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Sulfuric acid (pH~1-3): ethanol solution, 9:1, shipped in dry ice.

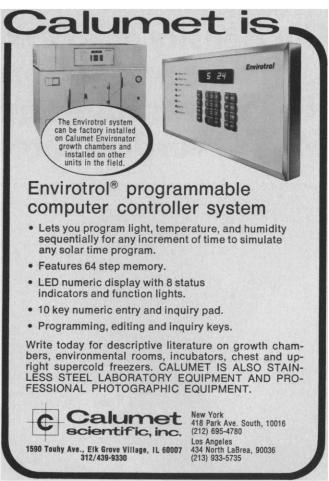
NET-155H \$111/250μCi \$295/1mCi

Caution: Not for use in humans or clinical diagnosis



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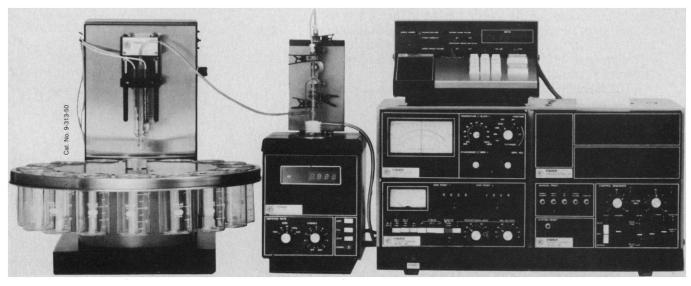
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# Cut density gradient spin time with a Sorvall® RC-5 centrifuge and new SS-90 vertical rotor.



The Sorvall® RC-5 refrigerated superspeed centrifuge with a Rate Controller is ideal for density gradient work. The soft start and soft stop characteristics of the Rate Controller prevent mixing of the gradient at speeds between 0 and 1,000 rpm.

With this feature and the new Sorvall® SS-90 vertical rotor, the RC-5 provides high resolution with reduced spin times. The rotor holds the tube at a fixed angle of 0° while the gradient reorients from horizontal to vertical. This means the particle must travel only the width of the tube, not the length. It also improves resolution by increasing the surface area and reducing the depth of the starting zone. In fact, the K factor calculated for the ultracentrifuge swinging bucket rotor of comparable volume is 265, while the K factor for the SS-90 vertical rotor is 210. And since the SS-90 holds 8 tubes instead of 6, you can spin more total volume.

The Sorvall® RC-5 also features solid state speed and temperature control systems, direct reading tachometer and temperature gauge, and an instrument panel with convenient push-button controls. And it accepts RC-2B as well as RC-5 rotors. It is built with the high quality and attention to detail that have been characteristic of Sorvall<sup>®</sup> centrifuges for years.

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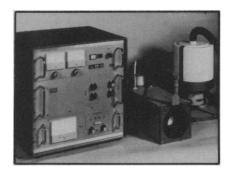
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With these features and the new Sorvall® vertical rotor, Sorvall® ultracentrifuges give high resolution with reduced spin times. The rotor holds the tube at a fixed angle of 0° while the gradient reorients from horizontal to vertical. This means the particle must travel only the width of the tube, not the length. It also improves resolution by increasing the surface area and reducing the depth of the starting zone. In fact, the K factor calculated for the highest performance ultraspeed swinging bucket rotor is 45, while the K factor for the Sorvall® TV865 vertical rotor is only 10.

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For more information on Sorvall® OTD ultracentrifuges, just write Du Pont Instruments, Biomedical Division, Room 23707A, Wilmington, DE 19898

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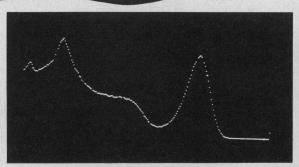
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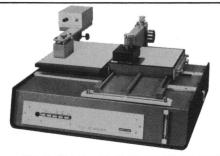
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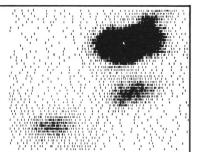
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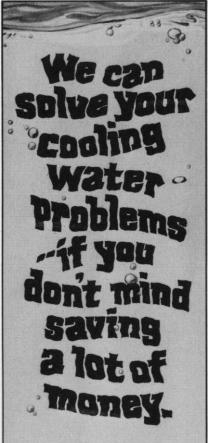
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#### **POSITIONS WANTED**

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

Histologist/Physiologist, Ph.D. 1968. Broad background with over 5 years of teaching experience in histology, histological technique, vertebrate physiology, vertebrate anatomy, general zoology, and general biology. Research interests in quantitative cytophotometry. Administrative experience and publications. Seeking teaching position with some research. Box 119, SCIENCE.

Ph.D. Linguistics. Four years of postdoctoral experience. Teaching/research: psycholinguistics, phonetics, language acquisition, humanities. Seeks creative, interdisciplinary position for 1977–78. Box 120, SCI-

Microbiologist, B.S., MT(ASCP). Ten years of experience in all phases of medical microbiology. Recent courses (1975) in immunology and advanced microbiology. Desires position in medical, industrial, or governmental research. Box 121, SCIENCE. X

Molecular Biologist/Generalist, Ph.D. August 1977. Broad multidisciplinary interests including chemical evolution, theoretical biology, planetary atmospherevolution, theoretical biology, planetary atmospheres (computer modeling/quantitative laboratory simulations) and history/philosophy of science. Experienced in interdisciplinary teaching and research (government/academic). Excellent analytic ability and communication skills. Publications, citations, growing international reputation. Seeks rewarding position in research/teaching/consulting. Box 122, SCI-ENCE.

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

Neuroendocrinologist. Ph.D. 1971. Thyroid, gonadal functions, growth. Fifteen publications. Experienced in RIA. NIH grants on growth and on neurohormones in portal blood. Assistant professor for past 4 years teaching anatomical/physiological sciences and advising student research at prestigious medical school. Desires advanced academic position. Box 123, SCIENCE. X

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

Physical Chemistry Ph.D./Recent M.A. in Economics. Seeking part-time or summer employment involving both backgrounds. Interdisciplinary teaching, research, marketing. Except summers anchored to Philadelphia area. Box 124, SCIENCE. 3/18,25

Physiologist. Four years medical school faculty; 2 years undergraduate faculty. Research publications on platelet aggregation. Seeks research or research/teaching position. Box 125, SCIENCE. 3/18,25

Program Director. Director of undergraduate phase of 6-year Family Practice Medicine Program; 4 additional years of experience as medical school faculty member. Research publications. Seeks administrative position. Box 126, SCIENCE. 3/18,25

#### POSITIONS OPEN

## ASSISTANT PROFESSORS OF BIOENGINEERING

The Department of Bioengineering is seeking two The Department of Bioengineering is seeking two candidates for faculty positions as assistant professors. The areas of research interest that are of especial need are: non-ionizing radiation effects in living tissue; prosthetics with an emphasis in cardiovascular prostheses; animal experimentation and instrumentation in subspecialties including respiration, cardiovascular research or implantation. strumentation in subspecialties including respiration, cardiovascular research or implantology. Applicants will be expected to teach undergraduate and graduate engineering courses in the bioengineering academic programs. Applicants should have a Ph.D. in engineering or related fields, and it is desirable that at least one candidate also have a degree in veterinary medicine. Please send résumés to: Dr. Solomon R. Pollack, Chairman, Bioengineering Department, University of Pennsylvania, Towne Building/D3, Philadelphia, Pennsylvania 19104.

An Equal Opportunity/Affirmative Action Employer.

An Equal Opportunity/Affirmative Action Employer.

#### **POSITIONS OPEN**

ANIMAL PHYSIOLOGIST/GENETICIST. Anticipated position, fall semester 1977, 1-year appointment, renewable for second year. Teach two courses per semester: animal physiology, genetics, and cell biology, general biology, and assist in staff courses (communications, seminar, and research problems). Send curriculum vitae, list of publications, and three letters of reference before 15 April to:

Dean Joseph C. Dana Blackburn College Carlinville, Ill. 62626

Blackburn College is an Equal Opportunity Employer

## ASSISTANT OR ASSOCIATE DEAN BASIC SCIENCES

The College of Medicine and Dentistry of New Jersey-New Jersey School of Osteopathic Medicine is recruiting for the position of associate or assistant dean for basic sciences.

Send curriculum vitae to:

Benjamin L. Cohen, D.O., Dean College of Medicine and Dentistry of New Jersey New Jersey School of Osteopathic Medicine Box 55, University Heights Piscataway, New Jersey 08854

Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR. Liberal arts college has opening for September 1977 to teach introductory anatomy, physiology, microbiology, and chemistry to nursing students. Opportunity to develop specialized courses for biology majors. Ph.D. required. Salary competitive. Send curriculum vitae to Academic Dean, Briar Cliff College, Sioux City, Iowa 51104. Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR IN BIOCHEMISTRY: Applications are invited for a state-funded tenure-track position in the Department of Biochemistry, College of Medical, University of South Alabama. Canidates must have an interest in medical educacandidates must have teaching experience, and be productive researchers. Preference will be given to those candidates active in research related to the biochemistry of membranes, membrane transport, or the biochemical mechanisms of hormonal action. Submit résumé cal mechanisms of normonal action. Submit resume and letters of recommendation to: Dr. C. M. Baugh, Chairman, Department of Biochemistry, College of Medicine, University of South Alabama, Mobile, Ala-bama 36688. An Equal Opportunity Employer, M/F.

## FLORIDA STATE UNIVERSITY DEPARTMENT OF BIOLOGICAL SCIENCE

Two assistant professorship appointments will be made from the following areas, effective September 1977. (i) Genetics (higher organism functional genetics; population genetics; gene ecology), (ii) Marine Biology, (iii) Immunology/Membrane Biology, and (iv) Developmental Biology. The department is a large, broad-based biological science unit with a large undergraduate program and a strong commitment to graduate teaching and research. We are an Affirmative Action/Equal Opportunity Employer and welcome applications from women and minority group members. Applicants should send curriculum vitae, representative reprints, and at least three letters of memoers: Applicants should send curriculum vitae, representative reprints, and at least three letters of reference to A. Gib DeBusk, Chairman, Department of Biological Science, Florida State University, Tallahassee, Florida 32306.

