## Personnel Placement

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

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

universities take display rate for all advertising. DISPLAY (POSITIONS OPEN, MARKET PLACE, AND SO FORTH): \$130 per inch, minimum, per insertion (1 inch is equivalent to 11 lines of 52 spaces each). Ads over 1 inch billed to nearest quarter inch. No charge for Box Number. Rates net. No agency commission allowed for ads under 4 inches. No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information must accompany all other advertis-ing.

COPY for ads must reach SCIENCE by Wednesday, 3-½ weeks before issue date (Friday of each week) re-quested. Send copy for all positions wanted ads and dis-play ads under 5 inches to:

SCIENCE, Room 207 1515 Massachusetts Ave., NW Washington, D.C. 20005 Send copy for display ads, 1/6 page and larger, to:

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

BLIND AD replies should be addressed as follows:

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

Effective 1 January 1977, the display rate for SCIENCE will be \$145 per column inch, minimum.

#### POSITIONS WANTED

Biochemist, Ph.D. Wide background in teaching, re-Biochemist, Ph.D. Wide background in teaching, re-search. Years of postdoctoral experience. Cancer: metabolism, enzymology, explant-culture. In vivo, in vitro chemical carcinogenesis: food contaminants, additives. Steroid receptors. Independent/publica-tions. Seeking administrative, research, and/or teaching position. Box 527, SCIENCE. X

Physiological Ecologist. M.A., marine science; recent Ph.D., biology. Will conduct studies of energy distri-bution by aquatic organisms. Academic or consult-ing position. Box 528, SCIENCE. X

Publications Director, highly experienced, imaginarubications pirector, nigniy experienced, imagina-tive, seeks challenging position. Broad background in scientific research, publishing, and management. College text author, M.S. level education. Box 524, SCIENCE. 12/3, 10, 17

#### POSITIONS OPEN

ANALYTICAL CHEMISTRY-The Water Resources Laboratory, an Institute of Advanced Studies of the University of Louisville Graduate School has an opening for an assistant professor with special-ization in the general areas of water analyses, both in organic and inorganic compounds in natural and treated waters. Candidates must have experience in analyses of cations and anions using atomic absorp-tion spectrophotometry and other comparable equip-ment. A comprehension of the role of nutrient mate-rials in eutrophication is highly desirable. Ph.D. or Sc.D. in the appropriate field of specialization is re-quired. Send curriculum vitae and reprints of repre-sentative publications before 15 January 1977 to Dr. Stuart E. Neff, Chairman, Analytic Chemistry Search Committee, Water Resources Laboratory, University of Louisville, Louisville, Kentucky 40208. An Equal Opportunity/Affirmative Action Employer. ANALYTICAL CHEMISTRY-The Water Resources

#### POSITIONS OPEN

**ANATOMIST** to teach human gross anatomy. Applicant should have 3 to 4 years experience, hold Ph.D. or M.D. degree and have demonstrated potential for excellence in both teaching and research. Pre-fer individual with secondary interest in neurosci-ence area. Send complete curriculum vitae, includ-ing names of three professional references, to Dr. J. W. Wagner, Head, Department of Anatomy, Texas A & M University, College of Medicine, Olin E. Teague Research Building, College Station, Texas 77843. Deadline for receipt of applications is 15 January 1977. Texas A & M University is an Equal Opportu-nity/Affirmative Action Employer. tial for excellence in both teaching and research. Pre-

#### ANATOMIST

Analounds1 Applications are invited for a faculty position as an assistant professor in the Department of Anatomy at Wayne State University School of Medicine. Appli-cants should be able to teach gross anatomy and neu-roanatomy and be interested in carrying out a pro-ductive research program, preferably in neuroanato-my. Candidates should send their curriculum vitae and names of three references to Dr. Harry Maisel, Department of Anatomy, Wayne State University School of Medicine, 540 East Canfield, Detroit, Mich-igan 48201. An Equal Opportunity/Affirmative Ac-tion Employer. tion Employer.

#### ANATOMISTS

Three assistant professors, Ph.D. or M.D., with postdoctoral research and teaching experience and postdoctoral research and teaching experience and ability to develop independent research programs; with research interests in cell biology (devel-opmental biology or neurobiology); and with teach-ing interests in gross anatomy or microscopic anato-my or neuroanatomy. Send curriculum vitae to Dr. G. Gordon Robertson, Department of Anatomy, Uni-versity of Tennessee Center for The Health Sciences, Memphis, Tennessee 38163. Equal Opportunity, M/F/Affirmative Action Employer

ANIMAL PHYSIOLOGIST: Assistant professor lev-el, starting September 1977. Circulatory or respira-tory physiologist preferred, but all outstanding can-didates will be considered. Teaching duties include an undergraduate laboratory course in human physi-ology for allied health students and graduate course in candidate's specialty. Evected to develop indein candidate's specialty. Expected to develop inde-pendent research program and supervise graduate students. Send curriculum vitae, reprints, brief statement of research plans, and the names of at least three referees to Dr. Peter Abramoff, Biology Depart-ment, Marquette University, Milwaukee, Wis. 53233. An Equal Opportunity/Affirmative Action Employer.

#### ANIMAL PHYSIOLOGY-HISTOLOGY

ASSISTANT PROFESSOR, Ph.D. required. Appli-ASSISTANT PROFESSOR, Ph.D. required. Appli-cant should be qualified to develop and teach upper-level undergraduate and graduate-level courses in stated areas. Applicants will be expected to teach in-troductory courses in general biology and develop an active research program. Send curriculum vitae and three letters of reference by 15 February 1977, to: Search Committee, Department of Biology, Pan American University, Edinburg, Texas 78539. Pan American University is an Equal Opportunity/ Affirmative Action Employer. Affirmative Action Employer.

## ASSISTANT DIRECTOR, INSTITUTE FOR ENVI-RONMENTAL STUDIES, UNIVERSITY OF WASH-INGTON, SEATTLE, WASHINGTON 98195.

A nonacademic person experienced in environmenal affairs is sought to assist the director in devel-oping and maintaining undergraduate and graduate tal anars is solgh to assist the director in dever-oping and maintaining undergraduate and graduate educational programs, serving as a liaison person with federal, state, and private agencies for Institute internship programs and research projects, and as a contact person for joint programs with departments and other institutes within the University. A college degree in an environmentally related field, skill in writing reports and articles, and a minimum of 3 years of experience with an organization involved with environmental programs are highly desirable. Salary range is \$13,656 to \$17,748, depending on ex-perience. Applications, which should include a cur-riculum vitae and a list of three persons from whom letters of recommendation can be solicited, must be received no later than 31 December 1976. *The Uni-versity of Washington is an Affirmative Action/Equal Opportunity Employer*. For additional information, write to: Gordon H. Orians, Director, Institute for Environmental Studies, 230 Engineering Annex, FM-12, University of Washington, Seattle, Washington 98195.

#### POSITIONS OPEN

The Research Institute of Pharmaceutical Sciences (RIPS), School of Pharmacy, University, Mississip-pi, is seeking candidates for ASSISTANT DIREC-TOR OF PHYSICAL SCIENCES. Candidates with a TOR OF PHYSICAL SCIENCES. Candidates with a B.S. in pharmacy and a Ph.D. in related life science field are of particular interest. Salary will be com-mensurate with experience and equivalent academic positions. Interested persons should send biographi-cal data, publications, and so forth, to Dr. Carlton Turner, Associate Director, RIPS, School of Pharma-cy, University, Miss. 38677. An Equal Opportunity/ Affirmative Action Employer.

ASSISTANT PROFESSOR. The Department of Zoology, University of Washington, invites applications for an assistant professor position. The area is purposely left open, with the aim of building departmental breadth and quality. The position involves instruction at undergraduate and graduate levels and the development of a vigorous research program. Persons holding doctorates and with outstanding qualifications are invited to apply. Please send curriculum vitae, pertinent transcripts, bibliography with copies of significant publications or manuscripts in press, a list of three references, and a statement of research and teaching interests to Professor Donald S. Farner, Chairman, Department of Zoology NJ-15, University of Washington, Seattle, Wash. 98195. Deadline for completion of applications is 15 January 1977. The University of Washington is an Affirmative Action/Equal Opportunity Employer. Applications from women and members of minority groups are encouraged.

#### ASSISTANT PROFESSORSHIP

A position is open at the rank of assistant professor A position is open at the rank of assistant professor for an individual with research interest in the molecu-lar, genetic, or cellular aspects of development. This would include persons with training in the areas of cell surface interaction, immunology, or the control of gene expression. Candidates with promise of ex-cellence in both research and teaching should send curriculum vitae and the names of three references curriculum vitae and the names of three references to Search Committee, c/o Austin Newton, Department of Biology, Princeton University, Princeton, N.J. 08540. Princeton University is an Equal Opportu-nity/Affirmative Action Employer.

#### UNIVERSITY OF WISCONSIN-MILWAUKEE

ASSISTANT PROFESSORSHIPS. Four openings ex-ASSISTANT PROFESSORSHIPS. Four openings ex-pected. The department is concerned with under-graduate and graduate study to the Ph.D. in biologi-cal sciences. In addition to the specialty areas in-dicated for instruction, development and research, the new faculty will be expected to be able to in-struct or contribute to instruction in the general un-decorroducte biology curriculum.

Invertebrate biology curriculum. Invertebrate Zoologist (Aquatic)-Expertise in in-vertebrate physiology and freshwater physiological ecology. The Center for Great Lakes Studies and a Field Station offer facilities and assistance for work

Field Station offer facilities and assistance for work on Lake Michigan, and so forth. Neurophysiologist-Interests and talents in cellular and/or integrative neurophysiology and a desire to environmental physiology. Special training in elec-trophysiology desired. Parasitologist-M.D. or Ph.D., expertise in environ-mental health and/or anuatic parasites. Experience

mental health and/or aquatic parasites. Experience with transmission and/or scanning electron microscopes desirable.

scopes desirable. Animal Virologist-M.D. or Ph.D., postdoctoral expe-rience preferred. Experience in tissue culture tech-niques, assay procedures, and the isolation and puri-fication of viruses.

