Science and Technology
University of Michigan
2200 Bonisteel Boulevard
Ann Arbor, Mich. 48109**

A Nondiscriminatory, Affirmative Action Employer

POSITIONS OPEN

Indiana University School of Medicine seeks applicants for new position of **DIRECTOR-COORDINATOR**, Cancer Research and Education program. Career opportunity in the office of the dean, School of Medicine at one of the nation's leading medical centers. Major administrative responsibility for developing and implementing cancer education and research programs. Applicants must be eligible for senior faculty rank with an M.D. and/or Ph.D. degree in basic or clinical sciences with emphasis on oncology. *Indiana University is an Affirmative Action/Equal Opportunity Employer.* Send curriculum vitae and references by 28 February 1977 to **Robert Rogers, M.D., Chairman Search and Screen Committee, 1100 West Michigan Street, Indianapolis, Indiana 46202.**

FACULTY POSITIONS DEPARTMENT OF TECHNOLOGY AND HUMAN AFFAIRS WASHINGTON UNIVERSITY (ST. LOUIS)

It is anticipated that two faculty positions will be available in the Department of Technology and Human Affairs in the School of Engineering and Applied Science starting in the summer or fall 1977. A doctoral degree and some background in engineering or applied science is required. One of these positions requires previous participation and/or direction of interdisciplinary research concerned with application of technology to contemporary societal problems, technology assessment, or technology policy analysis. The other position involves teaching and research on application of modeling, simulation, and systems dynamics to contemporary societal problem areas such as energy, environmental quality, food supply, world development, with emphasis on applications rather than mathematical techniques. Must be capable of communication with university students with widely varying mathematics background and career interests. Rank and salary dependent upon qualifications. Send résumé before 1 March 1977 to **Professor Robert P. Morgan, Chairman, Department of Technology and Human Affairs, Box 1106, Washington University, St. Louis, Missouri 63130.** *An Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS PHARMACOLOGY AND CLINICAL PHARMACOLOGY

The Department of Pharmacology and Therapeutics and the Section of Clinical Pharmacology at Louisiana State University School of Medicine in Shreveport have two positions open at the assistant professor to associate professor level. Qualified Ph.D. or M.D. candidates are invited to submit an application and curriculum vitae by 15 February 1977 to: **Dr. Helmut M. Redetzki, Professor and Head, Department of Pharmacology and Therapeutics, Louisiana State University School of Medicine in Shreveport, P.O. Box 33932, Shreveport, La. 71130.** *An Equal Opportunity Employer.*

UNIVERSITY OF WASHINGTON DEPARTMENT OF ATMOSPHERIC SCIENCES

A faculty position at the beginning assistant professor level will be available in September 1977 in the field of theory of climate. Applicants should have earned a doctoral degree by September 1977 with specialization closely related to the dynamical theory of climate, they should be familiar with modern methods of data analysis, and should have broad interests in climate and mechanisms of climate change. Applicants should send curriculum vitae and names of three references prior to 1 February 1977 to: **Robert G. Fleagle, Department of Atmospheric Sciences AK-40, University of Washington, Seattle, Washington 98195.** *The University of Washington is an Equal Opportunity/Affirmative Action Employer.*

TWO TENURE/TRACK FACULTY POSITIONS in analytical, inorganic, or physical chemistry are available for fall 1977. Preferred research areas are GC/MS, bio-, or physical inorganic chemistry, and experimental physical chemistry. Rank is open. Vigorous research program and excellence in teaching are required. Qualified Ph.D. chemists should submit complete résumé, proposed plan of research, graduate transcripts, and have three letters of recommendation sent to **T. C. O'Haver, Chairman, Faculty Search Committee, Chemistry Department, University of Maryland, College Park, Md. 20742.** Deadline for receipt of completed application is 21 February 1977.

The University of Maryland is an Affirmative Action/Equal Opportunity Employer. All interested persons are encouraged to apply.

POSITIONS OPEN

FACULTY POSITIONS IN FOREST ENGINEERING

The College of Forest Resources, University of Washington, is seeking faculty members in the following areas:

Analysis of Forest Engineering Systems—Evaluation of harvest alternatives; use of operations research.

Soils, Water, and Engineering—Soil mechanics; harvest impacts on water quality.

Forest Roads and Harvesting Systems—Forest road location; harvest layout.

Forest Surveying—Field and office aspects of forest surveying.

Salary and rank open. For job description write: **W. A. Atkinson, College of Forest Resources, University of Washington, Seattle, Washington 98195.** *The University of Washington is an Equal Opportunity/Affirmative Action Employer.*

UNIVERSITY OF CALIFORNIA, IRVINE

The University of California, Irvine, Department of Psychiatry and Human Behavior, invites applicants for full time **FACULTY POSITIONS**. M.D. degree, 3 years of accredited psychiatric residency, California licensure, and evidence of scholarly productivity required. (i) Assistant professor level, family therapy and liaison with family medicine (training in family therapy preferred); (ii) assistant professor level to coordinate undergraduate psychiatry curriculum, didactic, clinical, and cognate basic sciences at medical student level; (iii) two at assistant or associate professor level to direct inpatient and outpatient services, including clinical supervision and didactic teaching of medical students and residents in child and adult psychiatry. *Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.* Send curriculum vitae and names of three references to **Dr. E. Mansell Pattison, University of California, Irvine, Calif. 92717.**

TWO FACULTY POSITIONS, ELECTRICAL ENGINEERING. The University of Connecticut invites applications for two tenure track positions available September 1977. One position (assistant/associate professor) emphasizes communications and signal processing. Applicants should have education or experience in digital communications and data transmission. The second position (assistant professor) emphasizes biomedical engineering. Applicants should have an interest in clinical applications, and have education or experience in an interdisciplinary program involving bioengineering and a medical field. Both positions require a doctorate and an interest in undergraduate laboratory development. Duties include teaching undergraduate and graduate courses, and initiation of an appropriate research program. Send résumé to **Professor C. H. Knapp, Department of Electrical Engineering and Computer Science, Box U-157, University of Connecticut, Storrs, Connecticut 06268.** *An Equal Opportunity Employer.*

FACULTY POSITIONS: DEPARTMENT OF PATHOLOGY NEW YORK UNIVERSITY MEDICAL CENTER

- (1) **Surgical Pathology-Cytopathologist** to direct Cytology Services and related training programs for the Medical Center. Will participate in surgical and autopsy services part-time. Should have experience in all areas of cytology methodology and interest in related research and development programs.
- (2) **Surgical Pathologist** with experience in electron microscopy to train residents and fellows as well as pursue own investigations. A new Joelco TEM-SEM is operational and two full-time technicians are fully funded.
- (3) **Clinical Chemistry and Toxicology Director** to supervise routine and emergency services and train residents. Research space available, opportunity to collaborate with New York City Toxicologists Medical Examiner's Office and New York University Department of Environmental Medicine.

All positions entail full academic privileges and responsibilities with rank and salary dependent on experience, scholarly achievements, and potential. Send résumé to **Vittorio Defendi, M.D., Chairman, Department of Pathology, New York University Medical Center, 550 First Avenue, New York, New York 10016.** *An Equal Opportunity/Affirmative Action Employer, M/F.*

14 JANUARY 1977

POSITIONS OPEN

DEPARTMENT OF HUMAN GENETICS. Yale University School of Medicine, has two faculty openings at the level of assistant professor or above. (i) **Medical genetics:** M.D. degree with postdoctoral clinical training required. (ii) **Mammalian developmental genetics:** Ph.D. or M.D. degree. Candidates for both positions will be judged on potential for conducting outstanding research and on teaching ability. Applicants should send curriculum vitae, list of publications, and three references to: **C. W. Slayman, Department of Human Genetics, 333 Cedar Street, New Haven, Conn. 06510.** *The Department encourages applications from women and members of minority groups. Yale University is an Equal Opportunity/Affirmative Action Employer.*

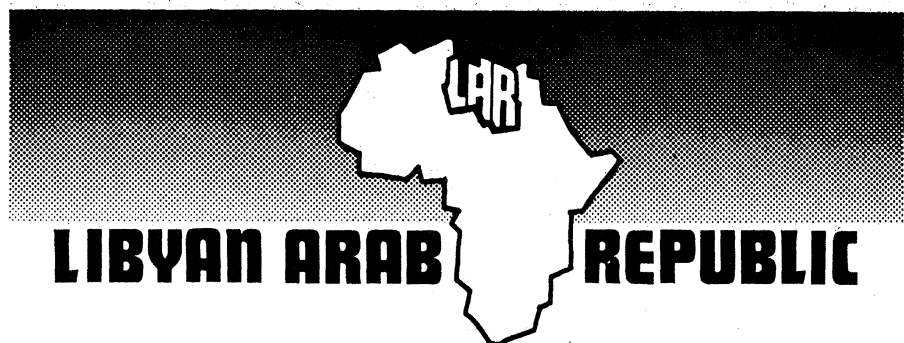
IMMUNOLOGY-POSTDOCTORAL. Available February. Salary \$11,000. In vitro studies of immunological function of alveolar macrophages. Experience in cellular immunology, macrophages, or in vitro antibody formation. Send curriculum vitae and names of three references to: **Dr. H. B. Herscovitz, Department of Microbiology, Georgetown University, School of Medicine, Washington, D.C. 20007.**

POSITIONS OPEN

The Division of Natural Sciences, State University of New York, Purchase, New York 10577, an Equal Opportunity/Affirmative Action Employer, invites applications from persons with experience beyond the doctorate for **FACULTY APPOINTMENTS** for September 1977. Purchase emphasizes teaching and student research participation. Submit curriculum vitae, names of three references, and summary of research plans to Search Committee at above address.