#### ENVIRONMENTAL BIOCHEMISTRY

Assistant professor of biochemistry and ecology. Applications are invited from individuals who have a demonstrated interest and training in ecological redemonstrated interest and training in ecological research. Teaching responsibilities include undergraduate/graduate biochemistry and ecology courses. The successful candidate will be expected to join an interdisciplinary team of ecologists and biochemists investigating the movement of chemicals and toxins in the department. The position requires a strong background in spectroscopy and the chemistry of natural products. Applications and three letters of reference must be received by 15 April 1977. Women and members of minority groups are encouraged to and members of minority groups are encouraged to apply. Address correspondence to: The Search Committee, Department of Biochemistry or Ecology Program, University of Tennessee, Knoxville, Tenn.

The University of Tennessee, Knoxville, is an Equal Opportunity/Affirmative Action Employer, Title IX.

#### ANIMAL ECOLOGIST, Ph.D.

With interest in and acquaintance with the general ecology of New England for a position as assistant professor starting 1 September 1977. Send curriculum vitae and three letters of recommendation to: **Dr.** Miriam F. Bennett, Department of Biology, Colby College, Waterville, Maine 04901.

An Equal Opportunity/Affirmative Action Employer.

ANIMAL PHYSIOLOGIST-IMMUNOLOGIST, as-ANIMAL PHYSIOLOGIST-IMMUNOLOGIST, assistant professor, Department of Biology, University of New Mexico, anticipates position to begin August 1977. The doctorate degree is required and post-doctoral experience desirable. The appointee will teach introductory human anatomy and physiology each semester and immunology alternate semesters. The person is expected to be active in research and direct graduate students. Submit curriculum vitae and three letters of reference by 8 April 1977 to: M. L. Riedesel, Search Committee, Department of Biology, University of New Mexico, Albuquerque, N.M. 87131. An Equal Opportunity/Affirmative Action Employer. An Equal Opportunity/Affirmative Action Employer.

#### UNIVERSITY OF GUELPH

The Department of Nutrition, University of Guelph, has an opening for an assistant professor. Applicants should be prepared to undertake teaching and research on metabolic aspects of ruminant nutrition. Strong training in experimental nutrition, biochemis-

try, and/or microbiology is required.
Address inquiries to Dr. H. H. Draper, Chairman,
Department of Nutrition, University of Guelph,
Guelph, Ontario, Canada N1G 2W1.

ASSISTANT PROFESSOR. Cornell University, Department of Food Science, is seeking a qualified Ph.D. to teach at least one course and establish a research program concerned with relationships of food processing/preservation to nutrient content and nutri-tional value of foods. This position will be held jointly with the Division of Nutritional Sciences. Applicants should have academic training in food chemistry/nu-tritional biochemistry and provide evidence of re-search capabilities in these areas. Applicants must send complete current curriculum vitae, recent reprints, and have at least three reference letters sent by 15 April to Dr. J. E. Kinsella, Department of Food Science, Stocking Hall, Cornell University, Ithaca, N.Y. 14853. Cornell University is an Equal Opportu-nity/Affirmtive Action Employer.

ASSISTANT PROFESSOR to teach undergraduates ASSISTANT PROFESSOR to teach undergraduates in wildlife management and introductory environmental science and to conduct research projects at a satellite campus in Chazy, N.Y. Ph.D. required. Send résumés and three references by 15 April 1977 to Dr. James Dawson, Acting Director, Institute for Man and Environment, State University of New York, Box 1000, Plattsburgh, N.Y., 12901. Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF BIOLOGY for 15 August 1977, Ph.D. required. Duties include teaching microbiology, general biology, and developine one other course in area of expertise. Research encouraged. By 29 April 1977 send résumé, graduate transcripts, three letters of recommendation, and statement of teaching and research interests to Dr. Richard W. Fredrickson, Biology Department, Saint Joseph's College, 54th and City Avenue, Philadelphia, Pa. 19131. We are an Equal Opportunity/Affirmative Action

## VISITING ASSISTANT PROFESSOR GEOLOGY DEPARTMENT

To teach course in sedimentary petrology To teach course in sedimentary petrology. Additional course offerings might also include hydrogeology or fluid flow through porous media. Applicants, with Ph.D. (or soon to receive), to pursue active field-oriented research program in sedimentary petrology and supervise graduate (M.S.) and undergraduate research in this and allied areas. Opening January 1978 or September 1978. Send résumé and arrange for three letters of recommendation to be sent to Dr. Rolfe S. Stanley, Perkins Geology Hall, University of Vermont, Burlington, Vermont 05401.

An Affirmative Action Employer

#### **POSITIONS OPEN**

ASSISTANT PROFESSOR OF ZOOLOGY—Temporary appointment for 1977-1978 academic year. Teaching responsibilities will be in areas of ecology. invertebrate zoology, and introduction to biological science courses. Qualifications: Ph.D. and teaching experience. Application deadline: 15 May 1977. Send experience. Application deadline: 13 May 1977. Send curriculum vitae and three letters of recommendation to J. T. Morrow, Head, Department of Zoology, P.O. Drawer Z, Mississippi State University, Mississippi State, Miss. 39762. This university is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR IN PHARMACOLOGY-ASSISTANT PROFESSOR IN PHARMACOLOGY—
July 1977. Applications are invited from neuropharmacologists; trained in neurochemistry of the central nervous system, particularly protein kinases and cyclic nucleotides, or electrophysiological and biophysical approaches to peripheral nervous system and synaptic transmission. Experience in teaching is important. Submit curriculum vites to: Frank Stand. synaput transmission. Experience in teaching is important. Submit curriculum vitae to: Frank Standaert, M.D., Chairman, Department of Pharmacology, Georgetown University, Washington, D.C. 20007.

Equal Opportunity/Affirmative Action Employer

Position available: ASSISTANT PROFESSOR OF PHARMACOLOGY. Ph.D. with background in phar-PHARMACOLOGY. Ph. D. with background in pharmacology, drug metabolism and pharmacokinetics. Experience with GC/MS desirable. Prior collaborative experience in area of clinical pharmacology required. Participation in teaching medical, dental, pharmacy and graduate students. Applicants should send curriculum vitae, including a list of publications, a summary of teaching and research experience, and a summary of teaching and research experience, and a summary of teaching and research experience, and the names of three references to Arthur H. Briggs, M.D., Professor and Chairman, Department of Phar-macology, The University of Texas Health Science Cen-ter, 7703 Floyd Curl Drive, San Antonio, Texas 78284. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR, VERTEBRATE ZOOL-OGY. Starting date September 1977. Teach a one-semester course in comparative anatomy and develop mester course in comparative anatomy and develop an active research program in anatomy and/or closely related areas, for example vertebrate histology, embryology, or comparative physiology. Ph.D. in vertebrate zoology with demonstrated record of excellence in teaching and research required. Application deadline: 8 April 1977. Send letter of application, curriculum vitae, complete transcript, outline of research plans, and three letters of recommendation requested by applicant to: Dr. C. D. Brown, Chairman, Department of Biology, Memphis State University, Memphis, Tennessee 38152.

Equal Opportunity Employer, M/F

## ASSISTANT PROFESSOR VERTEBRATE ZOOLOGY

Applications are invited for the position of vertebrate zoologist at the level of assistant professor. Applicants must have a Ph.D. in zoology. Teaching responsibilities include undergraduate courses in verte-brate anatomy and the functional design of animals; research and the direction of graduate students should involve terrestrial vertebrates.

Submit a letter of application to Glenn K. Morris, Associate Professor, Department of Zoology, Erindale College, University of Toronto, Mississauga, Ontario, LSL 1C6, Canada. The position is tenable at the Erindale campus beginning on 1 July 1977. Closing date is 31 March 1977, or when the position is filled.

## BACTERIAL VACCINE PROCESS DEVELOPMENT

Biochemical engineer, immunochemist, or biologist with training or experience in separation of natural products wanted for development and scale-up of products wanted for development and scale-up of processes for production of purified bacterial vaccines as part of the developmental research effort of Merck & Co., Inc. A challenging senior and junior position exists for innovative scientists versed in a multi-disciplined engineering, chemical, and biological approach to laboratory and plant processing of complex novel systems.

Work in the Merck Sharp and Dohme Research Laboratories offers outstanding professional associa-tions, projects of major significance, and excellent compensation commensurate with experience, in addition to a comprehensive benefits program. Please send résumé including salary requirements, in confidence to: William T. Jackson, Employment Supervi-

> MERCK & CO., INC. P.O. Box 2000 Rahway, New Jersey 07065 Equal Opportunity Employer, M/F

**POSITIONS OPEN** 

## ASSISTANT PROFESSOR ECOLOGY—ENERGETICS

The Department of Zoology invites applications for a 2-year contractual appointment in ecology at the level of assistant professor. The appointee will be expected to participate in undergraduate courses in ecology and introductory biology and to conduct research in ecological energetics. The position is tenable at the Erindale campus beginning 1 July 1977. Send curriculum vitae with names of three referees to Dr. W. Gary Sprules, Chairman, Search Committee, Department of Zoology, Erindale College, University of Toronto, Mississauga, Ontario, L5L 1C6, Canada.

The closing date is 8 April 1977 or when position

is filled.

ASSISTANT PROFESSOR IN PHYSIOLOGY. Applications are invited for a position available in September 1977 at Washington State University. Appointment is divided equally between the Department of Zoology and the Program in Basic Medical Sciences ences. Competence in comparative vertebrate systems physiology as well as in human anatomy and physiology, including the nervous system, is required. Formal training beyond introductory levels in these disciplines is mandatory as are basic skills in these disciplines is mandatory as are basic skills in small mammal surgery. Responsibilities include teaching medical students as well as undergraduate and graduate students. Applicants must present a record of associations and research featuring a basic or comparative perspective on physiology, the earned doctorate, Ph.D., M.D., or D.V.M., and evidence of strong potential for both teaching excellence and scholarly research. Research areas of interest are systems physiology, behavioral physiology, or environmental physiology. Candidates should submit a curriculum vitae and the names of three references to: Physiology Search Committee, 102 Morrill Hall, Washington State University, Pullman, Wash. 99164. Telephone: 509-335-2602. Application review begins 15 April 1977. Washington State University is an Equal Opportunity/Affirmative Action Employer. pportunity/Affirmative Action Employer.