Send curriculum vitae, a summary of research inter-ests and goals, and the names of three references to Dr. Roslyn P. Warren, Department of Zoology, Uni-versity of Wisconsin-Milwaukee, P.O. Box 413, Mil-waukee, Wisconsin 53201. An Equal Opportunity/Af-firmative Action Employer.

#### UNIVERSITY OF MICHIGAN **Department of Pharmacology** Assistant Professor

Candidates must have a M.D. or Ph.D. degree with Candidates must have a M.D. of Ph.D. degree with at least 2 years of postdoctoral training in pharmaco-logical research. Interest and experience in teaching pharmacology to graduate, medical, dental, pharma-cy and/or nursing students. Send résumé to **Box 529**, SCIENCE. Code 1000BO. A nondiscriminatory, Afrmative Action Employer.

ASSISTANT PROFESSOR: ANALYTICAL CHEM-**ISTRY**, University of Delaware. Applications are so-licited from candidates with a clearly demonstrated potential for excellence in both research and teachunderstand the excent of the second model of the second model of the second model of the second seco the department. Postdoctoral experience is desir-able. Applicants should submit a complete résumé and a detailed research plan, together with the names of three references, to Professor Henry N. Blount, Chairman, Analytical Search Committee, De-partment of Chemistry, University of Delaware, New-ark, Delaware 19711. Closing date for applications is 15 January 1977. The University of Delaware is an Equal Opportunity/Affirmative Action Employer.

#### ASSISTANT PROFESSOR OF ANATOMY

The Department of Anatomy at Emory University School of Medicine is planning to fill a position at the level of assistant professor. Candidates should have the Ph.D. or M.D. degree with postdoctoral research experience and interest in the experimental study of experience and interest in the experimental study of the ultrastructure of excitable tissues. The applicant should be qualified to teach in an organ microscopic anatomy and cell biology program. Persons who wish to apply should send a curriculum vitae, bibliog-raphy, and the names of three references to: Dr. J. Sutin, Chairman, Department of Anatomy, Emory University, Atlanta, Georgia 30322. An Equal Oppor-tunity/Affirmative Action Employer.

ASSISTANT PROFESSOR-BIOCHEMISTRY. The ASSISTANT PROFESSOR—BIOCHEMISTRY. The Department of Biochemistry at Michigan State Uni-versity invites applications from individuals of dem-onstrated research capability for a position as assist-ant professor. Applicants should hold the Ph.D. de-gree in biochemistry or a related field and have had postdoctoral research experience. The appointee will be expected to develop a vigorous, independent, research program in an area of basic biochemistry and to participate in the teaching programs of the De-partment at the undergraduate, graduate, and profespartment at the undergraduate, graduate, and profes-sional levels. Applicants should submit, prior to 1 February 1977, a complete curriculum vitae, the names of at least three references, and a statement of their proposed research program to: Dr. Robert Barker, Chairman, Department of Biochemistry, Michigan State University, East Lansing, Michigan 48824. Michigan State University is an Equal Opportunity/Affirmative Action Employer.

The Department of Biology at Harvard University is considering an appointment at the ASSISTANT PRO-FESSOR level in the field of experimental vertebrate behavior. Candidates should have demonstrated ex-cellence in research dealing with either the in-tegration of neural mechanisms and the endocrine system at the organismic level or with the ontogeny of behavior as determined by the endocrine system. Postdoctoral or equivalent experience is required. Position available July 1977. Complete applications rosition available July 19/7. Complete applications (curriculum vitae, professional goals statement, three letters of reference) should be sent before 15 January 1977 to Karel F. Liem, Museum of Com-parative Zoology, Harvard University, Cambridge, Massachusetts 02138. An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSORS OF GENETICS. Iowa State University seeks highly qualified Ph.D.'s for two positions open 1 July 1977. Postdoctoral re-search and publications required. Must have strong search and publications required. Must have strong research program in molecular genetics of eukary-otes. Duties equally divided between teaching and research. Application by 28 February 1977. Send curriculum vitae and three letters of reference to: Dr. W. J. Welshons, Department of Genetics, 8 Cur-tiss Hall, Iowa State University, Ames, Iowa 50010. Equal Opportunity/Affirmative Action Employer

#### ASSISTANT PROFESSOR OF PHYSIOLOGY

ASSISTANT PROFESSOR OF PHYSIOLOGY The Department of Physiology, University of Pittsburgh School of Medicine, solicits applications and nominations for this position. Candidates should have research interests in any aspect of organismic physiology (exclusive of reproductive endocrinolo-gy), must have completed a postdoctoral fellowship and be prepared to initiate an independent research program for which extramural support must even-tually be obtained. Please send curriculum vitae, ref-erences, and a statement of research plans to: E. Knobil, Department of Physiology, University of Pitts-burgh School of Medicine, Pittsburgh, Pennsylvania 15261. 15261

An Equal Opportunity/Affirmative Action Employer

3 DECEMBER 1976

#### **POSITIONS OPEN**

#### ASSISTANT PROFESSOR OF NEUROSCIENCE

The University of California, Los Angeles, invites applications or nominations for a position of assist-ant professor of neuroscience. This appointment will be sponsored jointly between the Brain Research Inbe sponsored jointly between the Brain Research in-stitute and an appropriate basic science department in the School of Medicine. The appointment com-mittee is seeking a scientist of recognized accom-plishment and outstanding promise in the field of cellular neurobiology, one area of particular interest being neuroimmunology. The appointee will join the newly established Ahmanson Laboratory of the Brain Research Institute. Applications for nomi-nations should be submitted with a curriculum vitae, bibliography, and names of potential references to: Director, Brain Research Institute, UCLA School of Medicine, Los Angeles, California 90024. All applica-tions and inquiries will be treated confidentially with-in the limits of the law. UCLA is an Equal Opportunity Employer. Candidates will be considered with-out regard to race, color, religion, sex, or national origin. All applications must be received by 31 De-cember 1976.

#### ASSISTANT PROFESSOR OF PHYSIOLOGY

Reproductive physiologist with at least 2 years of postdoctoral research fellowship experience ready to initiate independent research program. Must ob-tain own grant support following limited period of in-tramural funds. Experience in primate research is

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

An Equal Opportunity/Affirmative Action Employer

#### ASSISTANT PROFESSOR OF PHYSIOLOGY

Applicant must have strong background in central control of breathing and especially in electro-physiology and central neurophysiology. Apply with curriculum vitae and names of two references to: S. M. Tenney, Department of Physiology, Dartmouth Medical School, Hanover, N.H. 03755.

Equal Opportunity Employer

#### **BIOCHEMICAL/CELL GENETICIST**

The Department of Genetics at the John A. Burns School of Medicine, University of Hawaii, has a va-School of Medicine, University of Hawaii, has a va-cancy for an assistant professor whose research in-terests are in the area of biochemical or cellular as-pects of human genetic diseases. The appointee will be expected to assist in teaching general genetics to undergraduates and/or cytogenetics to graduate stu-dents. This appointment is being made in con-junction with an appointment in clinical genetics. Deadline 31 December 1976. Applications should be sent to Dr. John A. Hunt, Chairman, Department of Genetics, John A. Burns School of Medicine, Universi-ty of Hawaii, 1960 East-West Road, Honolulu, Hawaii 96822. An Equal Opportunity/Affirmative Action Em-plover. plover.

**BIOCHEMIST.** Assistant professor of biochemistry in the School of Medicine, to teach medical, nursing, and graduate students. Research area open but would prefer focus on biochemical processes at cellular level. Applicants must send curriculum vitae in-cluding bibliography and a brief description of teach-Cluding bibliography and a brief description of teach-ing experience, research interests, and career goals with names of three references to Dr. Richard T. Jones, Chairman, Department of Biochemistry, School of Medicine, University of Oregon Health Sci-ences Center, Portland, Oregon 97201. Closing date for applications is 1 January 1977. An Equal Oppor-tunity/Affirmative Action Employer.

### BIOCHEMIST—ASSISTANT OR ASSOCIATE PROFESSOR

A position is available for September 1977, for a bio A position is available for September 1977, for a bio-chemist, preferably with training in endocrinology. Must have extensive research experience and publi-cations and be ready to initiate an independent re-search program. The position requires the devel-opment and teaching of biochemistry courses at the undergraduate and graduate levels, as well as direct-ing a high-caliber, original research program. Quali-fied applicants should submit curriculum vitae, names of references, and a short description of re-search plans to: Dr. Robert W. Gracy, Department of Chemistry, North Texas State University, Denton, Texas 76203. An Affirmative Action/Equal Opportu-nity Employer. nity Employer.

#### POSITIONS OPEN

### ASSISTANT PROFESSOR OF SYSTEMATIC BOTANY

The Division of Biological Sciences at Cornell University seeks an assistant professor to teach underversity seeks an assistant professor to teach under-graduate and graduate courses in vascular plant sys-tematics and to develop a program of research in that area, commencing July 1977. The appointment will be in the L. H. Bailey Hortorium with a joint ap-pointment in the Section of Ecology and System-atics. A Ph.D. is required. Applicants should pos-sess a field orientation and knowledge of contempo-rary methods in systematics. rary methods in systematics.

Curriculum vitae with a statement of research inter-ests and needs, description of teaching experience, transcripts, and three letters of recommendation should be sent to: Dr. David M. Bates, L. H. Bailey Hortorium, 467 Mann Library Building, Cornell Uni-versity, Ithaca, New York 14853. Deadline for receipt of applications is 15 January 1977.

Cornell University is an Equal Opportunity/Affirmative Action Employer.