BIOLOGISTS—One appointment at associate professor level, other at assistant professor. **Cell biologist**—with skills in electron microscopy and histology. Interest in tissue culture, neurobiology, or developmental biology is desirable. Courses to be taught include general biology, cell biology, and specialty. **Animal physiologist**—with interests in endocrinology, environmental physiology, and/or developmental biology. Courses to be taught include general biology and specialty.

CHEMIST capable of teaching courses in both physical and organic chemistry, or a chemist with an inorganic and analytical chemistry background. An active interest in environmental and biological problems is desirable.



ALFATEH UNIVERSITY FACULTY OF VETERINARY MEDICINE P.O. BOX 4281 TRIPOLI LIBYAN ARAB REPUBLIC

Applications are invited for teachers of the following subjects in the Department of Preclinical Studies:

Veterinary Anatomy
Veterinary Histology and Embryology
Veterinary Biochemistry
Veterinary Sanitation and Hygiene
Nutritional Biochemistry
Animal Breeding

All instructions are in the English language.

Applicants should possess a veterinary (or equivalent) degree from a recognized university, and a Ph.D. in some branch of their respective discipline. Salary range from 3120 to 5760 Libyan dinars per annum (1 L.D. = U.S. \$3.3 approximately) plus a housing allowance of 100 L.D. monthly.

Applications and further details should be sent to:

**The Dean
Faculty of Veterinary Medicine
Alfateh University
P.O. Box 4281
Tripoli
Libyan Arab Republic**

**FOOD AND DRUG
ADMINISTRATION (FDA)
BUREAU OF DRUGS
WASHINGTON, D.C.**

MANAGERIAL POSITION: We are seeking candidates for the position of director, Division of Drug Chemistry, in our Pharmaceutical Research and Testing activities. The director is responsible for planning, conducting, and managing research to: (i) detect, isolate, and disclose the nature of important constituents of drugs; (ii) develop original methods to quantitate important drug components; and (iii) investigate the principles underlying the chemical reactions employed in the analysis of drug components. Opinions and research investigations support FDA regulatory decisions regarding the safety of drugs marketed in the United States.

Candidates must possess a Ph.D., or equivalent achievement, with a background and training in analytical chemistry, pharmaceutical chemistry or related physical sciences. Applicants must also possess testing or research expertise in the analysis of pharmaceuticals and their metabolic products, with managerial experience in this scientific area. In addition to the above, the usual benchmarks of scientific achievement such as peer recognition, publications, professional activities, honors and awards will be considered in making a final selection.

Salary: \$39,600 per annum.

Applicants should submit a curriculum vitae and bibliography to:

**Michael Smith
Food and Drug Administration
Personnel Operations Branch, FB No. 8
200 C Street, SW—Room 1825
Washington, D.C. 20204**

U.S. citizenship is required.

FDA is an Equal Opportunity Employer.

**CSIRO
DIVISION OF FISHERIES
AND OCEANOGRAPHY
CRONULLA, N.S.W.
EXPERIMENTAL OFFICER**

CSIRO has a broad charter for research into primary and secondary industry areas. The Organization has approximately 7000 employees—2200 of whom are research and professional scientists—located in divisions and sections throughout Australia. **FIELD: PHYSICAL OCEANOGRAPHY.**

GENERAL: The Division is Australia's principal marine research institution with about 50 scientists investigating the fisheries resources and the physical, chemical and biological features of the oceans and estuaries around Australia. Headquarters of the Division are at Cronulla, Sydney, with regional laboratories in Perth, Brisbane and Karumba. On-line access to a CYBER 76 computer is available at Cronulla. Sea-going facilities include a vessel chartered for oceanography and several smaller vessels.

The appointee will be a member of the physics and chemistry group, and will be located initially at Cronulla.

DUTIES: Carry out investigations in physical oceanography under the general direction of research scientists. Take part in research cruises, occasionally as leader of the scientific party. Assist in processing data, and in preparing equipment for field work.

QUALIFICATIONS: A University degree in mathematics, physics or equivalent qualifications. Previous experience in physical oceanography would be an advantage. Ability to work at sea is essential.

SALARY: Experimental Officer Class 2 or 3: A\$13,248 to A\$17,032 per annum.

TENURE: Indefinite or 3-year fixed term.

Applications stating full personal and professional details, listing the names of at least two referees, and quoting reference number 320/565 should reach:

**The Chief
Division of Fisheries and Oceanography
P.O. Box 21
Cronulla, N.S.W. 2230
Australia**

by 21 January 1977.

POSITIONS OPEN

**ARYA MEHR UNIVERSITY
OF TECHNOLOGY AT ISFAHAN**

Applications are invited from persons holding or expecting to receive the degree of Ph.D. or its equivalent in chemistry, physics, mathematics, biology, geology, all fields of engineering, agriculture, and food technology, and from persons holding the degrees of M.L.S. and/or D.L.S. in library science and the degree of M.A. in the teaching of English as a second language.

Applications are also invited from individuals holding the degree of Ph.D. or its equivalent in architecture, social sciences, humanities, management, and economics who intend to participate in graduate or undergraduate programs designed in an interdisciplinary manner to study the impact, and to make an assessment of, technological endeavours.

Preference will be given to applicants with previous experience in their fields and knowledge of fluent Farsi is mandatory. Applicants should send their personal data summary including education, experience, and list of publications, together with a transcript of their academic record to

**The Academic Vice Chancellor (Isfahan Project)
Arya Mehr University of Technology
P.O. Box 3406
Tehran, Iran**

FACULTY POSITION—BIOCHEMISTRY

The Department of Biochemistry at the University of Georgia invites applications for a position at the assistant or associate professor level from individuals with a clearly demonstrated potential for excellence in both teaching and research. Applicants should hold the Ph.D. degree in biochemistry or a related field and have had postdoctoral research experience. The appointee will be expected to participate in the teaching programs of the department at the undergraduate and graduate levels and to develop an active independent research program in the area of protein structure. A secondary interest in biological membranes, immunology, neurobiology, electron transfer, or organelle structure is highly desirable. Applicants should submit, prior to 1 March 1977, a complete curriculum vitae, names of four references, and a research prospectus to

**Dr. James Travis
Chairman, Search Committee
Department of Biochemistry
Graduate Studies Research Center
University of Georgia
Athens, Georgia 30602**

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

HEAD, DEPARTMENT OF SYSTEMS ENGINEERING, University of Illinois at Chicago Circle. Position open September 1977. The department has a full-time faculty of 15 and offers undergraduate and graduate degrees in industrial engineering, operations research, systems analysis and design, urban, and transportation systems. Candidates should have an earned doctoral degree, an outstanding record in research, and demonstrated ability in teaching and administration. Send résumé, list of publications, and names of three references to: **Dr. Richard M. Michaels, Chairman, Search Committee, 925 SEO, University of Illinois, Box 4348, Chicago, Illinois 60680.** *An Equal Opportunity/Affirmative Action Employer.*

INSECT PHYSIOLOGIST. Assistant professor rank or, if especially qualified, associate professor. To teach a graduate course, possibly an undergraduate course, appropriate graduate seminars, and to conduct physiological research. Research areas open but candidate should appreciate applications of basic work to agriculture. Postdoctoral experience required. Send résumé with three letters of recommendation to: **Dr. Milton W. Weller, Head, Department of Entomology, Fisheries, and Wildlife, University of Minnesota, 219 Hodson Hall, 1980 Folwell Avenue, St. Paul, Minn., 55108,** by 15 February 1977. Position to be filled by 1 July 1977. *Equal Opportunity/Affirmative Action Employer.*

INSTRUCTOR OF LIFE SCIENCES. Duties will be in laboratory sections of advanced biology courses including ecology, mammalogy, ornithology, and comparative anatomy. M.A. or M.S. required. Application deadline: 21 February 1977. Qualified applicants should send curriculum vitae, transcripts, and three letters of recommendation to **Dr. Richard L. Myers, Chairman, Recruitment Committee, Southwest Missouri State University, Springfield, Missouri 65802.** *An Equal Opportunity/Affirmative Action Employer, F/M.*

POSITIONS OPEN

LABORATORY MECHANIC MACHINIST

To operate Medical Center Research Shop facility. Ability to operate equipment and to work with all materials. Ability and experience in designs and fabrication of special purpose research devices. Ability to repair existing research equipment. Four years machine shop experience. Salary: \$9,834 to \$13,321. Send résumé and three references to: **Dr. Carleton H. Baker, Department of Physiology, Box 8, College of Medicine, University of South Florida, Tampa, Florida 33612.** *The University is an Affirmative Action/Equal Opportunity Institution.*

**UNIVERSITY OF QUEENSLAND
LECTURER IN PHYSIOLOGY
OR PHARMACOLOGY**

Applications are invited from medical, veterinary science, science, or dental graduates for above position. Quote Reference No. 41376, 31.1.77.

Salary: within the range A\$13,552 to A\$17,993 per annum.