#### ASSISTANT SOIL SCIENTIST

ASSISTANT SOIL SCIENTIST

The Western Washington Research and Extension Center seeks a Ph.D. in soil management fertility starting 1 June 1977 to develop and conduct a full-time research program in soil management with emphasis on crop fertilization under changing tillage and rotation systems. Salary is open. Applicants sould submit résumé, statement of research interests, academic transcripts, and names of three references to Dr. E. C. Bay, Superintendent Western Washington Research and Extension Center Puyallup, Washington 98371

Washington State University is an Equal Opportunity/Affirmative Action Employer.

nity/Affirmative Action Employer.

East Tennessee State University is seeking an AS-SOCIATE DEAN FOR CLINICAL SCIENCES for its developing College of Medicine. Applicants should possess the M.D. degree and have experience with direct patient care and medical school administration. Respond with curriculum vitae and three references to:

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

The University is an Affirmative Action/Equal Opportunity Institution.

BASIC SCIENTIST-Assistant professor with re-BASIC SCIENTIST—Assistant professor with research interests in fundamental aspects of onocology. A developmental biologist, cellular immunologist, or a person working in some other area which complements existing programs is sought. Yale University is an Affirmative Action/Equal Opportunity Employer. Send curriculum vitae and the names of three referees to Dr. William C. Summers, Department of Therapeutic Radiology, Yale School of Medicine, 333 Cedar Street, New Haven, Conn. 06510.

#### BIOCHEMICAL GENETICIST

Biochemist or biochemically trained human geneticist for research in human and medical genetics. Research experience (preferably with eukaryotic organisms) mandatory. Rank and salary depend upon qualifications. Replies to A. G. Motulsky, Director, Center for Inherited Diseases, University of Washington, Seattle, Wash. 98195. An Equal Opportunity Employer.

#### BIOCHEMISTRY FACULTY POSITIONS

The Department of Biological Chemistry invites ap-The Department of Biological Chemistry invites applications for several faculty positions, and seeks applicants at the level of assistant professor (although candidates of all ranks will be considered). Applicants are expected to have demonstrated some originality and productivity in research and the potential for excellence and flexibility in teaching. Preference will be given to those whose interest and experience lies in metabolic regulation, carbohydrates, immunochemistry, cell surfaces, nitrogen metabolism, or biological macromolecules, although other areas will be considered. considered.

The Department participates in the training of medical, graduate, and undergraduate students. The successful applicants will be appointed to the faculty of the School of Medicine and of the College of Science and Engineering. Send curriculum vitae, a very brief statement of research plans, and three letters of recommendation to: Search Committee, Department of Biological Chemistry, Wright State University, Dayon, Ohio 45431. Applications received after 1 June may not be considered. Wright State University is an Equal Opportunity/Affirmative Action Employer.

**BIOLOGISTS**: Teaching general biology (large section) and nature study or human ecology; previous teaching experience is desired but not essential. Must have M.A. or M.S. degree in biological sciences at time of appointment; instructor level; two temporary (I-year) positions. Applicants should send résumé, transcripts, and reference letters by 15 April 1977 to Dr. L. Koehler, Chairman, Department of Biology, Central Michigan University, Mt. Pleasant, Mich. 48859.

4889.
Central Michigan University is a Nondiscriminatory
Educational Institution and Employer.

#### BIOMEDICAL INSTRUMENTATION

Assistant or associate professor, joint appointment, Assistant or associate professor, joint appointment, Department of Biomedical Engineering and Engineering Design Center. Ph.D. in electrical or biomedical engineering with background in microelectronics and integrated circuits and experience in medical instrumentation. Teach graduate and/or undergraduate courses. Participate in established research groups in medical instrumentation, particularly implant instruments. struments.

#### **BIOMATERIALS**

Assistant or associate professor, joint appointment, Department of Biomedical Engineering and Engineering Design Center. Ph.D. and broad background in medical materials, particularly packaging of implant instruments. Teach graduate and/or undergraduate courses. Develop and evaluate materials for implantially the translation of the professional designs of the profe table transducers and electronic circuits as member of established research group in medical instrumentation.

Both positions start summer or fall 1977. Send résumé or telephone: 216-368-4060:

# Robert Plonsey, Ph.D. Chairman, Department of Biomedical Engineering Case Western Reserve University Cleveland, Ohio 44106

An Equal Opportunity/Affirmative Action Employer

BIOMETRICIAN. Assistant or associate professor. Duties are consulting with agricultural and biological scientists, teaching, and research. Require Ph.D. with major or minor in statistics; background in biology or agriculture; demonstrated ability in consulting and teaching research contribution. and teaching; research contribution. Send curriculum vitae, transcripts, and three recommendations to Dr. George E. Shook, 1675 Observatory Drive, University of Wisconsin, Madison, Wisconsin 53706. An Equal Opportunity Employer.

#### CANCER RESEARCH FACULTY POSITIONS

The Los Angeles County–University of Southern California Comprehensive Cancer Center is accepting applications for positions which may be available within the next year in the clinical specialties of medical, pediatric, gynecologic, surgical, hematologic and radiation oncology, and in preclinical sciences such as immunology, cell biology, somatic cell genetics, iostatistics, carcinogenesis and toxicology. Positions include joint appointments with the Cancer Center and USC Schools of Medicine, Pharmacy, or Denistry. A policants should be willing to appear for persections. ter and USC Schools of Neutrine; rhaining, of Defi-tistry. Applicants should be willing to appear for per-sonal interviews. Address inquiries to Los Angeles County-University of Southern California Cancer Cen-ter, 2025 Zonal Avenue, Los Angeles, California 90033. The Cancer Center is an Equal Opportunity/ Affirmative Action Employer

#### **POSITIONS OPEN**

## MICHIGAN TECHNOLOGICAL UNIVERSITY DEPARTMENT OF BIOLOGICAL SCIENCES

Invites applications from all qualified persons in the following anticipated positions:

MEDICAL MICROBIOLOGIST: Assistant professor level. Capable of teaching in areas of general, medical and sanitary microbiology. Ph.D. required and hospital experience preferred. Research encour-

POPULATION GENETICIST: Assistant professor level. Capable of teaching in areas of general and population genetics. Ph.D. required. Research encour-

CELL BIOLOGIST: This is a teaching appointment for one year only. Instructor or assistant professor level. Teaching experience in areas emphasizing cell biology. Advanced degree required.

LABORATORY ASSOCIATE: To maintain efficient operation of laboratories in the biological sciences, especially microbiology. B.S. degree in related field required. Must have had courses in microbiology and/or related work experience.

Salaries are dependent on qualifications. Send curric-Salaries are dependent on qualifications. Send curriculum vitae and three letters of recommendation to Dr. Robert C. Stones, Head, Department of Biological Sciences, Michigan Technological University, Houghton, Michigan 49931.

Michigan Technological University is an Equal Opportunity Educational Institution/Équal Opportunity Employer.

#### **BIOLOGIST**

Applications are invited for an assistant or associate professor interested in teaching a course in social behavior, starting September 1977. The candidates should be willing to teach both major and nonmajor students. The area of research interest could range from ecology to neurobiology.

Applications, including a curriculum vitae and three reference letters, should reach the undersigned by I April 1977. E. Mader, Administrative Assistant, Department of Biology, McGill University, 1205 McGregor Avenue, Montreal, Quebec, Canada, H3A 1B1.

CELLULAR GENETICIST. Applications are invited for a faculty position in the area of eukaryotic cellular genetics. The appointment will be at the assistant professor level effective September 1977. Applicants must have demonstrated excellence in research and teaching, and the potential to develop an independent research program which would complement strong, ongoing programs in cellular and developmental biology. Research specialties should involve the use of ogy. Research speciatics should involve the use of genetic techniques in the investigation of cellular phenomena. Teaching responsibilities involve participation in sophomore level cell biology and/or genetics courses, plus a senior/graduate course in the appoint tee's specialty. Applications with curriculum vitae, list of publications, names of references, and a summary of research interest should be sent before 1 April to: Dr. Barry I. Kiefer, Chairman, Department of Biology, Wesleyan University, Middletown, Conn.

Wesleyan University is an Equal Opportunity/Affirmative Action Employer and encourages applications from minority groups and women.

#### CHAIRPERSON DEPARTMENT OF ORAL ANATOMY

The University of Illinois College of Dentistry seeks an individual of scientific attainment to head a department with research emphasis in functional mor-

department with research emphasis in functional morphology and teaching duties in gross and dental anatomy. Both D.D.S. and Ph.D. are desirable.

Send curriculum vitae, publications, and names of five references to: Dr. Dale R. Eisenmann, Chairman of Search Committee, The Department of Histology, University of Illinois at the Medical Center, P.O. Box 6998, Chicago, Ill. 60680.

The University of Illinois is an Equal Opportunity

Employer.

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

#### **POSITIONS OPEN**

#### CHAIRMAN, DEPARTMENT OF PHYSIOLOGY

The University of Texas Medical School at Houston. which is now in a stage of expansion, invites nominations and applications for the position of chairman of the Department of Physiology. This department will soon by occupying new quarters in the permanent medical school facility. The teaching program is oriented towards an organ system basis, and the department has already established itself as one of the department has already established itself as one of outstanding high quality in both teaching and research. Applicants should possess either an M.D., Ph.D., or an equivalent degree, and should qualify for the professor level. Please contact Joe G. Wood, Ph.D., Chairman, Physiology Search Committee, University of Texas Medical School at Houston, P.O. Box 20708, Houston, Texas 77030. The University of Texas Medical School is an Equal Opportunity of Texas and Equal Composition of the Composition of th Medical School is an Equal Opportunity/Affirmative Action Employer.