ASSOCIATE DEAN FOR FACULTY PERSONNEL ASSOCIATE DEAN FOR FACULTY PERSONNEL AND RESEARCH. The College of Liberal Arts at Idaho State University seeks a competent and skilled interdisciplinary professional with proven abilities for instructionally related grantsmanship and an excellent teaching record. \$20,000 top salary for 12 months beginning 1 July. Natural scientist pre-ferred. Send current curriculum vitage and latter of For the line of the second sec Equal Opportunity/Affirmative Action Employer

#### BIOCHEMISTRY POSTDOCTORAL POSITION

Beginning immediately. Interaction of peptides, hormones, and neurotransmitters with membrane-bound proteins of the central nervous system. Send foll curriculum vitae to: Professor Jay A. Glasel, De-partment of Biochemistry, University of Connecticut Health Center, Farmington, Conn. 06032. An Equal Opportunity Employer, M/F.

#### **BIOLOGY FACULTY**

- Animal Physiologist: Prefer broad training or experience in invertebrate physiology; special interest in endocrinology or neurophysiology. Teach introductory human anatomy and physiology for nursing majors and animal physiology for undergraduate and graduate biology majors.
- Applied Microbiologist: Teach introductory micro-biology for nursing majors. Prefer applicants also capable of participation in cell biology course for biology majors. Opportunity to develop special-ized undergraduate and graduate courses for biol-ory majors ogy majors.
- Terrestrial Ecologist: Prefer broad background in 3) retrestria Ecologist: Prefer broad background in ecology, including plant ecology, and experience in quantitative methodologies. Teach under-graduate ecology and in graduate specialization in environmental biology.

Ph.D. required by date of initial appointment, 1 September 1977. Evidence of teaching interest and ability and of commitment to research is desirable. Submit curriculum vitae and names of three refer-ences by 10 January 1977 to Dr. Stephan R. Taub, Chairman, Department of Biology, George Mason University, Fairfax, Va. 22030. Specify position de-sired sired.

George Mason University is the state university in northern Virginia and is located near the Washing-ton, D.C. metropolitan area.

An Equal Opportunity/Affirmative Action Employer.

#### **BIOLOGY LECTURER**

A full-time lectureship in biology is available for the academic year 1977–1978 with renewal possible; 1 July starting date preferable. Ph.D. and teaching experience required. Responsibility will be the orga-nization and teaching of introductory undergraduate laboratory courses (afternoon, evening). Applicants should send a curriculum vitae, names and ad-dresses of three references, and a one-page letter outlining their views on laboratory teaching. Send application before 1 January 1977 to: Department of Biological Sciences, Box 908, Columbia University, New York, N.Y. 10027. An Equal Opportunity/Af-firmative Action Employer.

Ecology-Instructor/assistant professor to teach population biology, a cross-disciplinary freshman course, and supervise undergraduate research.

**Botany**-Instructor/assistant professor to teach in-troductory organismic biology (shared), botany, mi-crobiology, biology for non-science majors, and cross-disciplinary freshman course; supervise under-graduate research and continue personal research. Send résumé and letters of reference by 15 January 1977, to James Perley, Biology, College of Wooster, Wooster, Ohio 44691.

Affirmative Action/Equal Opportunity Employer

#### BOTANIST

The College of Biological Sciences, The Ohio State University, invites qualified applicants to ap-ply for the following faculty position: Speciality in one of the following: structural bot-any, chemosystematics, reproductive biology, aquatic ecology. Candidates must hold the Ph.D., and be in-terested in teaching at both the undergraduate and graduate levels and developing an aggressive re-search program. Appointment will be for 9 months, beginning Autumn Quarter 1977. Salary and rank commensurate with qualifications. Candidates should submit a complete curriculum vitae, includ-ing reprints of published papers and at least three letshould submit a complete curriculum vitae, includ-ing reprints of published papers and at least three let-ters of recommendation, to Dr. Thomas N. Taylor, Chairman, Department of Botany, College of Biologi-cal Sciences, The Ohio State University, 1735 Neil Ave-nue, Columbus, Ohio 43210. Deadline for receipt of all materials is 20 December 1976. An Equal Opportunity/Affirmative Action Employer

CELL PHYSIOLOGIST. A tenure track position CELL PHYSIOLOGIST. A tenure track position starting fall 1977, Ph.D. required, to teach cell physi-ology and assist in the zoological curriculum. Send curriculum vitae and three letters of recommenda-tion by 1 March 1977 to: Dr. Robert Ediger, Departton of Finance Information and the second se

**CELL PHYSIOLOGIST.** Anticipated temporary po-sition in biology (1977–78) at an institution which provides primary support to teaching. To teach cell physiology and general biology (especially cell biol-ogy). Must be able to teach either nutrition for health ogy). Must be able to teach either nutrition for health science majors or plant physiology depending on background. Ph.D. required. Send curriculum vitae, statement of teaching philosophy, and three letters of reference to Dr. F. D. Blume, Department of Biol-ogy, California State College, Bakersfield, California 93309. Application deadline: 15 January 1977. An Equal Opportunity/Affirmative Action Employer.

The Department of Psychology, Princeton Univer-sity, anticipates an opening in the area of COGNI-TIVE PSYCHOLOGY at the level of full professor. Candidates for this position must have a demon-strated record of scientific accomplishment and teaching at both the undergraduate and graduate lev-les. Specific areas of research interact include comels. Specific areas of research interest include cogni-tive development, information processing, memory, and language behavior. Outstanding candidates will, of course, be considered regardless of specific areas of interest.

Nominations and applications should be sent to Professor Ronald Kinchla, Chairman Cognitive Search Committee, Department of Psychology, Green Hall, Princeton University, Princeton, New Jersey 08540. We are an Equal Opportunity Employer with a vigorous commitment to Affirmative Action.

#### NEUROANATOMIST

The Department of Psychology invites applications for an anticipated faculty position at the assistant professor level for the fall 1977. We are interested in a candidate who uses neuroanatomy as a tool for studying function or behavior. The candidate should be prepared to teach courses in vertebrate neuro-anatomy at the undergraduate and graduate levels as part of Princeton University's interdepartmental part of Princeton University's interdepartmental doctoral program in neuroscience. The Department of Psychology currently has five full-time faculty members whose major interest is in neuroscience and behavior. Send curriculum vitae and three let-ters of recommendation to Chairperson, Neurosci-ence Search Committee, Department of Psychology, Princeton University, Princeton, N.J. 08540. Prince-ton University is an Equal Opportunity Employer with a vigorous Affirmative Action Program.

#### POSITIONS OPEN

#### CHAIRPERSON DEPARTMENT OF MEDICINE DARTMOUTH-HITCHCOCK MEDICAL CENTER

Applications and nominations are invited for the po-Dartmouth-Hitchcock Medical Center. Candidates should have a distinguished record in clinical ser-vice, teaching and research, and have demonstrated administrative ability. Respond to: Chairman, Medi-cine Search Committee, Vail Building, Dartmouth-Hitchcock Medical Center, Hanover, N.H. 03755. An Equal Opportunity/Affirmative Action Employer.

The University of California, Irvine, College of Med-icine is seeking a **CHAIRMAN** for the Department of Pharmacology. Candidates must be eligible for ap-pointment to the rank of professor. Candidates must have demonstrated excellence in biomedical rehave demonstrated excellence in biomedical re-search and teaching and should preferably have ad-ministrative experience. Applications from all quali-fied candidates are welcome; minorities and women are encouraged to apply. Send curriculum vitae, be-fore 31 January 1977, to Paul S. Sypherd, Chairman of the Search Committee, Department of Medical Mi-crobiology, University of California, Irvine, Califor-nia 92717.

MICROBIOLOGY CHAIRPERSON: University of Mississippi Medical Center seeks qualified can-didates for chairperson of Department of Microbiology. Chairperson directs microbiology research and training programs in Schools of Medicine, Nurs-ing, Dentistry, and health related professions and for graduate programs in medical sciences. Send curric-ulum vitae to John F. Jackson, M.D., Chairman, Mi-crobiology Search Committee, University Medical Center, 2500 North State Street, Jackson, Mississippi 2016 39216. Equal Opportunity Employer, M/F.

### CHAIRPERSON DEPARTMENT OF PHARMACOLOGY UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE

Applications are invited for this position, which became vacant with the incumbent assuming the deanship of the School of Medicine.

Candidate should have outstanding record of sci-entific accomplishments. Experience in clinical phar-macology is desirable but not essential.

macology is desirable but not essential. Send curriculum vitae and bibliography to: Thom-as Detre, M.D., Chairman, Pharmacology Search Committee, University of Pittsburgh School of Medi-cine, Western Psychiatric Institute and Clinic, 3811 O'Hara Street, Pittsburgh, Pennsylvania 15261. An Equal Opportunity/Affirmative Action Employer

**CLINICAL LABORATORY SCIENTIST**, Dalhousie University. A position is now open to a medical bio-chemist, clinical chemist, chemical pathologist, clinichemist, clinical chemist, chemical pathologist, clini-cal pathologist, or similar subspecialist, in the Uni-versity Department of Pathology. Candidates must be able to participate in undergraduate and graduate medical and nonmedical teaching programmes. Orgamedical and nonmedical teaching programmes. Orga-nization of existing and new teaching programmes is required. One objective is the development of a strong research programme in basic or patient re-lated chemical pathology. In-depth experience in service laboratories is highly desirable as there is close interaction with eight other professionals in the Division of Clinical Chemistry. Academic rank and colorie ommeneurate with experience and qualifica-Salary commensurate with experience and qualifica-tions. Send curriculum vitae to M. A. MacAulay, M.D., Department of Pathology, Dalhousie Universi-ty, Sir Charles Tupper Medical Building, Halifax, Nova Scotia, Canada B3H 4H7.