Other benefits: lecturer and above: Superannuation, study leave, housing assistance, travelling, and removal expenses.

Additional information and application forms are obtainable from the **Staff Officer, University of Queensland, St. Lucia, 4067, Queensland, Australia.**

MARINE CHEMIST

The School of Oceanography, Oregon State University, invites applicants for a faculty position in chemical oceanography. Rank and salary will be commensurate with experience. Candidates should have a strong background in areas of interest to the school; marine organic chemistry and biochemistry or the physical chemistry of natural electrolyte solutions and solid-solution interactions would be examples. A recognizable potential for research, teaching, and obtaining grants in marine-related work is required. Apply to **The Dean, School of Oceanography, Oregon State University, Corvallis, Oregon 97331,** including résumé and names of three references. *An Affirmative Action/Equal Opportunity Employer.*

MEDICAL ADVISOR. A rapidly growing device-oriented company in the health care industry is searching for a medical advisor to join a small corporate applied research group. This individual will serve as the team's medical expert in assessing new product opportunities and medical needs. The advisor will be responsible for monitoring and assessing new developments in biomedical research and will interface with consultants and the academic community. Applicants should send curriculum vitae to: **Box 29, SCIENCE.**

MICROBIOLOGIST. International leader among chiropractic colleges has immediate opening for microbiologist with M.S. or Ph.D. and at least 2 years of postdoctoral experience in teaching and independent research. Ability to develop and implement basic courses in fundamental and pathogenic microbiology. Knowledge of another area such as virology, immunology, parasitology, mycology, or public health is desirable. Rank open. Salary competitive. Liberal fringe benefits. Interested candidates should send curriculum vitae, three letters of reference, and transcripts of all postsecondary education to: **Dr. C. C. Kuehner, Director, Division of Basic Science, National College of Chiropractic, 200 East Roosevelt Road, Lombard, Illinois 60148.**

MICROBIOLOGY. Assistant professor. Ph.D., broad background in microbiology and interest or experience in clinical microbiology.

ANIMAL PHYSIOLOGY. Assistant professor. Ph.D. with background in mammalian physiological systems. Openings subject to budget approval. Send letter and curriculum vitae to **John Farnsworth, Dean, Arts/Sciences, Box 655, State University College at Utica/Rome, 811 Court Street, Utica, N.Y. 13501.**

An Affirmative Action/Equal Opportunity Employer

MICROBIOLOGIST/GENETICIST. We are looking for a recent Ph.D. to plan, conduct, and report tests on the mutagenic potential of chemicals, using primarily bacterial systems. Should have knowledge in genetic toxicology, carcinogenicity, and cell culture. A well-organized person with superior communication abilities is being sought. Send résumé and appropriate references to: **Employment Office, American Cyanamid Company, Agricultural Division, P.O. Box 400, Princeton, N.J. 08540.** *An Equal Opportunity Employer, M/F.*

MICROBIOLOGIST/GENETICIST—Recent Ph.D. to be in charge of mutagen testing program for large New Jersey based corporation. Background in genetic toxicology, biochemistry, cell culture, and carcinogen testing would be preferred. Report writing and strong organization required. Salary dependent on experience. Fee and relocation paid. *An Affirmative Action/Equal Opportunity Employer.* Please send curriculum vitae and two references to: **Banner Business Associates, 145 Witherspoon Street, Princeton, New Jersey 08540.**

MOLECULAR BIOPHYSICS

A tenure track position will possibly be available in experimental molecular biophysics at the assistant professor level at the School of Physics at Georgia Tech. Interest in both teaching and research is essential. Applicants for a position in experimental biophysics should have a Ph.D. in physics with post-doctoral experience in experimental biophysics, biochemistry, or molecular biology. Applicants should complement but interact with current research efforts. We seek applications from candidates with research interests in mechanisms of genetic regulation or transfer, or in biophysical aspects of biological membranes. *Georgia Tech is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are urged to apply and identify themselves.* Applicants should send résumés and names of three references to **James R. Stevenson, School of Physics, Georgia Tech, Atlanta, Georgia 30332.**

NEUROPHYSIOLOGIST

Opening available at the assistant professor level and possibly above. Effective date: September 1977. Applicants should have a Ph.D. and a strong commitment to research and undergraduate teaching. The successful applicant will participate in teaching either an introductory course in human biology or general biology as well as intermediate courses in cell physiology or neurobiology and advanced courses in physiology of behavior or vertebrate physiology. Should have a background to teach general zoology as well as cell, vertebrate, and human physiology. Credentials will be reviewed when complete. Interested persons should send their curriculum vitae, transcripts, brief outline of research plans, and a letter of recommendation to **Dr. Mary D. Coyne, Chairman, Department of Biological Sciences, Wellesley College, Wellesley, Massachusetts 02181.** *An Equal Opportunity/Affirmative Action Employer*

PHARMACOLOGIST. Applications are invited for a faculty position (assistant or associate professor) at Emory University. Candidates must have doctoral degree, postdoctoral research experience, and be able to develop research program in biochemical/molecular pharmacology, preferably in autonomic nervous and/or cardiovascular system. Send curriculum vitae and names of three references to **Dr. Neil C. Moran, Chairman, Department of Pharmacology, Emory University, Atlanta, Ga. 30322.** *An Equal Opportunity/Affirmative Action Employer.*

MOLECULAR GENETICIST-PLANT BREEDER TO WORK WITH GRAPES

Recent Ph.D. needed to teach and research improvement of grapes at assistant professor level starting July 1977. Candidates should have a strong background in genetics, biochemistry, and plant physiology; should be prepared to develop a field of basic research, apply findings to practical viticulture, teach in his fields of expertise, and guide graduate student research. Appointee will assist in introducing new grape varieties from the breeding project. Qualified candidates should send curriculum vitae, list of publications, graduate and undergraduate transcripts, and request three letters of recommendation be sent to **Professor A. D. Webb, Department of Viticulture and Enology, University of California, Davis, Calif. 95616.** Applications received after 1 May 1977 may not be considered. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

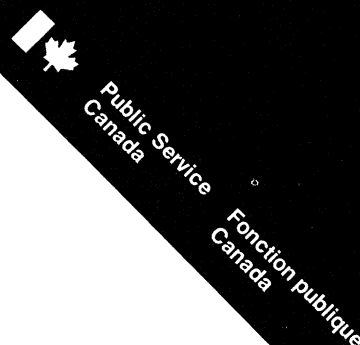
NEUROSCIENTIST

Interest in autonomic nervous system. Must be familiar with neurophysiologic and neuroanatomic techniques. Salary commensurate with experience. Send résumé to

Box 18, SCIENCE



Open to both
men and women Appel
de candidatures
mixtes



**Department of Environment Canada
Resource Branch, Maritimes
Halifax-Dartmouth, Nova Scotia**

RESEARCH SCIENTISTS

**Initial salary up to \$25,780 (dependent on experience)
Ref. No: 76-STP-32-104 (S)**

Resource Biologists (5 positions)
(4 positions related to finfish)
(1 position related to shellfish)

Duties

The candidates will conduct research on the biology and dynamics of marine stocks using data from research vessel cruises and from commercial fisheries to describe the biological parameters of these stocks. The candidates will be expected to contribute to the collection of such data including the planning and conduct of research vessel cruises at sea. The applicants will analyse the effects of fishing on marine stocks through the application of population dynamics theory. The research will provide the basis for evaluation of the current status of finfish or shellfish stocks and testing of alternative management strategies on the potential yield of these resources. These positions require the

incumbents to provide advice to fisheries managers on appropriate regulatory measures to optimize yields from these resources.

Qualifications

The candidates must possess a Ph. D. or lesser degree with evidence of research experience and productivity equivalent to that of the Ph. D. in the field of biology or mathematics with specialization in fish ecology. Experience and demonstrated ability to apply mathematical and statistical techniques to ecological research are required. Preference will be given to candidates with experience in applied fisheries research.

The qualified applicants not offered these positions will, if they wish, be retained in a candidate inventory for consideration for future vacancies. Knowledge of English is essential.

How to Apply

Forward completed "Application for Employment" (Form PSC 367-4110) available at Post Offices, Canada Manpower Centres or offices of the Public Service Commission of Canada, to:

**Professional, Scientific and Technical Program
Public Service Commission of Canada
Esplanade Laurier, West Tower
300 Laurier Avenue West
Ottawa, Ont. K1A 0M7**

Closing Date: January 28, 1977

Please quote the applicable reference number at all times.

POSITIONS OPEN

PATHOLOGISTS

DIRECTOR—D.V.M. Board-certified pathologist with solid managerial experience and interest in large-scale toxicology programs is needed to direct and expand a growing pathology department.

ANATOMIC PATHOLOGIST—D.V.M. Board-certified is preferred with experience in large-scale toxicology programs desired to perform necropsies and pathological evaluations.