## DEPARTMENT OF OCEANOGRAPHY DALHOUSIE UNIVERSITY

Seeking a chemical oceanographer. Preference may be given to scientists with interests in biochemical or geochemical aspects of marine systems. The appoint-ment rank and salary would be based on research/ ment rank and salary would be based on research teaching experience and will be subject to availability of funds. Reply with curriculum vitae, publications and referee names to Chairman, Department of Oceanography, Dalhousie University, Halifax, Nova Scotia, Canada B3H 4J1.

CLINICAL IMMUNOPATHOLOGIST to become associate medical director of established Clinical Immunopathology Laboratory. M.D. degree required. Capability of assuming responsibility for several ongo-ing research projects must be demonstrated by prior experience. Send curriculum vitae to: Bruce S. Rabin, M.D., Ph.D., Director of Clinical Immunopathology, Department of Pathology, University of Pittsburgh School of Medicine, Pittsburgh, Pa. 15261.

An Equal Opportunity/Affirmative Action Employer

#### UNIVERSITY OF CALIFORNIA, IRVINE Department of

**Developmental and Cell Biology** 

**LECTURER:** Teach an undergraduate nonmajor biology course; Ph.D. degree required.

POSTDOCTORAL SPECIALIST: cell biology; emphasis in muscle tissue culture or cell division; experience in EM, electrophysiology or biochemistry desired; Ph.D. required.

POSTDOCTORAL SPECIALIST: biochemical genetics of Neurospora; regulation of arginine metabolism; Ph.D. required.

POSTDOCTORAL SPECIALIST: protein and nucleic acid biochemistry; electron microscopy of chromosomes; Ph.D. required.

POSTDOCTORAL SPECIALIST: cell behavior and morphogenesis in Hydra; Ph.D. required.

POSTDOCTORAL SPECIALIST: physiology; biochemistry of activity metabolism in vertebrates; Ph.D. required.

POSTDOCTORAL SPECIALIST: development of animal models for tumor metastasis; in vivo experimentation with metastatic tumor cells; Ph.D. reanimal models for tumor metastasis; in viv auired.

All qualified candidates welcome; women and minorities are encouraged to apply

Individuals interested in any of the above positions should contact:

Michael W. Berns, Chairman Department of Developmental and Cell Biology University of California, Irvine Irvine, California 92717

Nominations and applications are invited for the position of **DIRECTOR**, School of Forest Resources and Conservation, University of Florida.

The director administers expanding upper division and graduate instruction, research, and extension

programs in forestry, forest products, wildlife, range, fisheries, and recreation.

Candidates with earned doctorate and administra-

tive and leadership abilities in a natural resource field should send curriculum vitae and list of references before 15 May 1977 to:

# Dr. Larry D. White School of Forest Resources and Conservation University of Florida Gainesville, Florida 32611

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

CHAIRPERSON, DEPARTMENT OF MEDICINE-Professor must have demonstrated experience and excellence in teaching, administration, research and patient care, and have significant publications as evidence of scholarship. Must be a leader in academic medicine. Send curriculum vitae to: Henry T. Bahnson, M.D., Department of Surgery, 1088 Scaife Hall, University of Pittsburgh, Pittsburgh, Pa. 15261. An Equal Opportunity/Affirmative Action Employer.

#### COMPARATIVE PHYSIOLOGIST

The Zoology Department, University of Tennessee, Knoxville, invites applications for a temporary, academic appointment beginning 1 September 1977, to assume teaching duties of a faculty member who is funded for full-time research. Initial appointment is for a 1-year period, with the possibility of a second year. Responsibilities include teaching a two-quarter

year. Responsibilities include teaching a two-quarter sequence of comparative animal physiology and participation in teaching other physiology courses.

Applicants must have a Ph.D. degree in zoology or physiology with training in comparative physiology and postdoctoral experience. Preference will be given to applicants whose area of research is muscle, nerve, or receptor physiology. Salary is appropriate to appointment at the assistant professor level, but more senior applicants wishing to make a sabbatical arrangement will be considered.

Send curriculum vitae, and names and addresses of three references to:

Roland Bagby
Department of Zoology
University of Tennessee
Knoxville, Tennessee 37916

An Equal Opportunity/Affirmative Action Employer

Assistant or associate professorship. Renewable probationary appointment is available 1 July for a DE-VELOPMENTAL BIOLOGIST, preferably working at the molecular, organelle, or cellular level. The appointee will be expected to develop a strong graduate pointee will be expected to develop a strong graduate research program, to participate in investigation-oriented undergraduate instruction, to teach a course in developmental biology, and to participate in molecular genetics and cell biology courses. Send full curriculum vitae by 15 April with a statement of research and teaching interests, reprints of published research, and the names of three referees to: Chairman, Developmental Biologist Search Committee, Department of Biological Sciences, Brock University, St. Catharines, Ontario, Canada, L2S 3A1.

#### ECOLOGIST TEACHING POSITION

Assistant professor in field ecology beginning September 1977. Ph.D. required. Responsibilities include an ecology course for majors and general biology. Expected to develop electives in area of specialization. Should have commitment to undergraduate teaching. Excellent fringe benefit program. Send curriculum vitae, three letters of recommendation, and transcripts by 4 April 1977, to Lawrence K. Fitzpatrick, Director of Personnel, Saginaw Valley State College, University Center, Mich. 48710. Saginaw Valley State College is an Equal Opportunity/Affirmative Action Employer.

#### **ELECTRICAL ENGINEER**

Electrical engineer—B.S. or M.S. level to design, construct, and test digital and linear remote atmospheric measurement systems. Contact Dr. Alan W. Shaw, Aeronomy Center, Utah State University, Logan, Utah 84322. Utah State University is an Equal Opportunity/Affirmative Action Employer.

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

#### **POSITIONS OPEN**

**ENTOMOLOGISTS**. Two research positions are available immediately at the assistant scientist level. The Ph.D. is required. (i) Entomologist to carry out research on integrated control of insects of vegetables and tobacco. (ii) Entomologist to study plum cur-culio, other fruit insects, and possibly black vine wee-vil. Applications consisting of undergraduate and graduate transcripts, a list of three references, curric-ulum vitae, reprints of publications, summary of Ph.D. thesis, and a letter in which the interests and aspirations of the candidate are reflected relative to the position should be sent to: Dr. John F. Anderson, Head Department of Entomology Competitut Agri-Head, Department of Entomology, Connecticut Agri-cultural Experiment Station, Box 1106, New Haven, Conn. 06504. An Equal Opportunity Employer.

## UNIVERSITY OF PITTSBURGH DEPARTMENT OF LIFE SCIENCE

Candidates will be considered in the field of evolutionary and environmental biology. There is special inter-est in the areas of microbial ecology, population biol-ogy, and physiological ecology, but consideration will be given to candidates from other fields of specialwill be given to candidates from other fields of special-ization. Selection will be based upon demonstrated potential for establishing a research program of ex-ceptional quality. The appointment will probably be made at the assistant professor level. Interested per-sons should submit curriculum vitae including a list of publications, names of at least three references, and a brief statement of research interest to **Dr. Richard T.** Hartman, Department of Life Sciences, University of Pittsburgh, Pittsburgh, Pa. 15260.

The University of Pittsburgh is an Equal Opportunity/Affirmative Employer.

FACULTY POSITION, interdisciplinary environmental studies college. Ph.D. in ecology required; postdoctoral experience, experience in interdisciplinary teaching, curriculum design, environmental education preferred. Assistant professor: salary open. Dr. Ruth Weiner, Huxley College, Western Washington State College, Bellingham, Wash. 98225, before 10 April. An Affirmative Action/Equal Opportunity Employer. tunity Employer.

## FACULTY/RADIOLOGICAL SAFETY OFFICER JOINT APPOINTMENT

An opening exists for an individual with a Ph.D. de-An opening exists for an individual with a Ph.D. degree who would serve in a joint appointment as half-time Radiological Safety Officer (RSO) for the University and half-time assistant professor of pharmaceutical chemistry and bionucleonics. An assistant will handle routine and technical tasks, thus provid-ing RSO ample opportunities for teaching and re-search. Send résumé and names and addresses of three persons who may be contacted to: Edward O. Magarian, Ph.D., Associate Professor of Pharmaceutical Chemistry and Bionucleonics, College of Pharmaceuty, North Dakota State University, Fargo, North Dakota 58102. North Dakota State University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS IN BEHAVIORAL BIOLOGY/EXPERIMENTAL PSYCHOLOGY. Applications are invited from candidates with research interests in neuroethology, socioblology, and human communication/clinical. Preference will be given to those whose background combines biological and behavioral science. Curriculum vitae, reprints of research publications; and the names of three referees should be sent to John Fentress, Department of Psychology, Dalhousie University, Halifax, Nova Scotia, Canada, B3H 4J1.

#### **FACULTY POSITIONS**

The College of Medicine and Dentistry of New Jer-

The College of Medicine and Dentistry of New Jersey-New Jersey School of Osteopathic Medicine is recruiting for faculty positions and chairpersons in anatomy, biochemistry, microbiology, pathology, pharmacology, and physiology.

Send curriculum vitae to: Benjamin L. Cohen, D.O., Dean, College of Medicine and Dentistry of New Jersey-New Jersey School of Osteopathic Medicine, Box 55, University Heights, Piscataway, New Jersey 08854. An Equal Opportunity/Affirmative Action Employer.

#### GENETICIST

Lecturer, Genetics Department, Cambridge University, United Kingdom. Salary according to age. After 3 years can become a tenured post. Good range of research facilities. Particulars from D. F. Barton, c/o Department of Applied Biology, Pembroke Street, Cambridge CB2 3DX, United Kingdom, to whom applications should be sent by 30 March 1977.