### CHEMICAL CARCINOGENESIS DIRECTOR

#### **Program in Environmental Carcinogenesis**

Applications are being accepted from individuals with a strong background in accepted from individuals with a strong background in carcinogenesis re-search. A minimum of 10 years of experience and/or training beyond the doctorate with emphasis in pathology and toxicology is desired. Program offers op-portunities for individual research and excellent ca-

Curriculum vitae together with salary history and requirements should be submitted in confidence to:

Donna Perron, Personnel Manager Mason Research Institute Harvard Street Worcester, Mass. 01608 An Equal Opportunity Employer, M/F

#### POSITIONS OPEN

### CLINICAL MICROBIOLOGY ASSOCIATE DIRECTOR

In accordance with the University principles of fair-practice employment, the Department of Pathol-ogy of the University of Pennsylvania School of Medicine invites applications for associate director of the Microbiology Laboratories at the Hospital of the University of Pennsylvania. The director of the Microbiology Laboratories is seeking an associate to Microbiology Laboratories is seeking an associate to share administrative and teaching responsibilities. The laboratories are full-service laboratories lacking only diagnostic virology services. Minimum qualifi-cations are a Ph.D. or M.D. with speciality training in clinical microbiology, ability to conduct an ongoing research program, and a desire to teach. Preference will be given to candidates possessing an M.D. de-gree with training in pathology. Send curriculum vitae to:

Dr. John C. McKitrick Director, Microbiology Section Division of Laboratory Medicine Hospital of the University of Pennsylvania 714 Maloney Building/G1 Philadelphia, Pennsylvania 19104

An Equal Opportunity/Affirmative Action Employer

Joint appointment as half-time COORDINATOR OF WOMEN'S STUDIES and half-time faculty member in the Biological Sciences Division available August in the Biological Sciences Division available August 1977. Ph.D. expected. The appointment will be sub-ject to approval of both the relevant department and Women's Studies. The successful applicant will ad-minister the Women's Studies Program 3 years and then will revert to a full-time tenure-track position in her/his department. Salary competitive. Send ré-sumé, including list of publications, and three letters of recommendation to Martha Vicinus, Chairperson, Search and Screen Committee, Women's Studies Pro-gram, Memorial Hall, Indiana University, Blooming-ton. Indiana 47401. An Eaud Opportunity/Affirmaton, Indiana 47401. An Equal Opportunity/Affirma-tive Action Employer.

DIRECTOR, COLLABORATIVE RADIOLOGICAL HEALTH LABORATORY, COLORADO STATE UNIVERSITY. The director is responsible for the scientific leadership, administration, and future development of a large multidisciplinary program con-cerned with the lifetime hazards in beagle dogs asso-ciated with prenatal and early postnatal exposure to ionizing radiation. Candidates should have demon-strated competence as research scientists and adminstrators and in evaluation of experimental results. An earned D.V.M. or M.D. (or equivalents) and/or Ph.D. degree and training and practice in medicine, pathology, radiology, physiology, toxicology, bio-metry, or other fields of biomedical science are required. The director is expected to participate active-ly in some aspect of the research and should qualify for academic appointment as associate or full profes-sor in the University. Rank and salary are nego-tiable. Send résumé and references to Dr. M. R. Zelle, Department of Radiology and Radiation Biol-ogy, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, Col-orado 80523. An Equal Opportunity/Affirmative Ac-tion Employer. Deadline for applications is 1 Janu-ary 1977. for academic appointment as associate or full profes-

#### ECOLOGY

The University of California at Santa Cruz seeks to The University of California at Santa Cruz seeks to fill an assistant professor level position in ecology, to begin in the fall of 1977. We invite applications from persons with a strong background in animal ecology who would develop a stimulating research program. Teaching responsibilities will include an upper divi-sion general ecology course and other undergraduate and graduate courses in the appointee's area of spe-cipilization cialization

Salary range for an assistant professor is \$14,500 to \$17,000.

Please send curriculum vitae, names of four refer-ences, and a brief statement of research plans to:

Biology Search Committee Attn: Jean H. Langenheim Thimann Laboratories University of California Santa Cruz, California 95064

The application filing deadline is 1 February 1977. The University of California is an Equal Opportu-nity/Affirmative Action Employer. Candidates will be considered without regard to race, color, religion, sex, or origin.

### DEAN, HUXLEY COLLEGE OF ENVIRONMENTAL STUDIES

Huxley College of Environmental Studies invites ap plications for the position of dean. Huxley College, a cluster college of Western Washington State Colcluster college of Western Washington State Col-lege, is an upper-division, interdisciplinary environ-mental studies unit with undergraduate programs covering the full spectrum of environmental prob-lems and ranging from vocational preparation to gen-eral studies. The college is actively involved in nu-merous grant programs and provides services to the community through its faculty and students in areas of advironmental encouragement or ad elevities. Calested of environmental assessment and planning. Selected graduate programs in the natural sciences and envi-ronmental planning are conducted in cooperation with other academic units.

Applicants for the position must have the doctorate Applicants for the position must have the doctorate or equivalent experience; in addition, preferred qual-ifications include achievement or demonstrated abili-ty in teaching, scholarly activity, environmental af-fairs, and administration. Appointment begins 1 July 1977 with approximate salary of \$29,000 on a 12-month basis. Please send résumé to **Dr. J. R. Crook**, **Chemistry Department, Western Washington State College, Bellingham, Wash. 98225.** Deadline for receipt of applications is 10 January 1977. Western Washington State College is an Equal Opportunity/ Affirmative Action Employer.

### UNIVERSITY OF MARYLAND DEAN, COLLEGE OF ENGINEERING

Nominations and applications are invited for the po-sition of Dean of the College of Engineering. The College consists of six academic departments: aero-space, chemical, civil, electrical, fire protection, and mechanical. The College offers B.S., M.S., and Ph.D. degrees in the academic departments. In addi-tion there are graduate degree programs in puckers tion there are graduate degree programs in nuclear engineering and engineering materials.

Desired qualifications: Ph.D. or equivalent in an en-Desired qualifications: Ph.D. or equivalent in an en-gineering discipline, a significant record of engineer-ing research and professional activity, and substan-tial academic and administrative experience. The ap-pointment will be effective 1 July 1977. Applicants should qualify for an academic appointment with ten-ure in the relevant department. The salary will be commensurate with qualifications.

Applications should be received before 15 February 1977 to receive full consideration. Applications should be received under the probability of the probabili

The University of Maryland actively subscribes to a policy of Equal Educational and Employment Opportunity. The University of Maryland is required by Title IX of the Education Amendments of 1972 not to discriminate on the basis of sex in admission, treat-ment of students, or employment.

#### DEVELOPMENTAL GENETICIST

The National Institute of Environmental Health The National Institute of Environmental Health Sciences, National Institutes of Health, Public Health Service invites applications for the position of developmental geneticist to plan and conduct inde-pendent and collaborative research directed toward the development of methods for the detection of and the study of the mode of action of mutations func-tioning during embryonic and early fetal devel-opment in mammals. The incumbent must have an extensive background in developmental genetics as well as interests in environmental mutagenesis. The incumbent will be a member of the Mammalian Ge-netics Section of the Environmental Mutagenesis Branch. The position requires a Ph.D. or equivalent in ge-

Branch. The position requires a Ph.D. or equivalent in ge-netics or a closely related field, preferably with post-doctoral experience and publications in devel-opmental genetics. Position will be filled through ca-reer Civil Service or service fellowship appointment. Salary will range from \$15,000 to \$29,500 per annum, depending on qualifications. Letters of application with curriculum vitae, bibliography, and the names and addresses of two references should be mailed to: **Bendore P. Gordner** 

# Penelope P. Gardner NIEHS Personnel Office P.O. Box 12233 Research Triangle Park, N.C. 27709

Letters must be received by 27 December 1976 to be considered. Equal Opportunity Employer.

3 DECEMBER 1976

#### POSITIONS OPEN

CANCER RESEARCH PROGRAM DIRECTOR. Senior cancer research scientist to direct Cancer Re-search Program of Oklahoma Medical Research Foundation, a sponsoring institution of Oklahoma Cancer Center. Established close working relation-ships with University of Oklahoma Health Sciences Center and other Oklahoma Health Center institu-Center and other Oklahoma Health Center institu-tions. Responsibility for evaluation and devel-opment of existing and new clinical and laboratory research components, including small group and larger collaborative programs. Should be capable of assuming a major scientific role in further devel-opment of Oklahoma Cancer Center. Salary nego-tiable with excellent fringe benefits. Equal Opportu-nity/Affirmative Action Employer. Send curriculum vitae and letter of interest to Chairman, Cancer Di-rector Search Committee, Oklahoma Medical Re-search Foundation, 825 Northeast 13th Street, Okla-homa City, Oklahoma 73104.

#### EXPERIMENTAL CHEMIST OR PHYSICIST

The Ames Laboratory, U.S. ERDA, plans to add a staff member for a new interdisciplinary program on the liquid-solid interface, with emphasis on corro-sion. Non-traditional approaches and experimental methods will be used. Candidates must possess: (i) Ph.D. in electrochemistry or solid state physics, (ii) 1 or 2 years of postdoctoral experience, (iii) knowl-edge of most of the following: optical and surface properties of solids, electrochemistry, experimental methods in modern spectroscopy, and (iv) ability to interact effectively with solid state theorists. Can-didates should send résumés and the names of three references to C. Roberg, Ames Laboratory, Iowa references to C. Roberg, Ames Laboratory, Iowa State University, Ames, Iowa 50011 by 1 February 1977. The Ames Laboratory is an Equal Opportunity Employer.