Maryland—D.C. area location; fringe benefits; salary open; relocation assistance available. Qualified individuals should submit a curriculum vitae with salary requirements to **Tim Schick, Employment Manager, Litton Bionetics, Inc., 5516 Nicholson Lane, Kensington, Md. 20795. Equal Opportunity Employer, M/F.**

PETROLOGIST—WASHINGTON UNIVERSITY

The Department of Earth and Planetary Sciences, Washington University, has available a position for an igneous-metamorphic petrologist beginning with the fall semester of 1977. The successful candidate must have the following attributes: demonstrated creativity and promise of excellence in research and teaching; substantial field experience and intent to develop a vigorous graduate research program with main thrust in terrestrial geoscience; willingness to teach courses in petrology and other topics of interest at the graduate and undergraduate levels; interest in planetary sciences and in becoming a fellow of the McDonnell Center for the Space Sciences, through which knowledge of petrology would be shared with scientists of other disciplines. It is intended that the candidate be hired as an assistant professor, but more experienced individuals with exceptional qualifications will be considered as well. *Washington University is an Equal Opportunity/Affirmative Action Employer.* Send résumé, statement of future research interests, and names of at least three references to **Larry Haskin, Chairman, Department of Earth and Planetary Sciences, Washington University, St. Louis, Mo. 63130.** Applications received through 18 February 1977.

PHARMACOLOGY

The Department of Pharmacology and Therapeutics, Schools of Medicine and Dentistry, State University of New York at Buffalo, invites applications for a full-time faculty position in the areas of (i) toxicology and (ii) clinical pharmacology, as assistant (or, if especially qualified, associate) professor. Candidates for (i) must have a Ph.D. or M.D. degree plus at least 2 years of research experience and publications. Duties include teaching and research, with a major opportunity to develop a new program. Candidates for (ii) must have an M.D. degree and sufficient clinical training to justify joint appointment with an appropriate clinical department. Duties include teaching, research, and patient care in an academic environment, with special opportunity for combined basic and clinical research. Send curriculum vitae and also request that three letters of recommendation be sent to **Dr. Edward A. Carr, Jr., 127 Farber Hall, State University of New York at Buffalo, Buffalo, N.Y. 14214.**

An Equal Opportunity/Affirmative Action Employer.

PHYSIOLOGISTS with a Ph.D. and/or M.D. and postdoctoral training are invited to apply for the position of assistant, or possible associate, professor of physiology in the Faculty of Medicine at Memorial University of Newfoundland at St. John's, Newfoundland. The duties include contributing to the teaching of physiology in an integrated medical curriculum as well as some physiology teaching to nursing and science students. The successful candidate should preferably have experience in teaching systems oriented physiology. A strong background in cardiovascular/respiratory and/or renal/body fluids physiology would fit in well with our program. The candidate will be expected to develop a research program. The Faculty of Medicine is presently expanding its facilities in a new Health Science Center which is a part of the Memorial University Campus.

The salary will be commensurate with experience and qualifications and the position is available immediately.

Applications, including curriculum vitae and the names and addresses of three references, should be sent to: **Dr. C. R. Triggie, Chairman, Physiology Search Committee, Faculty of Medicine, Memorial University, St. John's, Newfoundland, Canada, A1C 5S7.**

The application deadline is 1 March 1977.

POSITIONS OPEN

PHYSICAL OCEANOGRAPHER

The Department of Atmospheric and Oceanic Science, The University of Michigan, is accepting applications for a tenure-track faculty position now open for a physical oceanographer at the assistant professor level. Applicants must have a doctorate in physical oceanography with research interests in experimental or descriptive physical oceanography. Responsibilities will include teaching undergraduate and graduate courses and developing a research program in one's area of specialty. Duties will commence 1 September 1977.

Applicants should send curriculum vitae and names of three references to **Dr. P. A. Meyers, Chairman, Physical Oceanography Search Committee, Department of Atmospheric and Oceanic Science, The University of Michigan, Ann Arbor, Michigan 48109.**

The University of Michigan is a nondiscriminatory, Affirmative Action Employer.

PHYSIOLOGICAL PSYCHOLOGIST. Ph.D. in physiological psychology with research emphasis in either neurochemistry or animal behavior. Assistant professorship with undergraduate and graduate teaching. Current floor around \$16,000. This position is available subject to budget ratification. Send curriculum vitae and names of referees to: **Dr. Do-reen Kimura, Department of Psychology, University of Western Ontario, London, Canada N6A 5C2.**

PHYSIOLOGICAL PSYCHOLOGIST

Applications are invited for a position at the assistant professor level in the Department of Psychology, University of Toronto. The candidate will be expected to teach undergraduate, and some graduate courses, in physiological psychology. Experience in managing an active research programme and in training graduate students is desirable. Applicants should send a curriculum vitae and three letters of reference to **Dr. N. Mrosovsky, Department of Psychology, University of Toronto, Toronto, M5S 1A1, Canada.**

PLANT ANATOMIST/MORPHOLOGIST. The Department of Botany, University of Wisconsin-Milwaukee, seeks an assistant professor to teach plant anatomy, morphology, and microtechnique and participate in introductory courses. Applicants must have demonstrated research competence in experimental or evolutionary morphology or in a related area. Postdoctoral research and teaching experience is desirable. Closing date for application is 15 February 1977 and the effective date of appointment is 29 August 1977. Applicants should submit curriculum vitae, publications, and three letters of recommendation to **Forest Stearns, Chairman, Botany Department, University of Wisconsin-Milwaukee, Box 413, Milwaukee, Wisconsin 53201. An Equal Opportunity/Affirmative Action Employer.**

PLANT PHYSIOLOGIST/PLANT BIOCHEMIST

Department of Plant Sciences, University of California, Riverside, announces a position at the assistant professor level, available 1 July 1977. Primarily research with some teaching. Plant scientist with strong training in biochemistry and with a research commitment to the use of plant cell culture techniques for crop improvement. Candidates with extensive training in plant molecular biology or hormonal control of plant growth and development are encouraged to apply, but consideration is not restricted to these areas. Ph.D. required; postdoctoral experience preferred, but all qualified candidates will be considered. Expected to teach an upper division course in plant physiology, a graduate course in area of specialization, and to direct graduate students. Eleven-month appointment in the Agricultural Experiment Station. Send curriculum vitae and official transcripts and arrange to have at least three letters of recommendation sent to: **Dr. R. T. Leonard, Search Committee Chairman, Department of Plant Sciences, University of California, Riverside, Calif. 92502.** Application deadline: 15 February 1977.

An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL FELLOW

Position available immediately for recent Ph.D. in biochemistry, molecular, or cell biology to study molecular aspects of cell differentiation in culture. Please send résumé to **Dr. S. E. Plakis, Department of Biological Chemistry, University of Maryland, School of Medicine, 660 West Redwood Street, Baltimore, Md. 21201.**

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

POSITIONS OPEN

UNIVERSITY POSITION OPENING

Regular position in the Department of **PHYSICS AND ASTRONOMY** beginning 15 August 1977. Rank and salary dependent upon experience. Required: Ph.D., proven ability and interest in instruction, and strong motivation to carry on research involving B.S. and M.S. students. Preference given to **APPLIED EXPERIMENTAL PHYSICIST** with a minimum of 5 years of experience beyond the doctorate and demonstrated ability to secure research funding. Additional information will be supplied upon request. *Western Kentucky University is an Equal Opportunity/Affirmative Action Employer.* Send letter of application and résumé to:

**Dr. Frank Six, Chairman
Department of Physics and Astronomy
Western Kentucky University
Bowling Green, Kentucky 42101
Telephone: 502-745-4357**

POSTDOCTORAL APPOINTMENT to engage in a collaborative study of chromosomal proteins and associated enzymes as related to androgen action in the prostate. Strong background in biochemical preparative and analytical techniques as well as some experience in steroid hormone receptor work is desired. Send curriculum vitae and names of references to:

**Dr. Khalil Ahmed
Department of Laboratory Medicine and Pathology
Box 198, Mayo Memorial Building
School of Medicine
University of Minnesota
Minneapolis, Minn. 55455**

POSTDOCTORAL POSITION available immediately for research on structure-function relationships of regulatory enzymes and their physiological significance. Experience in work with enzymes is advisable. Salary: \$10,000 to \$11,000 per year. Send résumé and names of two references to **Dr. G. B. Kohlhaw, Department of Biochemistry, Purdue University, West Lafayette, Indiana 47907. An Equal Access/Equal Opportunity University.**

POSTDOCTORAL POSITION available immediately to study fungal metabolism of lignin and delignification of wood. Strong background in biochemistry and genetics preferred. Please send curriculum vitae including names of references to **Dr. M. H. Gold, Department of Chemistry and Biochemical Sciences, Oregon Graduate Center, 19600 Northwest Walker Road, Beaverton, Oregon 97005. An Equal Opportunity Employer.**

POSTDOCTORAL POSITION

Available immediately. Recent Ph.D. in biochemistry or microbiology for study of mechanism of bacterial energy conservation. Familiarity with enzyme purification or membrane or mutant systems desirable. One-year appointment, renewable. Stipend: \$10,000 for first year. Send curriculum vitae and names of three references to **Dr. Daniel DerVartanian, Department of Biochemistry, Boyd Graduate Studies Research Center, University of Georgia, Athens, Georgia 30602. The University of Georgia is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOW

Postdoctoral fellowship in host defense and pathogenesis. Research focuses on molecular and biochemical interactions of bacterial and phagocytic cells. Position open for recent Ph.D. or M.D. with advanced training in genetics and chemistry of bacterial cell walls. Send curriculum vitae and two letters of recommendation to **Dr. J. K. Spitznagel, Department of Bacteriology and Immunology, School of Medicine, University of North Carolina, Chapel Hill, N.C. 27514. The University of North Carolina is an Equal Opportunity/Affirmative Action Employer. Applications from women and minority candidates are welcome.**

POSTDOCTORAL RESEARCH ASSOCIATE

Position available in analytical mass spectrometry (therapeutic drug analysis) as part of a neuropsychopharmacology research program. Ph.D. in analytical organic chemistry experience desirable. Term: 1 to 3 years. Send curriculum vitae and letter of application with reference list (three) to: **Dr. Paul Mushak, Department of Pathology, University of North Carolina School of Medicine, 514 Preclinical Educational Building, Chapel Hill, N.C. 27514.**

An Equal Opportunity/Affirmative Action Employer

APPLIED MICROBIOLOGIST

The Upjohn Company, a growing name in the pharmaceutical-human health care field, is seeking an individual with a Ph.D. in microbiology (or related field) and 3-5 years academic or industrial experience. The position which is part of Upjohn's Quality Control Unit is responsible for developing and validating sterilization processes for pharmaceuticals, initiating programs for defining bioburdens of pharmaceutical products and materials, and providing solutions to microbiological control problems through independent research. Significant growth potential is available for the candidate with proven ability in project management, independent research and oral and written communication skills.