East Tennessee State University College of Medicine

invites applications for

CHAIRPERSONS OF THE DEPARTMENTS OF: ANATOMY, BIOCHEMISTRY, PHYSIOLOGY, MICROBIOLOGY, AND PATHOLOGY

#### CHAIRPERSONS:

Applications are invited for chairpersons of the Departments of Anatomy, Biochemistry, Physiology, Microbiology, and Pathology. These departments are responsible for undergraduate medical and graduate programs leading to the M.S. and Ph.D. in biomedical sciences. Successful applicants will have substantial input into curriculum development and resource allocation in the development of department and resource. cation in the development of departments and programs. Salaries are competitive. Candidates for anatomy, biochemistry, physiology, and microbiology should possess the Ph.D. or M.D. degree, while the pathologist should possess the M.D. degree and Board-certification in clinical and/or anatomical pathology. thology. All should have experience and a publication record commensurate with chairperson responsibili-

#### FACULTY OPENINGS:

Positions at the assistant and associate professor levels are available in all six pre-clinical departments. Salaries are competitive. Some instructorships with a 2-year limit to the appointment may also be made in selected departments. Interested individuals are urged to apply

#### APPLICATIONS:

Applications from minorities and women are encouraged. Letters of application and three supporting references should be received by 15 April 1977. Address applications to:

Dr. Ronald R. Cowden, Ph.D.
Associate Dean for Basic Sciences
College of Medicine
East Tennessee State University
Johnson City, Tenn. 37601

The University is an Affirmative Action/Equal Opportunity Institution

#### FACULTY POSITIONS College of Medicine

King Faisal University Dammam, Saudi Arabia

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

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

Salary ranges: Monthly salary and bonus in Saudi riyals

Approximate annual equivalent in U.S. dollars

Professor 6,720 to 7,392

\$22,600 to \$24,800

Associate professor 5,376 to 6,496 Assistant professor 4,032 to 5,152

ance to country of origin.

\$18,100 to \$21,800 \$13,500 to \$17,300

M.D. degree commands a higher salary. Fringe benefits include free furnished accommodations and annual leave and travel allow-

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

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

Specify teaching experience and date of avail-

#### FACULTY POSITION IN BIOCHEMISTRY

The Department of Biochemistry and Molecular Biology at the University of Texas Health Science Center at Houston invites applications for a faculty position from qualified individuals with a commitment to teaching and research in biochemistry and molecular biology. Responsibilities will include participation in the medical school curriculum and in the graduate teaching program within the Graduate School of Biochemistry and Molecular biology. the medical school curriculum and in the graduate teaching program within the Graduate School of Biomedical Sciences, as well as developing and conducting an independent research program. The area of research and the level of appointment are open; applicants should have postdoctoral research experience. Please send a curriculum vitae, list of publications, names of at least three references to be used for tions, names of at least three references to be used for letters of recommendation, and a summary of re-search interests to Dr. John A. DeMoss, Department of Biochemistry and Molecular Biology, The Universi-ty of Texas Medical School at Houston, P.O. Box 20708, Houston, Texas 77025, by 30 April 1977. An Equal Opportunity/Affirmative Action Employer.

## FACULTY POSITION ANATOMY/PHYSIOLOGY

The College of New Rochelle seeks a person to teach anatomy/physiology to nurses and an undergraduate course in comparative anatomy and either embryology or mammalian physiology and to participate in the department's research seminar. Position open September 1977. Assistant professorship; Ph.D. required. Send résumé to **Dr. M. G. Connell**, Chairman, Biology Department, College of New Rochelle, N.Y. 10801.

An Equal Opportunity/Affirmative Action Employer

#### HEALTH ECONOMIST

Applications are invited for a research faculty position beginning July 1977, participating in the development of cost projections for increased dental benefits for the elderly. Applicants should have a doctoral degree in economics or business with a concentration in econometrics and health economics. A joint appointment is anticipated in the School of Public Health and Community Medicine as well as affiliation in the Center for Health Services Research. Recent Ph.D. will be considered. Interested persons should forward a résumé and letter stating their interest to Dr. Peter Milgrom (Position #3), Department of Community Dentistry, University of Washington, Seattle, Wash. 98195. The University of Washington is an Equal Opportunity Employer and applications from women and minority professionals are encouraged. Applications are invited for a research faculty posi-

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

IMMUNOLOGIST/IMMUNOCHEMIST-A full-IMMUNOLOGIST/IMMUNOCHEMIST—A full-time, tenure-track, faculty position. Rank open de-pending on qualifications and experience. Can-didates must have a Ph.D., M.D., or equivalent de-gree, have an established research program in some aspect of modern immunology/immunochemistry and experience in the training of young scientists. Teaching duties include participation in teaching of courses to graduate and medical students. Send curcourses to graduate and medical students. Send curriculum vitae and references to Chairman, Immunology Search Committee, Department of Microbiology and Immunology, Temple University School of Medi-cine, 3401 North Broad Street, Philadelphia, Pa. 19140. An Equal Opportunity/Affirmative Action Em-

IMMUNOLOGIST/VIROLOGIST. Assistant or as-IMMUNOLOGIST/VIROLOGIST. Assistant or associate professor in immunology, with research interest in the areas of virology or membranes. The successful candidate will be expected to teach advanced undergraduate courses in immunology and vanced undergraduate courses in immunology and preferably virology, to participate in introductory courses and to conduct a productive research program. The position will commence September 1977, contingent on state funding. Postdoctoral experience required. Send curriculum vitae, three letters of recommendation, and transcript to Faculty Search Secretary, College of Arts, Sciences and Letters, The University of Michigan-Dearborn, 4901 Evergreen Road, Dearborn, Michigan 48128. A Nondiscriminatory, Affirmative Action Employer.

#### **POSITIONS OPEN**

## IMMUNOLOGIST—SEROLOGIST DIAGNOSTIC LABORATORY

The New York State College of Veterinary Medicine is seeking an immunologist-serologist for its Diagnostic Laboratory. The incumbent will provide scientific direction for immunological and serological testing programs; contribute to the multidisciplinary programs in diagnostic sciences; and participate in the development of service and research programs in ro-epidemiology.

Applicants should hold a D.V.M., M.D., D.D.S. and/or Ph.D. degree with advanced training in immunology. Title and salary will be commensurate with ability and experience. The position will carry a joint of the Destroy of Minimum and the academic appointment within the Department of Microbiology of the College.

Kindly forward complete curriculum vitae, personal bibliography and references to Dr. R. H. Cypess, Director, Diagnostic Laboratory, New York State College of Veterinary Medicine, P.O. Box 786, Ithaca, New York 14853. An Equal Opportunity Employer.

#### MEMBRANE BIOLOGY

A postdoctoral research position is available in the Department of Physiology at University of California, Los Angeles. The research is directed at the molecular mechanisms of ion transport across epithelial cells. Current projects include the study of transport by isolated plasma membrane vesicles and the isola-tion of transport proteins. Applications are invited from students and fellows with training in molecular biology. The appointment will be for 2 years, and the annual salary will be \$11,600.

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

Professor Ernest M. Wright Department of Physiology University of California Medical Center Los Angeles, California 90024

Affirmative Action/Equal Opportunity Employer. Minority and women candidates are encouraged to ap-

MICROBIOLOGIST—The Department of Bacteriology, University of California, Davis, is inviting applications for a faculty position in microbiology. The candidate, who should have a broad interest in biology of microorganisms, would be expected to teach microbiology at the lower and upper division levels, and to develop an active research program. Al-though the specific field of research is less important though the specific field of research is less important than demonstrated research ability, a program in general or comparative microbiology is preferred. The position, available 1 July 1977, is funded at the assistant professor level (salary range begins at \$14,500) but a higher level appointment may be possible, depending on qualifications of candidate. Applicants should submit a curriculum vitae (including brief synopsis of future research plans), representative reprints, and three letters of recommendation to D. Pratt, Acting Chairperson, Department of Bacteriology, University of California, Davis, California 95616. The deadline for applications is 30 April 1977. University of California is an Equal Opportunity 14F. University of California is an Equal Opportunity Affirmative Action Employer.

## Molecular & Microbial Genetics

Fundamental industrial research position for a Ph.D./senior research scientist with experience in molecular, microbial and bacteriophage genetics.

For further information and consideration, please forward a résumé of training and experience, a list of publications and pertinent reprints, and short description of your research in-

**Box 127, SCIENCE** 

An Equal Opportunity Employer, M/F

#### **POSITIONS OPEN**

#### POSITION IN MATERNAL AND CHILD HEALTH HARVARD SCHOOL OF PUBLIC HEALTH

The new Department of Health Services in the School of Public Health is seeking a senior physician faculty member who has experience and interest in coordinating field demonstrations that link material coordinating held demonstrations that link maternal and child health services with nutrition and family planning services. Person should be eligible for a senior appointment in the University, have done research, and be especially interested and experienced in teaching students at the School of Public Health and medical students in maternal and child health and international health. Women and minority applicants are encouraged to apply.

If interested, send applications to:

Robert J. Haggerty, M.D.
Roger I. Lee Professor of Health Services and Pediatrics
Harvard School of Public Health-Harvard Medical School
Chairman, Department of Health Services 677 Huntington Avenue Boston, Massachusetts 02115

## MEDICAL AND VETERINARY ENTOMOLOGIST

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

Applications including curriculum vitae, tran-

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

#### NEUROCHEMIST

The National Institute of Environmental Health Sciences, National Institutes of Health, Public Health Service, invites applications for the position of neurochemist to plan and conduct independent and collaborative research directed toward the development of methods for the detection of environmental neurotoxins and the study of their mode of action on the nervous system. The incumbent must have an extensive background in neurochemistry with good general knowledge of neurobiology. In naticular general knowledge of neurobiology. In particular, the individual must be willing to interact with psychologists, neurophysiologists, and neuropathologists. The incumbent will be a member of the Behavioral Toxicology Program in the Laboratory of Environmental Toxicology.

The position requires a Ph.D. or equivalent in biochemistry or a closely related field, preferably with postdoctoral experience and publications in neurochemistry. Position will be filled through career Civil Service or service fellowship appointment. Salary will range from \$15,100 to \$26,500 per annum, depending on qualifications. Letters of application with ary will range from \$15,100 to \$26,300 per annum, ue-pending on qualifications. Letters of application with curriculum vitae, bibliography, and the names and addresses of two references should be mailed to: Penelope P. Gardner, Personnel Office, NIEHS, P.O. Box 1223, Research Triangle Park, N.C. 27709. Applications should be received not later than 15 April 1977. An Equal Opportunity Employer, MIF.