**EXPERIMENTAL PSYCHOLOGIST, ASSIST-ANT PROFESSOR**, beginning September 1977. The Department of Psychology at the University of Minresolutions are seen as the second set of the set of the second s cognition. A secondary interest in the other two areas is preferred. The anticipated teaching responsi-bilities are: (i) an advanced level course in per-ception; (ii) an introductory course in cognition/in-formation processing; and (iii) a graduate seminar in the acceleration formation formation of the seminar in formation processing; and (iii) a graduate seminar in the candidate's area of specialization. The candidate must be capable of maintaining a strong research pro-gram. Salary is competitive. The University of Min-nesota is an Equal Opportunity Employer. Women and minority candidates are encouraged to apply. Send curriculum vitae, three letters of reference, and a statement (maximum two pages) of long-term research interests to: Dr. David LaBerge, Elliott Hall, 75 East River Road, University of Minnesota, Minneapolis, Minnesota 55455 by 1 February 1977.

## UNIVERSITY OF PETROLEUM AND MINERALS DHAHRAN, SAUDI ARABIA

The Department of Electrical Engineering, Universi-ty of Petroleum and Minerals, Dhahran, Saudi Arabia, has a vacancy for a **FACULTY MEMBER** with background in cryogenic applications of electri-cal or electronic engineering. Applications are in-vited from candidates with Ph.D. degrees in electri-cal engineering or physics of a varging for engineering. cal engineering or physics and 2 years of experience n cryogenics.

The University is developing a liquid helium facility and the candidate is expected to participate in this development as well as to undertake teaching and re-search duties. English used for instruction.

Minimum regular contract for 2 years, renewable, Minimum regular contract for 2 years, renewable. Competitive salaries and allowances, free air condi-tioned and furnished housing, free air transportation to and from Dhahran each 2-year tour. Attractive educational assistance grants for school-age depen-dent children. Local transportation allowance in cash each month. All earned income without Saudi taxes. Ten-month duty each year with 2-month vaca-tion paid and possibility of participation in Universi-ty's ongoing Summer Programs with adequate addi-tional compensation. tional compensation.

Apply with complete résumé on academic and pro-fessional background, list of references, publications and research details, and with copies of degrees/tes-timonials, including personal data, such as home and office addresses, telephone numbers, family status (names of children, ages and sex) to:

University of Petroleum and Minerals c/o Saudi Arabian Educational Mission 2223 West Loop South, Suite 400 Houston, Texas 77027

#### POSITIONS OPEN

FACULTY POSITIONS

Gross Anatomist/Histologist/Neuroanatomist Reproductive/Endocrine Physiologist Respiratory/Cardiovascular Physiologist **Clinical Biochemist** sychologist

Clinical Microbiologist/Immunologist General Pathologist

General Pathologist The Oklahoma College of Osteopathic Medicine and Surgery, a member of the Oklahoma State System of Higher Education, is seeking qualified candidates to teach medical students in an integrated organ-sys-tem oriented curriculum. Strong preference will be given to individuals having prior faculty teaching and research experience. A Ph.D. is required and postdoctoral training is highly desirable. Academic rank and salary negotiable. Applicants should sub-mit a curriculum vitae and the names of three refer-ences to: ences to:

Dr. William G. Robertson Chairman, Medical Biology Division Oklahoma College of Osteopathic Medicine and Surgery Ninth and Cincinnati Tulsa, Oklahoma 74119

### UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

Applications are solicited for faculty positions in the following areas: Senior scientist in immunology to direct the Division of Cancer Studies at the Oklahoma Cancer Center. Experience in program development and grants memory memory required that the the Cancer Center. Experience in program development and grants management required. Assistant or asso-ciate professor, Department of Pathology. Chief Pa-thology Service (comparative medicine). Must hold a D.V.M. plus at least a M.S. or equivalent in labora-tory animal/comparative pathology. Duties include direction of the Research Animal Diagnostic Labora-tory which has capabilities for necropsies, histo-pathology, hematology/urinalysis, chemistry, micro-biology and parasitology. Duties also include per-forming necropsies and evaluating and interpreting lab findings. Educational and research participation. Applicants should send curriculum vitae to: Dr. Thomas N. Lynn, Dean, College of Medicine, P.O. Box 26901, Oklahoma City, Oklahoma 73190.

## MEMORIAL UNIVERSITY OF NEWFOUNDLAND DEPARTMENT OF GEOLOGY

The Department of Geology invites applications for three full-time faculty positions, effective 1 Sep-tember 1977 (subject to the availability of funds). Sal-ary and rank will be commensurate with the qualifi-cations and experience of the successful candidates. Applicants should have proven teaching and/or re-search capability within one (or more) of the follow-ing combinations: 1) Engineering geology, environmental geology, Pleistocene geology, economic geology (in-cluding mineral resource management); 2) Regional geology, structural geology, geo-

Regional geology, structural geology, geo-chronology; and

3) Marine geology, clastic sedimentology. Duties will include undergraduate and graduate (M.Sc. and Ph.D.) instruction and supervision. Apiointees will be expected to develop research inter-sts within Newfoundland and Labrador.

Applications (three copies), which must include a detailed curriculum vitae and the names and addresses of three referees, should be sent by 31 January 1977 to Dr. D. Skevington, Head, Department of Geology, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1C 557.

#### FACULTY POSITIONS-BIOCHEMISTRY

FACULTY POSITIONS-BIOCHEMISTRY The Department of Biochemistry at the State Univer-sity of New York at Stony Brook has a position avail-able immediately at the assistant professor level and anticipates another position at the associate or full professor level. The applicant should have a publica-tion record demonstrating outstanding productivity in original research. Candidates should be prepared to establish a strong productive independent re-search program and to take an active role in the med-ical, graduate, and undergraduate teaching activity of the department. Although all research areas will be considered, preference will be given to those studying eukaryotic systems. Applicants should send complete curriculum vitae with reprints, re-search interests, and names of three references as soon as possible to: B. Dudock, Biochemistry Depart-ment Search Committee Chairman, State University of New York at Stony Brook, Stony Brook, New York 11794. An Equal Opportunity/Affirmative Action Em-ployer. plover.

### FACULTY POSITION-CLINICAL RADIOLOGIST

The New York State College of Veterinary Medicine is seeking applicants for a faculty position in radiolo-gy. The faculty member will be involved in diagnos-tic and therapeutic radiology of large and small ani-mals. Instruction of D.V.M. candidates through lec-Involvement in research and clinical investigation is encouraged. Potential for interdisciplinary research is available.

Applicants should have completed a radiology resi-dency program. Board certification or eligibility is preferred. Salary and rank are negotiable.

Applicants should send a complete curriculum vitae, personal bibliography, and references to Dr. Victor T. Rendano, G-161B, New York State College of Vet-erinary Medicine, Cornell University, Ithaca, New York 14853. An Equal Opportunity Employer.

#### FACULTY POSITION-MEDICINE

The New York State College of Veterinary Medicine is seeking applicants for a faculty position in the medical section of the Veterinary Medical Teaching Hospital. Primary responsibility will be the diag-nosis and treatment of medical diseases of large do-mestic animals including cows, horses, pigs, sheep, and goats. Activities of the faculty are focused on in-struction of junior and senior D.V.M. candidates through lectures, clinical rounds, and in-patient care. Faculty participate in resident and graduate student training. Involvement in research and clini-cal investigation is encouraged. Potential for inter-disciplinary research is available in many areas. Applicants should have completed a residency pro-The New York State College of Veterinary Medicine

Applicants should have completed a residency pro-gram. Board eligibility is preferred. Salary and rank are negotiable.

Applicants should send a complete curriculum vitae, personal bibliography, and references to Dr. F. A. Kallfelz, G-143, New York State College of Veterinary Medicine, Cornell University, Ithaca, New York 14853. An Equal Opportunity Employer.

#### FACULTY POSITION-SURGERY

The New York State College of Veterinary Medicine Increw rors state conege of veterinary Medicine is seeking applicants for a faculty position in the sur-gical section of the Veterinary Medical Teaching Hospital. The faculty member will be involved pri-marily in the diagnosis and treatment of surgical dis-eases of large domestic animals including horses and food animals. Activities of the faculty are focused on eases of large domestic animals including horses and food animals. Activities of the faculty are focused on instruction of sophomore, junior, and senior D.V.M. candidates through lectures, laboratories, clinical rounds, and in-patient care. Faculty participate in resident and graduate student training. Involvement in research and clinical investigation is encouraged. Potential for interdisciplinary research is available in many offset. many areas.

Applicants should have completed a residency pro-gram. Board eligibility is preferred. Salary and rank are negotiable.

Applicants should send a complete curriculum vitae Applicants should send a complete curriculum vitae, personal bibliography, and references to Dr. Karl K. White, Veterinary Medical Teaching Hospital, New York State College of Veterinary Medicine, Cornell University, Ithaca, New York 14853. An Equal Opportunity Employer.

FACULTY POSITION: Assistant professorship be-ginning 1 July 1977. To teach and conduct research in occupational health. Requirements: education through doctoral level in industrial hygiene, or rethrough doctoral level in industrial hygiene, or re-lated specialty; minimum of 2 to 4 years experience conducting industrial hygiene field surveys of work-er populations, application of air sampling and bioassay methods, and control of occupational health hazards. Qualified women and minority group members are encouraged to apply. Submit résumés to Dr. Dade W. Moeller, Harvard School of Public Health, 665 Huntington Avenue, Boston, Massachu-setts 02115.

#### FACULTY POSITION-BIOLOGY

Applications are invited for tentatively authorized positions, beginning fall 1977, in population genetics (strong biology background required) and immunol-ogy-virology. Research interests involving any group of organisms in either position are acceptable. Can-didates with potential for excellence in teaching and research should submit résumé by 15 February 1977 to Chairman, Search Committee, Department of Biol-ogy, The University of New Mexico, Albuquerque, N.M. 87131. An Equal Opportunity/Affirmative Action Employer

An Equal Opportunity/Affirmative Action Employer.