Living in Kalamazoo, a mid-sized Southwestern Michigan community, means no commuting, immediate access to an excellent mix of cultural-recreational pursuits including lakes, nearby colleges, a four-season climate and much more. Excellent benefits.

Upjohn

7171 Portage Road
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An Equal Opportunity Employer M/F

Please send resume including salary requirements in confidence to:

Dennis A. Nevala
Employment Representative
The Upjohn Company

biomedical evaluator

A Corporate Staff opportunity is now available to a career-minded individual who seeks an association with one of the world's leading producers of ethical and proprietary pharmaceuticals and health and beauty aids. A Doctorate in an appropriate scientific discipline and 5-10 years experience in industrial pharmaceutical research are preferred. Knowledge of and appreciation for Good Laboratory Practices are desirable, in addition. Candidates will be expected to interpret and apply the laws and regulations pertinent to this industry. Good communications skills are essential.

The applicant selected will assist our Director of Good Laboratory Practices in appraising conformity to all phases of non-clinical research operations, and eventually clinical research, by conducting inspections at corporate facilities on an international basis; will also monitor and distribute CLP information essential to maintenance of performance standards. Will involve some travel and be based in **Syracuse, New York**.

Please send detailed resume and salary history in confidence to: Stephen Lewis, Manager of Employment Services, Bristol-Myers Company, 345 Park Avenue, New York, N.Y. 10022. An equal opportunity/affirmative action employer M/F.



BRISTOL-MYERS

NEUROPHARMACOLOGIST (CANADA)

We have a challenging opportunity for a neuropharmacologist to develop novel approaches to problems as a member of a cooperative research effort directed towards new compounds active on the CNS.

Candidates should have completed at least 2 years of postdoctoral training in neuropharmacology and have a high level of achievement.

This is a permanent position in an established neuropharmacological group. It offers excellent growth potential, salary commensurate with qualifications, and a full range of employee benefits.

Our research laboratories are located in modern facilities in Kirkland, Quebec, a suburb 15 miles from downtown Montreal.

Please send curriculum vitae and complete details of your experience and publications to:

The Employment Manager
Merck Frosst Laboratories
P.O. Box 1005
Pointe Claire/Dorval, Quebec, Canada
H9R 4P8

ASSISTANT DIRECTOR Scientific Affairs and Chief, Reproduction, Perinatal Growth & Development

Overall responsibility & supervision of animal husbandry & health care for Laboratory for Experimental Medicine & Surgery in Primates, a division of New York University School of Medicine, located in rural N.Y. State. LEMSIP is New York's primate research resource. Familiarity with general research methodology & speciality in reproduction studies. Good surgical capabilities. Ability to assume back-up responsibility for administration.

Major responsibility is the direction of the existing Reproduction, Perinatal Growth & Development Program, consisting of services & collaboration with transmural scientists. Candidate will be expected to use existing resources to develop own research. Breeding colony includes 40 chimpanzees as well as baboons & macaques.

Excellent growth potential for a decision-making D.V.M., Ph.D. or M.D. with minimum 5 yrs research experience in a managerial capacity for this current opening. Outstanding benefit package includes broad-range medical & dental coverage plus free tuition for self & children. Please send curriculum vitae & salary history to: Ms. MIRIAM KERANS, Professional Placement Coordinator

NEW YORK UNIVERSITY MEDICAL CENTER

568 First Avenue, New York, N.Y. 10016
equal opportunity/affirmative action
employer m/f

MARINE FISHERIES BIOLOGIST Ph.D.

Requires a Ph.D with experience in ichthyology and ecology of marine fishes, preferably along U.S. East Coast. Salary is open, depending on experience, plus benefits, and position is available immediately. Send resume to:

Dr. Charles W. Townley



Battelle

Columbus Laboratories
William W. Clapp Laboratories
P.O. Box 4H, Duxbury, Mass. 02332
An Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE: Lipid metabolism, with emphasis in cholesterol and bile acid metabolism. Applicants should send a curriculum vitae, transcripts, and three letters of recommendation to: **Dr. Thomas F. Kellogg, Department of Biochemistry, Mississippi State University, Post Office Box BB, Mississippi State, Mississippi 39762.** An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH COLLEAGUE. A 1-year position for a neurobiologist is available (pending confirmation of federal funding) beginning June 1977, for a Ph.D. with experience and ability in one of the following areas: analysis of ionic conductances in invertebrate neurons, especially in connection with spontaneous bursting mechanisms and calcium-dependent spiking; or isolation, purification, and characterization of neurohormones, especially peptides, from very small samples. Send inquiries and résumés to: **Ian Cooke, Laboratory of Sensory Sciences, University of Hawaii, 1993 East-West Road, Honolulu, Hawaii 96822.** Telephone 808-948-8001.

POSTDOCTORAL RESEARCH POSITIONS IN BIOCHEMISTRY. Two positions available in the Department of Biochemistry and Division of Medical Genetics for postdoctoral fellows to pursue research on specific problems in red cell metabolism and protein isolation. The salary range for these currently funded positions is \$10,000 to \$14,000 per year depending upon experience and other qualifications. Send résumé and names and addresses of three references to: **Dr. Richard T. Jones, Chairman, Department of Biochemistry, School of Medicine, University of Oregon Health Sciences Center, Portland, Oregon 97201.** An Affirmative Action/Equal Opportunity Employer.

PREDOCTORAL POSITIONS in oncology, immunology, microbiology, virology, molecular, and cellular biology. Available: July to September 1977. Prerequisites: U.S. citizenship, B-plus average, high GRE scores. Inquiries to: **Dr. Sheldon Dray, Head, Department of Microbiology, University of Illinois Medical Center, P.O. Box 6998, Chicago, Illinois 60680.** The University of Illinois is an Equal Opportunity/Affirmative Action Employer.

PROFESSOR AND CHAIRMAN Department of Bacteriology and Biochemistry University of Victoria British Columbia, Canada

Applications are invited for the position of chairman of the Department of Bacteriology and Biochemistry, effective 1 July 1977, or as soon as possible thereafter.

It is expected that the successful candidate will have a strong academic background and broad understanding of teaching and research in microbiology and biochemistry. Candidates should have administrative experience.

Applications, including a complete curriculum vitae and the names and addresses of at least three referees should be sent to **Dr. A. Fisher, Dean, Faculty of Arts and Sciences, University of Victoria, P.O. Box 1700, Victoria, British Columbia V8W 2Y2, Canada.**

UNIVERSITY OF MASSACHUSETTS, AMHERST DEPARTMENT OF BIOCHEMISTRY

We expect to fill a nontenured position at the rank of **RESEARCH ASSOCIATE, INSTRUCTOR, or ASSISTANT PROFESSOR** for the fall 1977. Appointees will have major teaching responsibilities. Opportunity for research; reappointment is negotiable. Applications including a curriculum vitae, statement of teaching (and research) interests, and experience should be submitted to: **Dr. Henry N. Little, Department of Biochemistry, University of Massachusetts, Amherst, Mass. 01003.** University of Massachusetts is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE. FORMATION AND STRUCTURE OF FIBRIN. Interactions of fibrin with plasma components. Use of physical techniques, supported by biochemical and analytical studies. Three-year NIH grant, starts December 1976. Base salary: \$10,000 (no further experience), maximum: \$15,000 (several years appropriate postdoctoral). **Dr. Jan Hermans or Dr. Jan McDonagh, Department of Biochemistry, University of North Carolina, Chapel Hill, N.C. 27514; telephone: 919-966-4644.** Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH IN BIOCHEMICAL AND SOMATIC CELL GENETICS

The Biochemical Genetics Section at Roswell Park Memorial Institute has a postdoctoral research position available immediately. Research will be in human gene mapping, genetic dissection, and biochemical characterization of lysosomal enzymes and other enzymes involved in birth defects and childhood diseases. Man-rodent somatic cell hybrids will be used for mapping and dissecting complete enzyme systems. Experience in enzymology, electrophoresis, and tissue culture is desirable. Two years minimum. Send curriculum vitae and names of three references to **Dr. Thomas B. Shows, Biochemical Genetics Section, Roswell Park Memorial Institute, 666 Elm Street, Buffalo, N.Y. 14263.** An Equal Opportunity Employer, M/F.