#### **PALEOBOTANIST**

Applications and nominations are invited for a position beginning in September 1977. The successful applicant will be expected to develop a vigorous research program. Teaching duties will include courses in paleobotany and plant structure. Some participation in the undergraduate biology program will be expected. Rank and salary will be commensurate with qualifications and experience. Deadine for applications is 1 April 1977. To apply, send complete curriculum vitae and names of three references to: Dr. Orson K. Miller, Chairman of the Search Committee, Department of Biology, Virginia Polytechnic Institute and State University, Blacks-Polytechnic Institute and State University, Blacksburg, Virginia 24061.

An Affirmative Action/Equal Opportunity Employer

## UNIVERSITY OF MICHIGAN INSTRUCTOR/ASSISTANT PROFESSOR

Individual with M.D. Board-certified in clinical and anatomic pathology. Candidate must have interest and some experience in immunological research. Teaching and research responsibilities in the Depart-ment of Pathology, The University of Michigan Med-ical School. Responsibilities at University Hospital, Ann Arbor, Michigan, will be to direct the Clinical Immunology Laboratory. Send résumé to **Box 131**, **SCIENCE**. Code #1100FO. An Equal Opportunity Affirmative Action Employer.

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

PHARMACOLOGIST—Assistant professor position available July 1977. Ph.D. in pharmacology required. D.V.M. or M.D. degree desired but not mandatory. The successful applicant will be expected to develop a research program in an area of pharmacology with some relevance to veterinary medicine. Teaching assignments are in pharmacology courses for veterinary technicology and veterinary medical for veterinary technicology and veterinary medical students. Applicants should submit curriculum vitae and names of three references to **Dr. G. D. Goetsch**, Department of Veterinary Physiology and Pharmacology, School of Veterinary Medicine, Purdue University, West Lafayette, Ind. 47907. An Equal Opportunity/Equal Access Employer.

The University of Illinois, College of Veterinary Medicine, is seeking a PHARMACOLOGIST/TOX-ICOLOGIST. Applicants must have advanced training in one of these disciplines. The person selected will be involved in professional and graduate training and he/she will be expected to develop or continue an active research program.

This position is permanently funded. Rank/salary are negotiable and commensurate with experience. Interested parties should forward a résumé of their Interested parties should forward a résumé of their professional activities and the names of three references to: Dr. R. F. Bevill, Room 267, College of Veterinary Medicine, University of Illinois, Urbana, Ill. 61801. Deadline for application or nominations is 30 April 1977 or until the position is filled. The University of Illinois is an Affirmative Action/Equal Opportunity Employer and encourages applications from members of minority groups and women.

#### PHYSIOLOGIST

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

Applicants should send a scientific and accordance bit

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

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

#### PLANT SYSTEMATICS

Position available autumn 1977 for an assistant Position available autumn 1977 for an assistant professor of biology. Applicants must hold Ph.D. Field orientation and knowledge of contemporary and traditional plant systematics expected. Must interface with genetics and ecology. Send curriculum vitae with statement of research interests, teaching experience, reprints, and three letters of recommendation to: Dr. Wade T. Batson, Department of Biology, University of South Carolina, Columbia, S.C. 29208, by 15 April 1977.

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

portunity/Affirmative Action Employer.

#### **POSITIONS OPEN**

PHYSICIST: One-year appointment for 1977–78 as assistant professor with Ph.D. to teach undergraduate courses in introductory optics, electromagnetic theory and advanced mechanics. Send apmagnetic theory and avaleted mechanics, send application, résumé, and letters of reference to: Professor James H. Turner, Department of Physics and Astronomy, Bowdoin College, Brunswick, Maine 04011. Bowdoin College is an Equal Opportunity/Affirmative Action Employer.

#### PLASMA FRACTIONATOR

Experience with production-scale plasma fractionation required. Must be capable of supervising and directing the entire procedure and all associated personnel. The position is a most attractive long-term opportunity to commence on 1 July 1977. Please send résumé to **Box 128, SCIENCE.** 

POSTDOCTORAL POSITION: Terrestrial plant ecologist to work on computer simulation of forest ecosystems. Applicant should have experience in computer simulation and training in applied mathematics and statistics. Starting date: 1 September 1977. Please send curriculum vitae, including names of references, to Dr. Daniel Botkin, Ecosystems Center, Marine Biological Laboratory, Woods Hole, Mass. 02543.

POSTDOCTORAL POSITION available in June for individual interested in studying altered membranes of tumor virus transformed cells. Send résumé to Box 132, SCIENCE.

Applications are invited for a POSTDOCTORAL POSITION in visual physiology at Purdue University, available from 1 July 1977. This position will be supported by a training grant to the Vision Research Group at Purdue, and will be sponsored by one or more of the following faculty members: S. E. Ostroy, D. R. Pepperberg, and L. H. Pinto. Possible areas of study include: (i) the cellular biochemistry and physical chemistry of the vertebrate photoreceptor, including the metabolism of vitamin A; (ii) the electrophysiology and biochemistry of photoreceptor adaptation; and (iii) the comparative physiology of visual function in normal and mutant strains of Applications are invited for a POSTDOCTORAL POof visual function in normal and mutant strains of mice. Send curriculum vitae and a letter describing current research interests to D. R. Pepperberg, Department of Biological Sciences, Purdue University, West Lafayette, Indiana 47907.

An Affirmative Action/Equal Opportunity Employer

#### POSTDOCTORAL POSITION

Position available for Ph.D. or equivalent, who has experience in biochemical techniques in neuropharmacology. Interest in studies relating to developmental pharmacology essential. Send curriculum vitae and names of three references to:

Dr. George R. Breese
Biological Sciences Research Center 220H
University of North Carolina School of Medicine
Chapel Hill, N.C. 27514

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

POSTDOCTORAL RESEARCH IN CELL BIOLOGY. Position of research associate available in the division of human genetics, Cornell University Medical College. Research will involve the isolation of cell variants, karyology, and cell hybridization. Experience in cell culture techniques desirable. Send curriculum vitae and names of three persons familiar with candidate's research to: Gretchen Darlington, Ph.D., Department of Medicine, Cornell University Medical College, 1300 York Avenue, Room F-209, New York, N.Y. 10021. An Equal Opportunity Employer, M/F.

INTENSIVE TWO-WEEK TRAINING SESSION

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REPLICATION TECHNIQUES
EM AUTORADIOGRAPHY

and X-RAY MICROANALYSIS

4 to 16 September 1977

**Duke University Marine Laboratory** Beaufort, N.C. 28516 Dr. John D. Costlow, Director

Staff of internationally recognized experts in specialized techniques. Wide variety of instruments and equipment available for use by participants. Course geared to research investigators, but technicians and advanced graduate students are also invited to ap-

For descriptive brochure and application form, write to:

Dr. Eve L. MacDonald Program Coordinator **Electron Microscope Institute Duke University Marine Laboratory** Mailing address:

Department of Toxicology and Experimental Pathology Burroughs Wellcome Co. 3030 Cornwallis Road Research Triangle Park, N.C. 27709

#### VISUAL SCIENCE **Psychophysics**

Eye Research Institute of Retina Foundation wishes to hire a permanent staff member specializing in visual psychophysics. The candidate should be interested in accurate and sensitive descriptions of functions of the central retina related to the physiological and physical determinants of visual performance. The most important criteria are excellence in quality The most important criteria are excellence in quality of research, and willingness to explore application of psychophysical techniques to clinical diagnosis and treatment. This staff member will be expected to act as an adviser in the development of new clinical techniques and to help supervise clinical measurements taken by other workers. Available facilities: Individual laboratory and office space of 320 square feet; additional clinical testing space in medical office building; shared instrument shop and electronics shop. Collaborative research arrangements with other department members possible if appropriate. Candidate should have enough postdoctoral experience to be ready for an independent research program. Send curriculum vitae, a brief statement of expected research direction, and names of three or more references to address below.

Visiting Scientist/Senier Postdoctoral Position

#### Visiting Scientist/Senior Postdoctoral Position

Opportunity for creative and independent research on the electrophysiology and pharmacology of retinal synaptic mechanisms in *Limulus* eye. Areas of interest include: Modification of retinal function through pharmacological and environmental manipulations of pharmacological and environmental manipulations of synaptic properties; transmitter-receptor interactions; analysis of normal and modified retinal function by Fourier and Wiener techniques. Wellequipped laboratory with on-line, expanded PDP-12 system. Other departmental laboratories working on primate visual CNS; vascular properties of isolated mammalian eye; retinal chemistry; optical physics; spychophysics; and a variety of clinical retinal and visual problems. Please send curriculum vitae and reference names to address below.

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

### POSTDOCTORAL RESEARCH ASSOCIATE POSITION IN PHYSIOLOGY

A postdoctoral research associate position is available to a qualified applicant to participate in research on the control of vasopressin secretion and its metabolism. Current research involves both normal and hypertensive animal models. Candidates must have a Ph.D., M.D., D.V.M., or comparable degree. Felowship will begin 1 July 1977 with a stipend of \$10,000. Send curriculum vitae and the names of three references to:

Department of Physiology and Biophysics University of Tennessee Center for the Health Sciences Memphis, Tennessee 38163

Equal Opportunity/Affirmative Action Employer

## MEDICAL RESEARCH FOUNDATION PRESIDENT

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

## REPRODUCTIVE PHYSIOLOGIST POSTDOCTORAL IN VIROLOGY

We are seeking a Ph.D. and/or D.V.M. with specialization in reproductive physiology emphasizing gamete physiology, and supporting interest in animal breeding and in quantitative and population genetics for a position available 1 April 1977. Responsibilities are to provide reproductive physiology and animal breeding support to a selective breeding program for breeding support to a selective breeding program for producing baboon models for other research programs. In addition to assisting in colony management, there are opportunities for collaboration with other reproductive physiologists and development of the individual's own research program. Starting salary range is \$17,000 to \$20,000, dependent upon research qualifications and experience. Additionally, a postdoctoral position is available for a Ph.D. trained in RNA tumor viruses. This person will be involved in a research program on tumor viruses in primates. in RNA tumor viruses. This person will be involved in a research program on tumor viruses in primates. Initial one year appointment carries salary of \$12,000. Interested applicants should address curriculum vitae with names of two references to Person nel Manager, Southwest Foundation for Research and Education, P.O. Box 28147, San Antonio, Texas 78284. An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE OR POSTDOCTORAL POSITION available immediately to study biochemis-POSITION available immediately to study biochemistry of blood platelets. Background in protein structure particularly calcium binding and cyclic nucleotide areas desirable. Academic atmosphere with good opportunity to grow for a qualified candidate. Submit curriculum vitae and three references to Dr. P. Ganguly, St. Jude Children's Research Hospital, Memphis, Tennessee 38101. An Equal Opportunity Employer.