#### POSITIONS OPEN

### FACULTY VACANCY IN THE DEPARTMENT OF ANATOMY AT GEORGE WASHINGTON UNIVERSITY MEDICAL CENTER

Applications are now invited for an assistant or associate professor in the Department of Anatomy. Dem-onstrated commitment to excellence in research and teaching essential. All applicants should have the M.D. degree or Ph.D. degree in anatomy. Preference will be given to individuals who have one or more years of postdoctoral experience.

Candidates should submit their curriculum vitae and bibliography, including a statement of research interbiolography, including a statement of research inter-ests and names of three references, to Richard S. Snell, M.D., Ph.D., Professor and Chairman, Depart-ment of Anatomy, 2300 I Street, NW, Washington, D.C. 20037.

George Washington University is an Equal Opportunity Employer

#### FACULTY POSITION IN AQUATIC ECOLOGY

The North Carolina State University Department of Zoology is seeking an associate or full professor of aquatic ecology. Job responsibilities will be di-vided among teaching a senior-graduate level course, developing an advanced graduate course, conducting research, and supervising graduate stu-dents. Preference will be given to those who have demonstrated leadership in their field of research. Send curriculum vitae and three references to **Dr. B.** J. Copeland, Department of Zoology, North Carolina State University, Raleigh, N.C. 27607. North Carolina State University is an Equal Opportunity/Affirma-tive Action Employer. The North Carolina State University Department

### FACULTY POSITION AVAILABLE BIOLOGICAL SCIENCES

FISHERIES BIOLOGIST/DIRECTOR OF BIOLOG-**ICAL STATION.** The Department of Biological Sciences invites applications for the faculty position of fisheries biologist and director of the Murray State University Biological Station located in close prox-imity to the main campus on Kentucky Lake.

The applicant shall have demonstrated excellence in both teaching and research. In addition, successful applicants should have proven grant acquisition abilies, vision, and a desire for administrative challenge.

The director will be expected to maintain a reduced teaching assignment in his field of specialty while de-veloping and supervising research programs at the Biological Station. The director is also responsible for developing relationships between state and other public agencies concerned with water resources. Salary and rank for this appointment are competitive and negotiable. The Ph.D. degree is required. Send curriculum vitae, reprints of major publications, and

three letters of recommendation to: Dr. W. J. Pitman, Chairman Department of Biological Sciences Murray State University Murray, Kentucky 42071

All applications to be considered must be received no later than 1 February 1977.

Murray State University is an Equal Opportunity Employer, M/F and encourages applications from all qualified persons.

GENETICS-BOTANY. Two assistant professor posi-tions. Geneticist to teach general genetics and either population or human genetics, or clinical hematolo-gy, or introductory biology/zoology. Botanist to teach general botany and either quantitative ecol-ogy; or anatomy/development, or introductory biol-ogy. A broad background in biological sciences, a strong commitment to teaching, and Ph.D. are re-quired. Send curriculum vitae, three letters of recom-mendation, and complete transcripts by 18 February 1977, to C. David Vanicek, Chair, Department of Bio-logical Sciences, California State University, Sacra-mento, Calif. 95819. An Equal Opportunity/Affirma-tive Action Employer. tive Action Employer.

DEPARTMENT HEAD-CHEMISTRY. California Polytechnic State University, San Luis Obispo, Cali-fornia 93407. Effective 1 August 1977. Candidates must possess the Ph.D. degree in chemistry and have experience in college level teaching. Adminis-trative experience desirable. Closing date: 1 Febru-ary 1977. Salary: \$22,620 to \$30,024. Full-time per-manent position. For further information contact Dr. Max T. Wills, Search Committee Chair, Chemistry Department. Affirmative Action/Equal Opportunity/ Title IX Employer.

#### POSITIONS OPEN

#### Ph.D FRESHMAN BIOLOGY COORDINATOR

Responsible for developing and strengthening pro-grams at the freshman level; development and teachgrams at the freshman fevel; development and teach-ing of a non-majors integrated biology course includ-ing laboratories; aid in the restructuring of freshman level botany and zoology courses. The position car-ries the possibility of tenure. Significant experience ries the possibility of tenure. Significant experience in college teaching, earned doctorate, and demon-strated leadership and administrative ability re-quired. Salary based on 10½-month period; salary negotiable, depending on qualifications and experi-ence. Beginning date 1 September 1977. Applica-tions containing résumé, three letters of recommen-dation, and other supporting documents, should be submitted no later than 1 February 1977 to: Dr. Francis L. Rose, Chairperson, Search Committee, Bi-ological Sciences, Texas Tech University, Lubbock, Texas 79409, Texas Tech University is an Equal Op-portunity/Affirmative Action Employer.

The Division of Biological Sciences at Indiana University has a position available at the assistant pro-fessor level in the field of **GENETICS**. Candidates fessor level in the field of **GENETICS**. Candidates with abilities and interest in undergraduate teaching are being sought. Applicants will be expected to be able to develop an independent research program as well as participate in graduate education. They should be able to interact with established groups in areas such as developmental, population, and molec-ular genetics. Position available in September 1977. Postdoctoral research and teaching experience desir-able. Applicants must submit curriculum vitae, three letters of recommendation, and a description of planned research to Dr. C. H. W. Hirs, Director, Di-vision of Biological Sciences, Indiana University, Bloomington, Indiana 47401 before 15 January 1977. An Equal Opportunity/Affirmative Action Employer.

### UNIVERSITY HOSPITAL POSITION IN HUMAN CYTOGENETICS

Ph.D. geneticist with research experience in cy-togenetics is needed to work with cell synchro-nization, G-banded prophases and in situ hybridiza-tion in human chromosomes and to assist in the contion in human chromosomes and to assist in the Coor-dination of clinical service activities within the Medical Genetics Division. Please send curriculum vitae and references to: Dr. Jorge J. Yunis, M.D., Professor and Director, Medical Genetics Division, Department of Laboratory Medicine and Pathology, Box 198, University of Minnesota Hospitals, Minneapolis, Minn. 55455. An Equal Opportunity Employer.

#### JOHNS HOPKINS UNIVERSITY SCHOOL OF HYGIENE AND PUBLIC HEALTH HEAD OF DEPARTMENT OF POPULATION DYNAMICS

The Johns Hopkins University invites nomi-nations and applications for the position of chairper-son of the Department of Population Dynamics. The main objective of the deaprtment is the graduate lev-el education of individuals for research, academic, academic, academic and administrative careers related to population growth and its implications for the health and socio-

growth and its implications for the health and socio-economic well-being of human populations. The faculty of nine full professors, two associate professors, and seven assistant professors, currently represents three major fields, demography, repro-ductive biology, and family planning administration. Inquiries and curriculum vitae should be sent to:

Paul E. White, Ph.D. Chairman of Search Committee c/o Department of Behavioral Sciences School of Hyglene and Public Health Johns Hopkins University 615 North Wolfe Street Baltimore, Maryland 21205

#### An Equal Opportunity/Affirmative Action Employer

#### MALACOLOGIST

The Museum of Zoology of the University of The Museum of Zoology of the University of Michigan invites applications for a joint appointment with the Division of Biological Sciences as an assist-ant curator of mollusks and assistant professor of bi-ological sciences. Under unusual circumstances more senior individuals could be considered and we more senior individuals could be considered and we urge such individuals to advise us of their interest. The appointee must have the Ph.D. degree prior to beginning duties on 1 July to 1 September 1977. Three letters of recommendation, curriculum vitae, and reprints of publications should be sent to **Dr. J. B. Burch, Chairman of the Search Committee, Muse-um of Zoology, University of Michigan, Ann Arbor, Mich. 48109**. The University is a nondiscriminatory, Affementia Action Employee. Affirmative Action Employer.

#### HEAD DEPARTMENT OF LIFE SCIENCES SCHOOL OF SCIENCE AND TECHNOLOGY SOUTHWEST MISSOURI STATE UNIVERSITY

Biological scientist with earned doctorate and successful experience in undergraduate and graduate teaching and research. Previous administrative experience desirable. The department has 21 faculty members with broadly based teaching and research interests and provides strong programs for majors and minors in biology, teacher training, pre-professional medical areas, and graduate studies at the master's level. Current enrollment includes over 425 majors and 35 graduate students. Salary will be commensurate with experience. Inquires, nominations, or applications must be received by 15 January 1977, and should be addressed to Dr. Robert L. Philibert, Chairman, Search Committee, Department of Life Sciences, Southwest Missouri State University, Springfield, Mo. 65802. Applicants should send curriculum vitae, reprints, and the names of at least five references. Southwest Missouri State University is an Equal Opportunity Employer, M/F.

The Peoria School of Medicine, one of three clinical schools within the University of Illinois, College of Medicine, is seeking a **HEAD OR CHAIRPERSON** for the Department of Psychiatry and Behavioral Science. Applicants should have demonstrated an ability to function with community medical and mental health resources and should possess administrative experience, knowledge of funding, educational and clinical programs, teaching experience, and interpersonal skills.

Candidates must possess a terminal degree in the discipline in which their expertise and experience is based. This position is available at present; starting date to coincide with selection and approval of the candidate by the dean of the Peoria School of Medicine, salary and academic rank commensurate with experience and negotiable with the candidate. The University of Illinois is an Affirmative Action/Equal Opportunity Employer and encourages applications from members of minority groups and women. Interested persons should send curriculum vitae to F. Z. White, Chairman, Search Committee for Head/Chairperson for the Department of Psychiatry and Behavioral Science, Peoria School of Medicine, 123 Southwest Glendale, Peoria, Illinois 61605. Final date for submitting applications is 15 December 1976.