PROGRAM MANAGER

Electrical or mechanical engineer with 3 years of experience with spacecraft systems. Knowledge of NASA requirements and procedures required. Must have demonstrated management capability and be able to actively participate in design and testing of instrumentation for the space shuttle. Program manager for USU shuttle project will manage instrument development, design, fabrication, testing, and integration and will be point of contact with NASA and contractors for all instrument related questions. **Box 30, SCIENCE.**

THE PSYCHOLOGY DEPARTMENT OF BRIGHAM YOUNG UNIVERSITY is seeking applications and nominations for an appointment in experimental psychology in the area of cognition. Letters of inquiry, applications with curriculum vitae, and nominations should be addressed to: **Professor Donovan E. Fleming, Department of Psychology, Brigham Young University, 1240-B SFLC, Provo, Utah 84602.** An Equal Opportunity Employer. As a church-sponsored institution, all employees of BYU are required to conform to the standards of conduct of the Church of Jesus Christ of Latter-Day Saints (Mormons). A statement of the standards is available upon request.

PSYCHOLOGIST OR SOCIOLOGIST. Beginning level assistant professorship available to psychologist or sociologist interested in contributing to the development of a graduate level training program in adolescent development. Must have research interest in some aspect of behavior or development during adolescence. Teaching to include two courses at the undergraduate level and one at graduate level. Applicants should send curriculum vitae, statement of research and teaching interests, and arrange to have three letters of recommendation sent by 1 February 1977 to: **Dr. John P. Hill, Chairman, Department of Human Development and Family Studies, Cornell University, Ithaca, N.Y. 14853.** Cornell University is an Equal Opportunity/Affirmative Action Employer.

RADIOECOLOGIST

The Savannah River Ecology Laboratory, an ERDA-supported facility operated by the University of Georgia, has an immediate opening for a radioecologist (Ph.D.) to participate in studies of the cycling of energy related pollutants, especially the transuranics. Background in radiochemical procedures and instrumentations is highly desirable. U.S. citizenship required. Send curriculum vitae, three letters of recommendations, and other supportive information by 7 February 1977 to:

**Radioecologist Search Committee
Savannah River Ecology Laboratory
Drawer E
Aiken, S.C. 29801**

An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE

To study primate retinal physiology with electrophysiological techniques. Applicants should be recent Ph.D.'s. Those with a strong background in visual science will be given preference. Candidates will be expected to partake in the development of particular studies and assume responsibility for a laboratory computer facility.

Interested candidates should send curriculum vitae and names of three references to: **Dr. William Baran, Electronics and Bioengineering Laboratory, SRI, 333 Ravenswood Avenue, Menlo Park, Calif. 94025.** An Equal Opportunity Employer.

POSITIONS OPEN

RESEARCH ASSOCIATE

Ph.D. in physical oceanography, fluid dynamics, or related field with considerable expertise in finite difference techniques will adapt existing software to compute current structure off the North Carolina coast. The position will be available 1 February 1977 at \$16,000 per calendar year for a minimum of an 18-month period. Send résumé to **Gerald S. Janowitz, Center for Marine and Coastal Studies, North Carolina State University, Raleigh, North Carolina 27607.** An Equal Opportunity Employer/Affirmative Action Program.

RESEARCH ASSOCIATE

M.S. or Ph.D. in math/statistics. Must be familiar with pattern recognition and discrimination techniques. Send résumé to **Donna Titchener.**

**Baylor College of Medicine
1200 Moursund Avenue
Houston, Texas 77030**

Equal Opportunity Employer

UNIVERSITY OF UTAH COLLEGE OF MEDICINE DIVISION OF RADIOBIOLOGY

RESEARCH INSTRUCTOR OR ASSISTANT PROFESSOR—RADIOBIOLOGY. DEVELOPMENTAL BONE CELL BIOLOGIST/RADIOBIOLOGIST.

Biologists interested in the skeletal system with publications and competence in electron microscopy, histochemistry, autoradiography, morphometry, stereology, cell tissue, organ culture, and immunocytochemistry. Essential is a basic experience in the handling of hard tissue and some knowledge of radiation biology. Major responsibility is to carry out collaborative research programs with the bone group in the Division of Radiobiology, and supervise the electron microscopy laboratory.

Preference shown to individual whose research uses the cell biology in examining functional developmental bone problems. Salary is negotiable.

QUALIFICATIONS: Applicant should possess a Ph.D. or equivalent and several years of postdoctoral training, ability to work independently, and publications. Interested applicants should send their curriculum vitae and names of reference to:

**Dr. Webster S. S. Jee
Department of Anatomy, Division of Radiobiology
2C 110 Medical Center
University of Utah College of Medicine
Salt Lake City, Utah 84132**

Equal Opportunity/Affirmative Action Employer

SCIENCES

JAMESTOWN COMMUNITY COLLEGE anticipates several possible openings in the sciences for academic year 1977-78:

BIOLOGY—One, 1-year appointment and one, tenure-line appointment for the teaching of general biology offerings.

CHEMISTRY—One, 1-year appointment, teaching college chemistry (lectures and laboratories).

CHEMISTRY—One, 1-year appointment, teaching freshman-level chemistry and quantitative analysis.

PHYSICS—One, 1-year appointment, teaching engineering physics, and physical science or liberal arts physics.

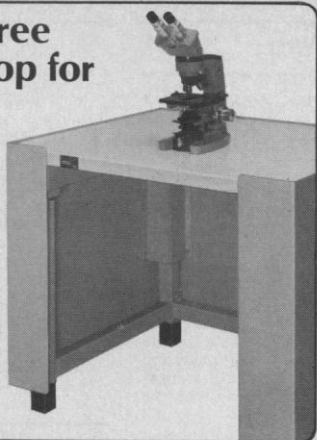
Rank at instructor or assistant professor level and salary range between \$9,500 and \$14,000, depending on education and experience. Qualifications: at least a master's degree in the discipline area.

Please send curriculum vitae, giving names of three references, to **Dr. John Weber, Dean of Instruction, Jamestown Community College, Jamestown, New York 14701.** An Equal Opportunity/Affirmative Action Employer.

The Midland Macromolecular Institute invites applications for a **SENIOR FACULTY POSITION.** Duties will involve research in molecular oncology and teaching in molecular biology, biochemistry, organic chemistry, or related fields at the graduate level. Prospective candidates with proven ability to carry out vigorous and imaginative research programs should contact the **Search Committee 7702, Midland Macromolecular Institute, 1910 West St. Andrews Road, Midland, Michigan 48640,** for details before submitting applications. Telephone: 517-631-9453. Midland Macromolecular Institute is an Equal Opportunity/Affirmative Action Employer.

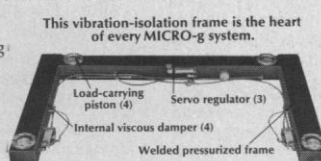
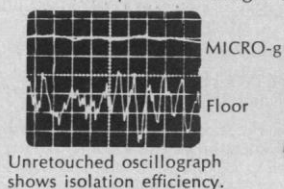
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CSIRO DIVISION OF FISHERIES AND OCEANOGRAPHY CRONULLA, N.S.W. RESEARCH SCIENTIST

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

FIELD: POPULATION DYNAMICS

GENERAL: The division is Australia's principal marine research institution with about 50 scientists investigating the fisheries resources and the physical, chemical, and biological features of the oceans and estuaries around Australia. Headquarters of the division are at Cronulla, Sydney, with regional laboratories in Perth, Brisbane, and Karumba. On-line access to a CYBER 76 computer is available at Cronulla. Sea-going facilities include a 44-meter chartered vessel and several smaller vessels. The appointee will be located in Cronulla.

DUTIES: The appointee will be a member of the division's population dynamics group. This group, which consists of four mathematicians and some supporting staff, is responsible for studies in the population dynamics of major fisheries, and collaborates closely with groups concerned with biological aspects of the same fisheries. At present major emphasis is placed on prawn, tuna, and whales. It is anticipated that the group will also become involved in modelling aspects of other ecological studies, including work on estuarine ecosystems. The appointee will be expected to take an active part in the development of new methods and techniques in population dynamics as well as the application of existing methods.

QUALIFICATIONS: A Ph.D. degree or equivalent qualifications in mathematics or biological sciences, supported by satisfactory evidence of research ability in the application of mathematics to biological problems. Practical experience in population dynamics or systems analysis preferably related to fisheries will also be an advantage.

SALARY: Research Scientist or Senior Research Scientist: A\$13,226 to A\$19,490 per annum.

TENURE: Indefinite or 3-year fixed term.

Applications stating full personal and professional details, listing the names of at least two referees, and quoting reference number 320/567 should reach:

The Chief
Division of Fisheries and Oceanography
P.O. Box 21
Cronulla, N.S.W. 2230
Australia

by 4 February 1977.