#### RESEARCH ENTOMOLOGIST

We are seeking a Ph.D. in entomology with a strong background in microbiology and insect pathology. Experience in tissue culture as well as a minimum of 2 years of experience in agriculture science and practice is desired but not required.

We have an immediate opening for a highly motivated person for development of biological pesticides to be located in south Florida in our Crop Protection Biological Research Center. We offer a good starting salary and excellent benefits. Please send résumé to:

SANDOZ, Inc Department B P.O. Box 1489 Homestead, Florida 33030

An Equal Opportunity Employer

#### **POSITIONS OPEN**

POSTDOCTORAL POSITIONS in basic and clinical neurobiology are available this year for individuals having the M.D. or Ph.D. degree in one of the biological sciences. Additional information can be obtainreal sciences. Additional information can be obtain-ed by writing to the individual below. Individuals in-terested in applying should send a curriculum vitae and two letters of recommendation to Dr. W. J. McBride, Institute of Psychiatric Research, Indiana University Medical Center, Indianapolis, Ind. 46202.

POSTDOCTORAL POSITION available immediately (duration: 2 to 3 years) for studies on sea urchin development using recombinant DNA technology. Strong background in biochemistry and experience in DNA-DNA, DNA-RNA hybridization desirable. Send curriculum vitae and names of two references to: Dr. Tom Humphreys, University of Hawaii, Kewalo Marine Laboratory, 41 Ahui Street, Honolulu, Hawaii 96813.

RESEARCH ASSOCIATE. The Department of Botany is seeking a research associate to assist in determining the flow of energy (energy budget) through salt marsh ecosystems. This is a one-year appointment and can begin immediately. Applicant should have ecological training primarily in marsh or wetland zoology, carbon cycling computer analyses. A Ph.D. is required. Send application to Dr. E. D. Seneca, North Carolina State University, Botany Department, P.O. Box 5186, Raleigh, N.C. 27607. Telephone: 919-737-2129 or 919-737-2223.

## RESEARCH PATHOLOGIST OCCUPATIONAL RESPIRATORY DISEASES

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

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

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

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RESEARCH POSITION, Ph.D., biochemist and/or pharmacologist, with experience and/or interest in cancer chemotherapy, and with experience in nucleic acid metabolism. To participate in an in vivo drug screening and chemotherapy research program utilizing a spontaneous murine breast tumor system. Academic affiliation. Send résumé to Dr. Daniel S. Martin, 89-15 Woodhaven Boulevard, Woodhaven, N.Y. 11421.

#### RESEARCH SCIENTISTS

An expanding biomedical research firm in suburban Washington, D.C., currently has positions available for qualified professional senior and technical personnel, in the following disciplines:

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Clinical chemistry
At least 2 years of post-degree experience preferred.
Interested individuals should submit references, salary requirements, and curriculum vitae in complete confidence to:

MELOY LABORATORIES, INC. 6715 Electronic Drive Springfield, Virginia 22151 Attn: Code R30

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#### **POSITIONS OPEN**

#### POSTDOCTORAL RESEARCH

Applications are invited for a position involving studies on immunological aspects of solid cancers. Background in biochemical and immunochemical techniques required. Experience with radioimmunoassay desirable. Excellent salary and benefits. Send curriculum vitae and references to:

Personnel Department Evanston Hospital 2650 Ridge Avenue Evanston, Illinois 60201

An Equal Opportunity Employer

A RESEARCH POSITION for work in neuroanatomy is available for 3 years, beginning 1 May 1977. **Professor Dr. V.** Braitenberg, Director, Max-Planck-Institut für biologische Kybernetik, Spemannstrasse 38, 74 Tübingen, West Germany.

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

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

#### SECTION HEADS

#### PATHOLOGY

Veterinary Pathologist—ACVP-certified or Boardeligible with experience and interest in large-scale toxicology programs. Duties involve the direction of a 14-person staff including 2 pathologists; examination of tissues from primates, dogs, rodents, and other research animals; participation in multi-disciplinary projects with three other sections in pharmacology and toxicology; and the development of new research programs.

#### TOXICOLOGY

Toxicologist—To participate in ongoing programs, develop new programs, interact with other groups, and provide leadership for a growing section of 20 and provide readership for a growing section of 20 persons. Ph.D. intoxicology or pharmacology preferred. Strong experience and interest in toxicological research required. Sound technical evaluation and writing skills essential, personal leadership qualities important.

Please send résumé, references, and salary history in confidence to: Martin N. Schuler, Manager, Personnel Operations,

MIDWEST RESEARCH INSTITUTE 425 Volker Boulevard Kansas City, Missouri 64110

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#### SENIOR AQUATIC BIOLOGIST

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We require a Ph.D. with experience in quantitative

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For consideration, submit résumé, including sala-

ry requirements in confidence to:

Dr. Marc Lorenzen Tetra Tech, Inc. 3700 Mt. Diablo Boulevard Lafayette, California 94549

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The Department of Psychiatry, University of Michigan Medical School, has an opening for a SENIOR PSYCHIATRIST. Must have Boards and also be graduate of accredited psychoanalytic institute and have documented evidence of research, teaching, and administrative experience. At associate or full professor level. Send résumé to

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to work on the Biochemistry of Bacterial (Bacillus) Sporulation and Germination, with special reference to the mechanisms involved in the initiation, maintenance and breakage of the metabolic dormancy or the dormant spore. Salary \$10,800.

Send curriculum vitae and three letters of reference to:

Dr. Peter Setlow
Department of Biochemistry
University of Connecticut
Health Center
Farmington, Connecticut 06032

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# FACULTY POSITION QUANTITATIVE METHODS LYNDON B. JOHNSON SCHOOL OF PUBLIC AFFAIRS THE UNIVERSITY OF TEXAS AT AUSTIN

The LBJ School of Public Affairs is recruiting for an assistant professor with a doctoral degree and experience in the application of quantitative methods to public policy for the fall of 1977. This tenure-track position involves teaching and research. Areas of application can include simulation, optimization, operations research, probability, statistics, decision theory, or other techniques. Minorities and women are encouraged to apply. Submit vita to Professor Sidney Weintraub, Chairman, Faculty Recruitment Committee, LBJ School of Public Affairs, Drawer Y, University Station, The University of Texas at Austin, Austin, Texas 78712.

### DEPUTY DIRECTOR

#### National Institute on Aging

The National Institutes of Health invites nominations and applications for the position of Deputy Director, National Institute on Aging, who will share responsibility with the Director NIA, for the planning and coordination of all activities related to the mission, functions, policies, and operations of the Institute. The newly organized NIA is the eleventh research Institute at the National Institutes of Health in Bethesda, Maryland (a suburb of Washington, D.C.). NIA conducts and supports basic and clinical research and research training in the biomedical, behavioral, and social sciences related to the aging process and the diseases and other special problems and needs of the aged.

Applicants must possess an MD degree or equivalent level training and have demonstrated achievement and stature in a relevant biomedical, behavioral or social science discipline. In addition, candidates should be knowledgeable about the general area of biomedical research activities being conducted at the Federal and State government levels, and by universities, non-profit research institutions and private industry. Administrative skill is also necessary for the effective planning and coordination of Institute activities.

Position is in a top U.S. Civil Service or Public Health Service Commissioned Corps grade level. The filling of this position through a Civil Service Appointment is subject to the approval of the Civil Service Commission. Letters of application with curriculum vitae and lists of publications and references should be sent to the Chairman of the Search Committee: Ruth L. Kirschstein, M.D., NATIONAL INSTITUTES OF HEALTH, Public Health Service, Bldg. 31, Room 4A-52, Bethesda, Md. 20014. Applications must be received by April 1, 1977 to be considered.

#### NATIONAL INSTITUTES OF HEALTH

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## NATO WORKSHOP ON ECOTOXICOLOGY

A NATO sponsored Workshop on the Ecotoxicology of Persistent Chemicals will be held at the University of Surrey from 11th July-5th August 1977.

The Workshop will include lectures, seminars, practical tuition and visits to relevant research establishments in the United Kingdom and attendance at an International Symposium on Environmental Toxicology to be held at the University of Surrey from 25th-30th July.

Participation is limited to 50 and awards are available to cover fees and residential expenses for the four week period.

Applications are invited from persons wishing to participate. For further details please write to the following address:—

Dr. J. A. R. Genge Department of Biochemistry University of Surrey, Guildford, GU2 5XH Surrey, England, U.K.

Applications sought for SENIOR STAFF POSITION in surgical pathology, University of Southern California School of Medicine and Los Angeles County-University of Southern California Medical Center. Salary and rank commensurate with experience. California license and previous experience in surgical pathology required. Candidate should have a strong interest in teaching and scholarly activity. Reply to: Chairman, Department of Pathology, 2025 Zonal Avenue, Los Angeles, California 90033. Equal Opportunity/Affirmative Action Employer.

STATISTICIAN: Faculty position, training or experience in biomedical area preferred; rank and salary dependent on qualifications. Teaching health professionals and graduate students; independent research and collaboration with investigators in major medical center. Submit curriculum vitae to Dr. James Kilpatrick, Jr., Chairman, Department of Biostatistics, MCV Station, Box 923, Richmond, Va. 23298. An Equal Opportunity Employer.