#### INVERTEBRATE PALEONTOLOGIST

Applications are invited for a faculty position at the assistant professor level in invertebrate paleontology in the Department of Paleontology, University of California, Berkeley. The department is interested primarily in a teacher with a research program in marine paleoecology, and especially in an individual whose research emphasis is in the Mesozoic or Cenozoic. Interested individuals are requested to send a complete résumé and a statement of both teaching and research objectives and to have sent letters of recommendation from at least three persons qualified to evaluate their background and experience to: Chairman, Department of Paleontology, University of California, Berkeley, California 94720. Review of applications will commence 1 February 1977. The University of California is an Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

#### MARINE ECOLOGIST

The Department of Zoology, University of California, Berkeley, invites applications for a staff position at the assistant professor level. We are seeking a quantitative ecologist with research and teaching interests in marine populations and communities. The person chosen will be expected to teach a course in marine ecology, contribute to the teaching of general ecology or general biology, and develop an active graduate teaching and research program. Applicants should send a curriculum vitae, names of three references, a summary of teaching experience and research interests, and a list of any publications to Marine Ecologist Search Committee, Department of Zoology, University of California, Berkeley, Calif. 94720. The review of applications will begin 15 January 1977. (Note: This opening is contingent upon final budgetary approval.) The University of California is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.

3 DECEMBER 1976



### Division of Biological and Medical Research Argonne National Laboratory

A number of postdoctoral appointments are anticipated under a multidisciplinary program supported by the National Cancer Institute. This program is designed to encourage and provide training in research areas related to cancer (e.g., biochemistry; chemical and radiation therapy; chemical, radiation, and viral oncogenesis; chronobiology; immunology; molecular structure and biology; radiation physics, etc.) Applicants should have received a Ph.D. degree or equivalent within the past 3 years, and have demonstrated research competence in an area related to cancer research. All non-citizens must have U.S. permanent resident status. Those qualified and interested are invited to write to: Mr. R. A. Johns, Box BIM, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439.



ARGONNE NATIONAL LABORATORY An Equal Opportunity Employer, M/F, HDCPD.

#### IBM Wallace J. Eckert Visiting Scientist Program

## environmental sciences

The IBM Thomas J. Watson Research Center is now inviting applications for appointment as Wallace J. Eckert Visiting Scientist in Environmental Sciences for the academic year of 1977 - 78.

Although the program is specifically intended for persons on sabbatical leave from universities and governmental laboratories, applications from any scientist prepared to carry out independent research will be seriously considered. The Visiting Scientist will normally be appointed for a period of one year. The primary responsibility of the Visiting Scientist will be to pursue a research program of his own choice at the Thomas J. Watson Research Center. A stipend will be paid and certain relocation expenses will be reimbursed.

The Wallace J. Eckert Visiting Scientist will join the General Sciences Department at the Research Center. Present departmental activities in environmental sciences include mathematical modelling of population dynamics, statistical analysis of ecosystems, stochastic hydrology, geomorphology of drainage basins, numerical taxonomy, and medical decision processes. Applicants for the environmental sciences appointment are not limited to these fields.

Those interested in applying for this post should send a letter, curriculum vitae, and a choice of supporting material (but not to include any formal research proposals) to Dr. S. L. Hantler, Manager, Corporate Ph. D. Program by January 1, 1977.



International Business Machines Corporation Thomas J. Watson Research Center P.O. Box 218, Yorktown Heights, New York 10598

#### DEPARTMENT OF KINESIOLOGY

An appointment is open for a physician with re-search interest in any aspect of human physiology, bioengineering, prosthetics, or human factors in the Department of Kinesiology at Simon Fraser Univer-sity. The appointee will work in an interdisciplinary environment with biochemists, engineers, work physiologists, and biomechanics faculty. The gradu-te and undergraduate teaching and research of the

physiologists, and biomechanics faculty. The gradu-ate and undergraduate teaching and research of the department emphasizes human performance in nor-mal and extreme conditions. Appointment will be made effective 1 September 1977 and will be at either the assistant or associate professor level. Salary is negotiable. Applications, together with three references, to be sent to:

Dr. T.W. Calvert, Chairman Kinesiology Department Simon Fraser University Burnaby, B.C., Canada V5A 186

LENS BIOCHEMIST to develop research opportu-nity on grant studying hereditary cataracts in deer mice. Knowledge of micromethods in protein, en-zyme, or lipid biochemistry important. Opportunity to tacch opticheling biochemistry if desired; opportunity to teach ophthalmic biochemistry if desired; opportu-nity for interaction with other basic scientists in de-partment. Two-year appointment available June 1977. Send curriculum vitae and three letters of refer-ence to Robert P. Burns, M.D., Department of Oph-thalmology, University of Oregon Health Sciences Center, 3181 Southwest Sam Jackson Park Road, Portland, Oregon 97201. An Equal Opportunity/Af-firmative Action Employer. to teach on thalmic biochemistry if desired: opportu-

#### MARINE BIOLOGIST

Applications are invited by the Department of Bio-logical Sciences and the Allan Hancock Foundation of the University of Southern California for a marine biologist. The individual chosen will also be expected to assume a position of leadership in existing and future programs in marine biosciences. The spe-cific area of specialization is open, although we rec-ognize the need for expertise in the following areas: food chains and energy flow in marine ecosystems; physiological ecology; functional morphology, be-havior; biochemical evolution. Rank and salary open. Send curriculum vitae and the names of three references to **Dr. Bernard C. Abbott, Department of** Biological Sciences and the Allan Hancock Founda-tion, University of Southern California, University Park, Los Angeles, California 90007. An Equal Op-portunity/Affirmative Action Employer.

MASS SPECTROMETRIST-staff fellow/senior staff fellow position. Requires analyti-cal, biochemical background, to do inde-pendent research in the Laboratory of Chemical Pharmacology, National Cancer Insti-tute. Some direction of collaborative research.

Salary from \$15,120 to \$26,527, according to qualifications. Initial appointment is for 2 vears, with possible extensions

Please send curriculum vitae, bibliography, and three references by 19 December 1976 to: National Institutes of Health, Public Health Service, National Cancer Institute, Building 31, Room 3A27, 9000 Rockville Pike, Bethesda, Maryland 20014, Attn: Ella Williams

NIH is an Equal Opportunity Employer

### MEDICAL SIGNAL PROCESSING ASSISTANT/ASSOCIATE PROFESSOR

ASSISTANT/ASSOCIATE PROFESSOR The Division of Health Computer Sciences, Depart-ment of Laboratory Medicine and Pathology, Uni-versity of Minnesota, invites applications for a grad-uate teaching and research position. Candidates should have demonstrated ability and interest in con-tinuous medical signal processing, frequency analy-sis, and pattern recognition emphasizing VCG and EEG applications. An M.D. and/or Ph.D. degree is required. Salary, level of appointment, and exact duties depend on experience; joint appointments are possible. Applicants should submit a current curricu-lum vitae, copies of relevant publications, and names of three references before 1 February 1977 to: Dr. Eugene Johnson, Chair, Search Committee, Box 197, Mayo Building, 420 Delaware St. SE, University of Minnesota, Minneapolis, Minnesota 55455. An Equal Opportunity/Affirmative Action Employer

An Equal Opportunity/Affirmative Action Employer

#### POSITIONS OPEN

#### MOLECULAR BIOPHYSICS

A tenure track position will possibly be available in A tenure track position will possibly be available in experimental molecular biophysics at the assistant professor level at the School of Physics at Georgia Tech. Interest in both teaching and research is essen-tial. Applicants for a position in experimental bio-physics should have a Ph.D. in physics with post-doctoral experience in experimental biophysics, bio-chemistry, or molecular biology. Applicants should complement but interact with current research ef-forts. We seek applications from candidates with re-search interests in mechanisms of genetic regulation forts. We seek applications from candidates with re-search interests in mechanisms of genetic regulation or transfer, or in biophysical aspects of biological membranes. Georgia Tech is an Equal Opportunity/ Affirmative Action Employer. Minority and women candidates are urged to apply and identify them-selves. Applicants should send résumés and names of three references to James R. Stevenson, School of Physics Coarrie Tech Atlantic Coarria 10337 Physics, Georgia Tech, Atlanta, Georgia 30332.

MOLECULAR BOTANY and/or ULTRASTURC-TURE; and PLANT ECOLOGY. The Department of Botany, University of Massachusetts, Amherst, in-vites applications for one or more assistant profes-sorships for fall 1977, in molecular botany and/or ul-trastructure; and plant ecology. Responsibilities: teaching, research, and guidance of graduate stu-dents in area of specialty, and participation in gener-al program of instruction. Send curriculum vitae and three letters of reference to Head. Denartment of Botthree letters of reference to Head, Department of Bot-any, University of Massachusetts, Amherst, Mass. 01003. An Equal Opportunity/Affirmative Action Employer.

NEPHROLOGIST—The Division of Nephrology in the Department of Medicine at the University of Ala-The Department of Medicine at the University of Ala-bama in Birmingham has available a position at the assistant professor level. The position is open to qualified individuals at a senior level fulfilling three criteria. First, the individual must have expertise in the care and management of patients with renal dis-ease and in the operation and administration of a he-modialysis unit. Second, the individual must have a firm commitment to teaching programs oriented to medical students, graduate students, house officers, and fellows. Finally, the individual should have a re-search background and be able to carry out inde-pendent research, preferably in the physiology of renal tubular transport processes. Apply to the **Divi-sion of Nephrology, University Station, Birmingham, Alabama 35294. Telephone: 205-934.3585.** An Equal Opportunity/Affirmative Action Employer. Expira-tion date for receipt of applications: 1 January 1977.

#### **OCEANOGRAPHER**

Oceanography department has faculty position open at assistant professor level; some preference will be given to candidates with strong interest in both research and teaching in areas of marine geo-chemistry and marine food chain dynamics. Address inquiries to Search Committee, Department of Oceanography, Florida State University, Tallahassee, Flor-ida 32306. Florida State University is an Equal Op-portunity/Affirmative Action Employer.