14 JANUARY 1977

CSIRO DIVISION OF FISHERIES AND OCEANOGRAPHY CRONULLA, N.S.W. RESEARCH SCIENTISTS (FOUR POSITIONS)

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

- FIELDS:** (1) **PHYSICAL OCEANOGRAPHY (TWO POSITIONS)**
(2) **MARINE CHEMISTRY**
(3) **ESTUARINE FLUID DYNAMICS**

GENERAL: The division is Australia's principal marine research institution with about 50 scientists investigating the fisheries resources and the physical, chemical, and biological features of the oceans and estuaries around Australia. Headquarters of the division are at Cronulla, Sydney, with regional laboratories in Perth, Brisbane, and Karumba. On-line access to a CYBER 76 computer is available at Cronulla. Sea-going facilities include a vessel chartered for oceanographical work and several smaller vessels.

(1) 320/563 PHYSICAL OCEANOGRAPHY (TWO POSITIONS)

The appointees will be members of the physics and chemistry group, which at present consists of seven professional staff, and supporting staff. The division is expanding its activities in the open ocean, and will be nearly doubling the size of this group. Both appointees will be located at Cronulla and will be expected to spend some time at sea.

DUTIES:

Position A: To carry out research in physical oceanography, with special emphasis on the dynamics of water movements. Field projects of immediate interest include upwelling, fronts, dynamics of the East Australian Current and of the western Coral Sea.

Position B: To carry out research in physical oceanography, with special emphasis on the application of satellite remote sensing to both physical and biological problems.

QUALIFICATIONS: A Ph.D. degree or equivalent qualifications in physics or mathematics preferably with training in geophysical fluid dynamics, and with demonstrable research ability. Field experience on research vessels would be an advantage. Ability to work at sea is essential.

SALARY: Research Scientist or Senior Research Scientist: A\$13,226 to A\$19,490 per annum.

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

(2) 320/564 MARINE CHEMISTRY

The appointee will be the senior chemist in the division, responsible for the chemistry programme within the physics and chemistry group, which at present consists of seven professional staff, and supporting staff. The division is expanding its activities in the open ocean, and will be nearly doubling the size of this group. Fields in marine chemistry that are currently of interest are nutrient cycling in estuaries, seagrass chemistry, heavy metals in estuaries and ocean, thin-film chemistry, pesticides. The appointee will be located at Cronulla.

DUTIES: Advise the chief of the division on the further development of marine chemistry within the division, including necessary staff and facilities. Initiate and carry out research in a branch of marine chemistry that is consistent with the general aims and policies of the division.

QUALIFICATIONS: A Ph.D. degree or equivalent qualifications, together with at least 10 years relevant research experience in chemistry, preferably in a marine field.

SALARY: Principal Research Scientist or Senior Principal Research Scientist: A\$20,245 to A\$26,779 per annum.

TENURE: An indefinite or fixed term appointment is available.

(3) 320/568 ESTUARINE FLUID DYNAMICS

The division is undertaking a major multidisciplinary study of estuarine ecosystems. A group of about ten scientists, mainly biologists, are involved in this project, and the appointee will become the main point of reference for the group on physical matters.

DUTIES: The appointee will be encouraged to collaborate in work on a variety of problems. These include; nutrient recycling, zooplankton and phytoplankton life cycles, the ecology of seagrass beds, and heavy metals dispersal. Opportunities for collaborative work on purely physical problems, such as salinity penetration in specific estuaries will also be available.

QUALIFICATIONS: A Ph.D. degree or equivalent qualifications in physics or mathematics or equivalent qualifications, with some training in geophysical fluid dynamics and with demonstrable research ability.

SALARY: Research Scientist or Senior Research Scientist: A\$13,226 to A\$19,490 per annum.

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

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

The Chief
Division of Fisheries and Oceanography
P.O. Box 21
Cronulla, N.S.W. 2230
Australia

by 4 February 1977.

POSITIONS OPEN

The Boston Biomedical Research Institute, a private nonprofit organization, is inviting applications for the position of **SENIOR STAFF SCIENTIST** to establish a research program in a field (for example, cell biology, endocrinology, immunology, neurobiology) that would complement existing research activities at the Institute. Applicants should have achieved wide recognition in their field and must have demonstrated the ability to obtain adequate funding for their program.

Up to 1000 square feet of modern laboratory space could be assigned to the new program, and extensive institutional facilities are also available.

Applications, including a complete curriculum vitae, a statement of research plans, and two letters of reference should be sent to: **Chairman, Search Committee, Boston Biomedical Research Institute, 20 Staniford Street, Boston, Massachusetts 02114. The Institute is an Equal Opportunity Employer.**

STRUCTURAL GEOLOGIST-GEOPHYSICIST WASHINGTON UNIVERSITY

The Department of Earth and Planetary Sciences, Washington University, has available a position for a structural geologist, preferably with a strong background in geophysics, beginning with the fall semester of 1977. The successful candidate must have the following attributes: demonstrated creativity and promise of excellence in research and teaching; substantial field experience and intent to develop a vigorous graduate research program in experimental or theoretical terrestrial geoscience; interest in teaching courses in structural geology, possibly geophysics, and other topics of interest at the graduate and undergraduate levels; interest in planetary sciences and in becoming a Fellow of the McDonnell Center for the Space Sciences, through which knowledge of structural geology would be shared with scientists of other disciplines. It is intended that the candidate be hired as an assistant professor, but more experienced individuals with exceptional qualifications will be considered as well. *Washington University is an Equal Opportunity/Affirmative Action Employer.* Send résumé, statement of future research interests, and names of at least three references to **Larry Haskin, Chairman, Department of Earth and Planetary Sciences, Washington University, St. Louis, Mo. 63130.** Applications received through 18 February 1977.

SYSTEMATIC ICHTHYOLOGIST. Faculty position open fall 1977, assistant professor level. Duties include teaching of ichthyology, taxonomic principles, advanced course in specialty, and some undergraduate courses; developing a program of research with graduate students. Excellent facilities. Candidate should have publication record and interest in outside funding. Submit résumé and three letters to: **Dr. H. J. Stains, Department of Zoology, Southern Illinois University, Carbondale, Illinois 62901.** *An Equal Opportunity/Affirmative Action Employer.* Deadline for application: 15 March 1977.

VETERINARIAN PATHOLOGIST

Applications are being accepted from qualified individuals who wish to work on a full-time or consultant basis. Programs in carcinogenesis bioassay, viral tumorigenesis, and tumor chemotherapy offer challenging research opportunities to the successful candidate.

Complete résumés including salary history and requirements should be submitted in confidence to:

**Donna Perron, Personnel Manager
Mason Research Institute
Harvard Street
Worcester, Mass. 01608**

An Equal Opportunity Employer, M/F

VISION RESEARCH

POSTDOCTORAL POSITIONS available in an interdepartmental program at the University of Michigan. Opportunities to apply anatomical, behavioral, developmental, electrophysiological, mathematical, and psychophysical techniques to the study of the visual system working with one or more of the following investigators: **M. Alpern, C. M. Cicerone, S. S. Easter, L. J. Fisher, D. G. Green, W. Kincaid, D. H. Krantz, J. S. McReynolds.** Positions are available for a period of at least 2 years starting 1 September 1977 or later. Send curriculum vitae and names of three references to **L. J. Fisher, Department of Anatomy, University of Michigan, Ann Arbor, Michigan 48109.** *A nondiscriminatory, Affirmative Action Employer.*

TRAINEESHIPS

NIH PREDOCTORAL TRAINEESHIPS AND DEPARTMENTAL ASSISTANTSHIPS GRADUATE STUDIES IN PHARMACOLOGY

Applications are invited from qualified students for graduate studies in pharmacology to begin in the fall semester 1977. Students may concentrate their studies in cardiovascular physiology and pharmacology or autonomic neurochemistry. New research facilities will be in operation. Prerequisites are a bachelor of science degree in biologically related sciences with a B average or above and a combined score of at least 1100 on the Graduate Record Examination. NIH traineeships are available with a stipend of \$325 per month (for 12 months, tuition paid) and assistantships with a stipend of \$325 for 9 months plus out-of-state tuition waiver. Inquiries should be addressed to:

**Dr. David E. Clarke
Professor and Director of Pharmacology
University of Houston
Houston, Texas 77004**

The University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL AND PREDOCTORAL TRAINEESHIPS (NIDR) AT RENSELAER POLYTECHNIC INSTITUTE

Several postdoctoral traineeships in dental materials are immediately available for D.D.S.'s, M.D.'s, or Ph.D.'s to acquire research experience and skills in the field of dental materials, especially concerned with polymeric, ceramic, and composite systems. Preceptors include: Diefendorf (fiber composites), Doremus (ceramics), Harper (mineralization), Katz (mechanical properties), Moore (polymers). Brand-new animal facility, also multimillion-dollar engineering center. Strong interdisciplinary programs in materials and biomedical engineering. Several predoctoral traineeships also available in same fields. Submit curriculum vitae to or request details from: **Dr. J. Lawrence Katz, Director, Center for Biomedical Engineering, Rensselaer Polytechnic Institute, Troy, New York 12181.**