#### VIRAL ONCOLOGIST

HAZLETON LABORATORIES AMERICA, INC., a leading contract research company specializing in the life sciences, is seeking a biologist who holds a Ph.D. with 2 to 6 years of postdoctoral experience to participate in an active, ongoing program in cancer research. Desired candidate should have demonstrated active research experience in virology, cell biology, and/or biochemistry. Must be able to function effectively as part of a research team conducting comprehensive study of tumor etiology.

Our staff and research facilities are located in suburban northern Virginia, approximately 20 miles west of Washington, D.C. We offer competitive salaries, excellent benefits, relocation, and opportunity for continued professional growth.

Please send résumé, including salary history, in complete confidence to Fred R. Williams, Assistant Personnel Manager, Hazleton Laboratories America, Inc., 9200 Leesburg Turnpike, Vienna, Virginia 22180.

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#### VISION RESEARCH

Two NRSA postdoctoral positions in vision research are available starting 1 July 1977. The main emphasis of the program is on basic retinal research, although fellows are encouraged to participate in both basic research training and clinical conferences. The present research staff includes seven Ph.D.'s with interests in lipid metabolism, lysosomal enzymes, high resolution electron microscopy, physical parameters of membranes, and control of photoreceptor renewal and shedding. Applicants sharing these interests should send their résumé and the names of three referees to:

Robert E. Anderson, Ph.D., M.D. Department of Ophthalmology Baylor College of Medicine Texas Medical Center Houston, Texas 77030

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#### **CONFERENCE**

5th MEETING ON ANALYSIS AND FORMATION OF N-NTTROSO COMPOUNDS. International Agency for Research on Cancer, at the University of New Hampshire, Durham, 22 to 24 August 1977. For information write: Dr. Robert E. Lyle, Department of Chemistry, North Texas State University, Denton, Texas 76203.

#### **COURSES**

SCANNING AND TRANSMISSION ELECTRON MICROSCOPY—Classes are designed to introduce the participants to the theoretical and practical aspects of electron microscopy. Primary emphasis will be on specimen preparation, operation of electron microscopes, photographic and darkroom techniques. Tuiton: \$500 for TEM, 6 to 17 June (two weeks); \$425 for SEM, 20 to 24 June and 27 June to 1 July (one week each); \$800 for combined program, 6 to 24 June. For information write or phone: Fred Lightfoot, Department of Anatomy, George Washington University, 2300 I Street, NW, Washington, D.C. 20037; telephone: 202-676-2881 or 3511.

#### **COURSES**

## 7th INTERNATIONAL FREEZE DRYING COURSE

This course, managed by Professor L. Rey, will be devoted to fundamental aspects of freeze-drying and its application in the pharmaceutical industry as well as in biology and medicine. It will be held from 19 to 24 September 1977, at the Institut National des Sciences Appliquées, in Lyon, where the preceding courses of 1958, 1960, 1962, 1964, 1966 have already been given.

Languages: mainly English, and some lectures in French.

For information and registration, please write to:

L. Valette, D.V.M.—Mérieux Foundation Secretary of Freeze Drying Course 254, rue Marcel Mérieux B. P. n° 9 69342 LYON CEDEX 2 (France)

#### **GRADUATE STUDY**

ASSISTANTSHIPS. The Department of Biology offers a highly individualized program leading to the Ph.D. for a limited number of qualified graduate students. All students are supported by teaching or research assistantships carrying stipends of \$3600 to \$4000 (plus tuition and dependency allowance). Active research programs are offered in the areas of behavior, biochemistry, biophysics, cell biology, development, genetics, microbiology, molecular biology, neurophysiology, and physiological ecology. For further information write to Director of Graduate Admissions, Department of Biology, Wesleyan University, Middletown, Conn. 06457.

#### GRADUATE STUDY IN PHARMACOLOGY

Graduate fellowships are available on a competitive basis for studies leading to the Ph.D. in pharmacology. Current research projects of the faculty include neuropharmacology, cellular transport, drug design, disposition of drugs, endocrine pharmacology, teratogenesis, and toxicology. Write: William J. Waddell, M.D., Chairman, Department of Pharmacology, University of Louisville, School of Medicine, Louisville, Kentucky 40201.

#### **TRAINEESHIPS**

PREDOCTORAL AND POSTDOCTORAL TRAIN-EESHIPS, available after 1 May 1977, in distributional ecology, ecological energetics, microbial ecology, behavior cell biology, genetics, and possibly other areas of molecular biology. Applications from female and minority candidates are particularly welcome. Send curriculum viate and three letters of reference to: Dr. Paul Agris, Director of Graduate Studies, Division of Biological Sciences, 206 Tucker Hall, University of Missouri-Columbia, Columbia, Missouri 65201. An Equal Opportunity/Affirmative Action Employer.

#### **FELLOWSHIPS**

POSTDOCTORAL FELLOWSHIP IN PSYCHOBIOLOGY OF AGING. Applications are requested for a one-year position at Clark University. The position is intended for a new Ph.D. in physiological psychology or neuroanatomy. The candidate should have interest and some experience in neuroplasticity and behavior, and the capacity to generate research on the relationship between brain damage, recovery of function, and aging. Continued support may be available if the candidate is willing to seek outside sponsorship. Please send curriculum vitae and references as soon as possible to Professor Donald Stein, Department of Psychology, Clark University, Worcester, Massachusetts 01610. Clark is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP—Position available about 1 September 1977 in the laboratories of Drs. Barbara and Bruce Furie for the study of the biochemistry of blood coagulation proteins employing immunochemical approaches and solid phase peptide synthesis. Salary based upon NIH stipends; 2-year support available. Applicant with Ph.D. or M.D. degree within past 3 years should have background in protein or peptide chemistry. Send curriculum vitae and three references to Linda C. Smith, Personnel Office, 37 Bennet Street, Boston, Mass. 02111. Tufts-New England Medical Center Hospital. An Equal Opportunity Employer, MIF.

#### **FELLOWSHIPS**

POSTDOCTORAL FELLOWSHIPS: Two-year position available immediately for studies on the identification of mycobacteria isolated from sea animals and ocean waters. Studies will include immunological and G-L-C methodology. Salary range, \$10,714 to \$13,404, plus fringe benefits. Send curriculum vitae and three references to Box 130, SCIENCE.

The Australian National University invites applications for a POSTDOCTORAL FELLOWSHIP (surface science) in the Department of Applied Mathematics, Research School of Physical Sciences. The successful applicant will join an ongoing experimental program under Dr J. N. Israelachvili involving one or more of the following topics: (i) measurement of forces between surfaces immersed in liquids, (ii) physical properties of thin liquid films, (iii) adsorbed polymer interactions, (iv) adsorbed lipid monolayer interactions, and (v) adhesion studies. Several theoretical and experimental groups are involved in the program. A preliminary report is contained in Nature 262, 744 (1976). Experience in experimental physics and/or colloid science, theoretical physics, physical chemistry or biophysics is desirable. Appointment for not less than one year and not more than two. Salary: \$13,850 to \$18,269 per annum, exchange rates 4\$1.US\$1.08. Reasonable travel expenses. Superannuation benefits. Further information from Academic Registrar, Australian National University, P.O. Box 4, Canberra, ACT, 2600 Australia, with whom applications close 25 April 1977.

#### NATIONAL RESEARCH SERVICE AWARD FELLOWSHIPS IN LUNG BIOCHEMISTRY OR ANATOMY

A few NIH postdoctoral fellowships for up to 3 years are available to study lung cell biology including biochemistry and ultrastructure. Excellent background in a basic science, medicine or veterinary medicine is essential. A commitment to basic or applied research on the lung is desirable. Participating faculty are in departments of anatomy, biochemistry, medicine, physiology. Inquiries, curriculum vitae, and names of three references to Donald Massaro, M.D., University of Miami School of Medicine, P.O. Box 520875, Biscayne Annex, Miami, Florida 33152. An Equal Opportunity Employer.

## POSTDOCTORAL RESEARCH FELLOWSHIP

The University of Massachusetts Medical Center at Worcester has a postdoctoral research fellowship available immediately in the area of renal ultra structure. Previous experience with SEM or TEM advantageous. Submit curriculum vitae, statement of research interest, and names of three references to: Dr. Ruth Ellen Bulger, University of Massachusetts Medical Center, Department of Anatomy, 55 Lake Avenue, North, Worcester, Mass. 01605. An Equal Opportunity/Affirmative Action Employer, M/F.

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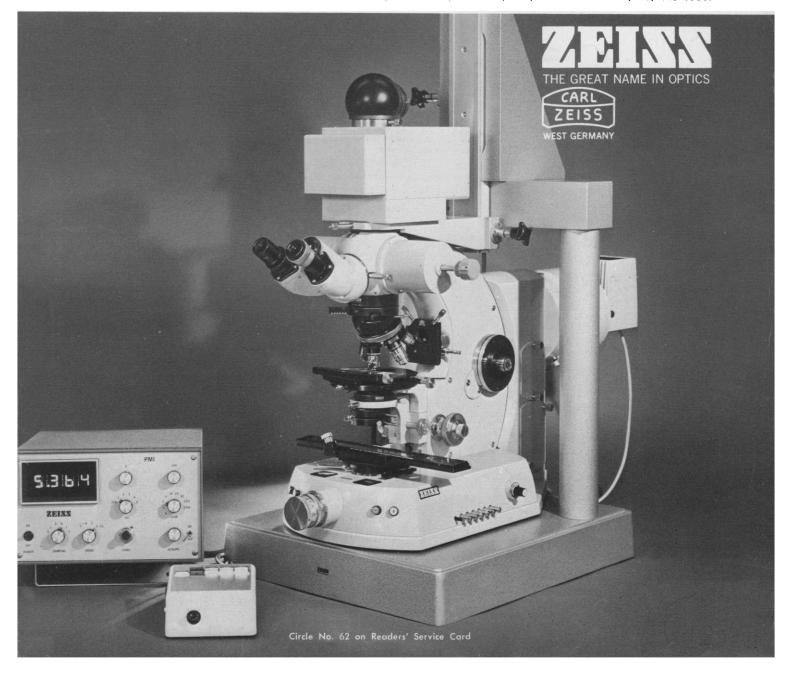
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