An Equal Opportunity/Affirmative Action Employer

SYMPOSIUM

SYMPOSIUM ON CALCIUM-BINDING PROTEINS

An International Symposium on Calcium-Binding Proteins and Calcium Function in Health and Disease is planned as a 5-day conference from 5 to 10 June 1977 at Cornell University. The organizing committee consists of **E. Carafoli, R. H. Kretsinger, D. H. MacLennan, F. Siegel, and R. H. Wasserman.** The purpose is to provide new information on the properties and function of calcium-binding proteins in several tissues, including muscle, brain, nervous tissue, bone, intestine, and so forth, among 150 participants. The proceedings will be published. In conjunction with the formal program, submitted papers for possible presentation at poster sessions are invited; these should include a title, names and affiliations of authors, and a 100-word abstract (due 1 March 1977). For further information and for the submission of abstracts, contact **R. H. Wasserman, Department of Physical Biology/Section of Physiology, New York State College of Veterinary Medicine, Ithaca, New York 14853.**

PROGRAMS

EYE RESEARCH INSTITUTE OF RETINA FOUNDATION is accepting applications for its POSTDOCTORAL RESEARCH PROGRAM in the Department of Retina Research

The program focuses on experimental approaches to problems of the eye and the visual nervous system. Recent Ph.D.'s and M.D.'s who have backgrounds in biochemistry, biomedical engineering, biophysics, chemistry, electron microscopy, histology, histopathology, immunopathology, electrophysiology, optics, pharmacology, surgery, or visual psychology are invited to apply. A brief pamphlet describing the program can be obtained by writing to:

**Director, Postdoctoral Research Program
Department of Retina Research
Eye Research Institute of Retina Foundation
20 Staniford Street
Boston, Massachusetts 02114**

COURSES

FIFTH SUMMER SCHOOL IN METHODS OF IMMUNOLOGIC RESEARCH AND DIAGNOSIS

The fifth biennial course on current methods of immunologic research and diagnosis will be offered by The Center for Immunology of the State University of New York at Buffalo in June 1977. The deadline for applications is 15 April 1977.

Further information may be obtained from **James F. Mohn, M.D., Director, The Center for Immunology, 210 Sherman Hall, State University of New York at Buffalo, Buffalo, New York 14214.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP

Position available immediately for the study of lipases and their roles in the regulation of lipid metabolism and pathogenesis of cardiovascular disease. Background of applicant should include Ph.D. or M.D. with training in biochemistry. Stipend is \$12,000 to \$15,000. Laboratory and hospital are UCLA-affiliated. U.S. citizenship or permanent residency required. Send curriculum vitae and names of three references to **Dr. Michael C. Schotz, 691/151R, Lipid Research Laboratory, VA Wadsworth Hospital Center, Los Angeles, Calif. 90073.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIPS in HUMAN and MEDICAL GENETICS

Training available in clinical biochemical, immunological, and population genetics. Candidates must have M.D., Ph.D., D.V.M., or comparable degree and be U.S. citizens or permanent residents. Fellowships will begin 1 July 1977. The stipend is \$10,000 to \$13,200, depending upon previous postdoctoral experience.

Send curriculum vitae and the names of three references to: **Dr. Arthur G. Steinberg, Case Western Reserve University, Cleveland, Ohio 44106.**

POSTDOCTORAL FELLOWSHIPS

Applications are invited for fellowships (1 year, renewable) in the area of alcohol (psychobiology, psychology, sociology). Deadline for applications is 1 March 1977. Send curriculum vitae, three letters of recommendation, and proposed research. For further details write **Nancy Carter, Department of Psychology, C-009, University of California at San Diego, La Jolla, California 92093.** *The University of California is an Affirmative Action/Equal Opportunity Employer.*

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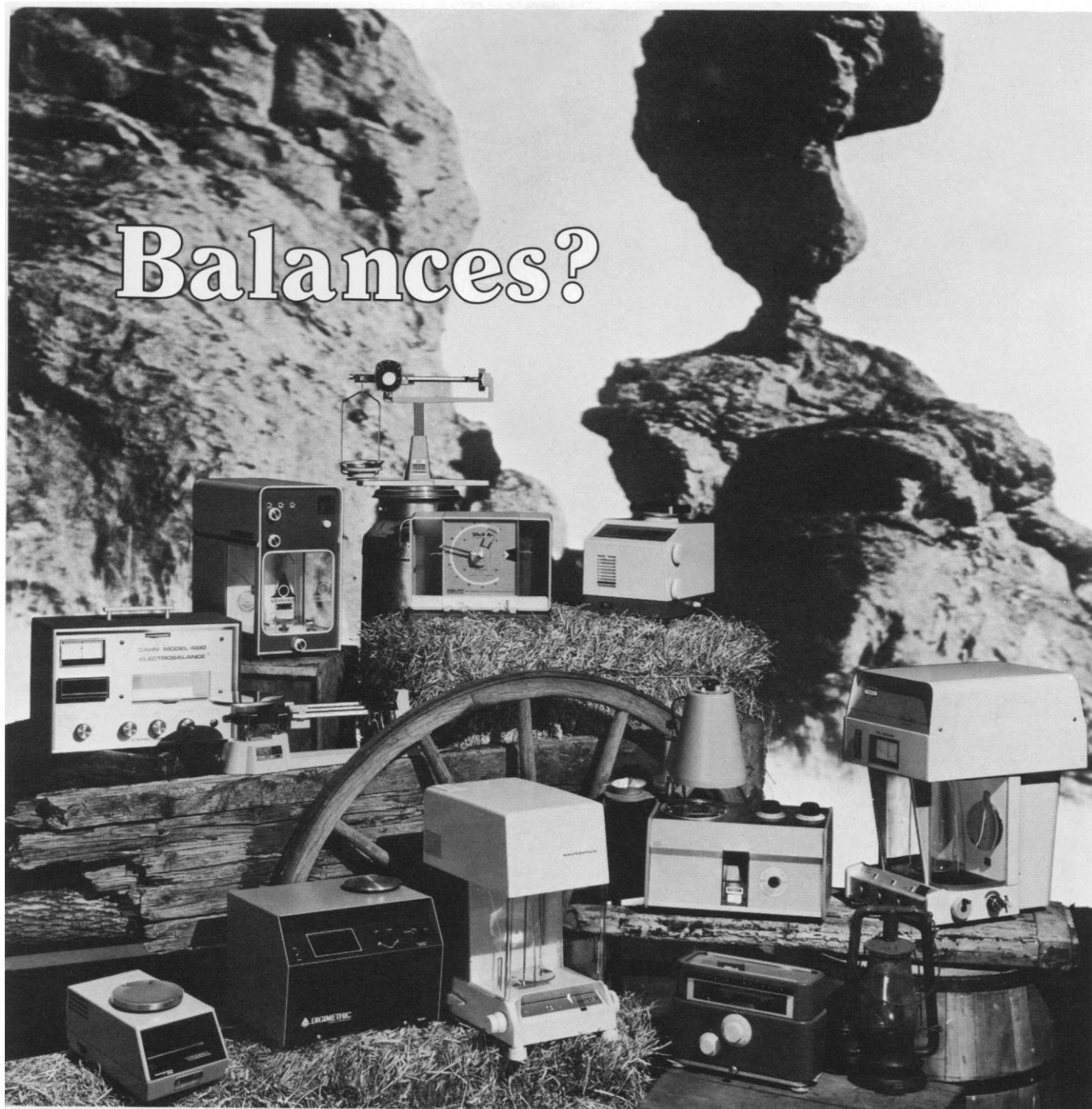
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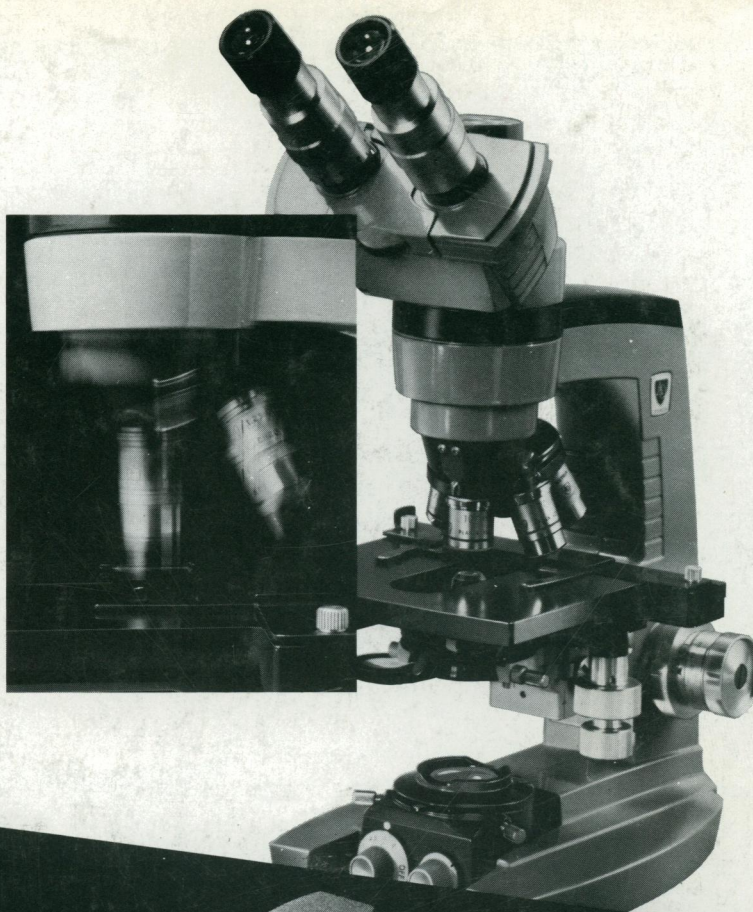
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