#### PHARMACOLOGIST IN JAPAN

PHARMACOLOGIST IN JAPAN Mitsubishi Kasei Institute of Life Sciences is now accepting applications for a senior and several junior pharmacologists in a newly established research lab-oratory of biochemical pharmacology. Candidates should possess either a doctorate in pharmacology, physiology, or biochemistry or an equivalent (M.D.). In addition, bilingual candidates (English and Japanese) are preferred. Experience is helpful for junior pharmacologists but is not necessary. However, a minimum of 10 years of experience is re-quired for the senior pharmacologist. Applicants should submit a copy of their curricu-lum vitae, a list of publications, relevant reprints, and the names of three references to: Dr. Fujio Eg-ami, Mitsubishi-Kasei Institute of Life Sciences, 11, Minamiooya, Machida-shi, Tokyo, Japan.

Minamiooya, Machida-shi, Tokyo, Japan.

PLANT ECOLOGIST with broad training in botany and ecology sought to teach core course in general ecology, participate in non-major general biology course and develop an advanced undergraduate course and develop an advanced undergraduate course in area of specialization. Development of an active research program expected. Appointment at rank of assistant professor commencing September 1977. Send curriculum vitae, transcripts, and three letters of recommendation before 1 February 1977 to Dr. Robert L. Simpson, Chairman, Biology Depart-ment, Rider College, Lawrenceville, New Jersey 08648. Rider College is an Equal Opportunity/Af-firmative Action, M/F, Employer.

#### POSITIONS OPEN

#### PHYSIOLOGY-PHARMACOLOGY

Two faculty positions at the assistant professor level. (i) **Physiologist** with research interests com-plementary to on-going work in cellular neurobiol-ogy; interest and ability in teaching human physi-ology or basic pharmacology. (ii) **Pharmacologist**, ca-pable of teaching second-year course in dental therapeutics. D.D.S.-Ph.D. or D.M.D.-Ph.D. with research interests in pain control or emergency drugs preferred. Joint appointment in oral medicine, if applicable. Send résumé, reprints, and a list of three references to:

Dr. Richard K. Orkand Chairman, Department of Physiology and Pharmacology School of Dental Medicine University of Pennsylvania 4001 Spruce Street Philadelphia, Pennsylvania 19174 Equal Opportunity Employer: positions not filled

**PLANT ECOLOGIST:** Applications and nominations are invited for a position beginning in September 1977. Successful applicant is expected to develop a strong research program in terrestrial plant ecology. Teaching duties include speciality courses in plant ecology, general ecology, and some participation in the freshman biology program. Rank and salary commensurate with qualifications and experience. Postdoctoral experience desirable. Deadline for applications is 15 January 1977. To apply send complete curriculum vitae and names of three references to: Dr. R. A. Paterson, Head, Department of Biology, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061.

An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL (U.S. citizen or permanent resi-dent) to work on transfer RNA isoacceptor charac-terization in developing brain cells and on role of TRNA methylation as a determinant of neuronal specificity. NIMH support for 2 years. Apply to: O. Z. Sellinger, Director, Laboratory of Neurochemis-try, Mental Health Research Institute, University of Michigan, Ann Arbor, Michigan 48109.

**POSTDOCTORAL POSITION** immediately available for research on fetal and tissue antigens and immune responses to these antigens, including autoimmu-nity. Previous relevant Ph.D.-level research experi-ence required. No telephone inquiries. Send curricu-lum vitae, including names of references, to **Dr. Coorse 1** Frion Director Clinical Immunology and George J. Friou, Director, Clinical Immunology and Rheumatic Disease Section, University of Southern California School of Medicine, 2025 Zonal Avenue, Los Angeles, California 90033. An Equal Opportu-nity/Affirmative Action Employer.

#### POSTDOCTORAL POSITION

For biochemical studies on xanthine dehydrogenase from Drosophila. Experience in protein purification and characterization required. Salary purification and characterization required. Salary \$10,500 for the first year. Position renewable. Send curriculum vitae and a list of three personal refer-ences to Dr. E. P. M. Candido, Department of Bio-chemistry, University of British Columbia, Van-couver, British Columbia, Canada V6T 1W5. The University of British Columbia is an Equal Opportu-nity Employer. nity Employer.

TWO POSTDOCTORAL POSITIONS open in NIHfunded training program on eye research to work in the areas of (i) ultrastructure and histochemistry of normal and abnormal extraocular muscle with Dr. J. Davidowitz and B. R. Pachter and (ii) rhodopsin re-Davidowitz and B. R. Pachter and (1) rhodopsin re-generation, vitamin A metabolism, and related enzy-mology in the eye with Dr. C. David Bridges. Re-quirements are Ph.D., M.D., or equivalent. Mini-mum of 2 years in Program. Starting salary \$10,000 to \$13,000. Write, sending curriculum vitae to: Train-ing Program, Dr. J. A. Zadunaisky, Director, Depart-ment of Ophthalmology, New York University Medi-cal Center, 550 First Avenue, New York, N.Y. 10016.

POSTDOCTORAL POSITION IN PHARMACOLO-GY FOR Ph.D. WITH CHEMICAL OR BIOCHEMI-CAL BACKGROUND. Laboratory interested in bone and calcium metabolism has opening for post-doctoral fellow interested in one of the following areas: isolation and purification of bone-resorbing factor; actions of ionophores on bone; bioassay of vi-tamin D metabolites. NIH-level stipend. Send curric-ulum vitae and two letters of recommendation to Dr. P. H. Stern, Department of Pharmacology, North-western University Medical School, Chicago, Illinois, 60611. An Equal Opportunity/Affirmative Action Em-plover. ployer.

POSTDOCTORAL POSITION available in early POSTDOCTORAL POSITION available in early 1977 for research on drug metabolism and pharma-cokinetics. Previous experience with isolated liver perfusion techniques required. Send curriculum vitae, including names of references, to Dr. Gerhard Levy, Department of Pharmaceutics, State University of New York at Buffalo, Buffalo, N.Y. 14214. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION:** Immediate opening POSTDOCTORAL POSITION: Immediate opening in active research laboratory to study biochemistry of polypeptide hormones. Some expertise in protein or enzyme chemistry required. Send curriculum vitae and list of three references to:

Dr. Richard J. Freer Department of Pharmacology-Box 726 Medical College of Virginia Richmond, Virginia 23298

An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL RESEARCH ASSOCIATE** in neurophysiology, beginning July or September 1977. Training in intracellular electrophysiological techniques, including voltage clamping, desirable. To collaborate in research on membrane conductances in electroplaque. *The University of Colorado is an Equal Opportunity Employer*. Applicant should send curriculum vitae and names of three referees to: Dr. A. R. Martin, Department of Physiology, University of Colorado Medical School, Denver, Colorado 80262.

**RESEARCH ASSOCIATE** position available in 1977 in laboratory equipped for voltage clamp of *Myxi-cola* giant axons and frog myelinated nerve; micro-electrode recordings from frog spinal motorneurons and/or invertebrate neurons; pharmacology of condi-tion in demyelinated nerve; or other electro-physiological problems. Starting date and salary ne-gotiable. Send curriculum vitae, names of refer-ences, and a description of problems of interest and required facilities to Dr. C. L. Schauf, Department of Physiology, Rush College of Health Sciences, Rush-Presbyterian-St. Lukes Medical Center, 1753 West Congress Parkway, Chicago, Illinois 60612. An Equal Opportunity/Affirmative Action Employer.

CONTRACTOR CONTRACTOR CONTRACTOR

#### **RESEARCH FELLOWSHIPS** TO SWEDEN AND SWITZERLAND

The Fogart International Center, National Institutes of Health, has been asked to announce that the Swedish Medical Research Council and the Swiss National Science Foundation will each make available in 1977 three research fellowships to qualified biomedical scientists. These fellowships will provide postdoctoral training in basic or clinical areas of medical research.

training in basic or clinical areas of medical research. To be eligible candidates must be citizens of the United States and have been engaged in independent responsible research in one of the health sciences for at least 2 of the past 4 years. They must present evidence of aptitude and promise in basic sciences or clinical research, with an active interest in pursuing a re-search career in a health science field. Applicants must also provide evidence of acceptance by a training institution and preceptor. It is the applicant's responsi-bility to arrange for his research training with the preceptor and to present in his application a complete and explicit plan for research training. Affiliation with the preceptor is documented in the Facilities and Commitment Statement which must accompany each application. must accompany each application.

The Swiss fellowship may begin at any time between September 1977 and April 1978. The Swedish fellowship must be started within 10 months of the date of its award and each date must be set by mutual agreement of the applicant and the institution.

institution. The fellowships provide for reimbursement of the cost of round-trip tourist air fare tickets for the Fellow and his/her family. Health insurance is provided dur-ing the term of the fellowship. Stipends for the Swedish Medical Research Coun-cil Fellowships range from \$10,000 to \$13,000 per year, depending upon the num-ber of years of postdoctoral research experience at the time of award. The Swiss National Science Foundation stipends range from 22,800 Swiss francs (approxi-mately \$9,200) to 28,200 Swiss francs (approximately \$11,400) depending upon the age and experience of the applicant at the time of award. In addition, the Swiss National Science Foundation Fellowships provide 3,600 Swiss francs (ap-proximately \$1,450) for the spouse, 1,200 Swiss francs (approximately \$480) for each child and a cost of living adjustment.

each child and a cost of living adjustment. Application materials may be obtained from Scholars and Fellowships Program Branch, Fogarty International Center, National Institutes of Health, Bethesda, Maryland 20014. The deadline for receipt by NIH of completed applications is 1 January 1977. Applications will be reviewed for appropriateness and scientific merit at the Fogarty International Center. They will be forwarded to Sweden or Switzerland, as appropriate, for final selection and award in late spring or mid-summer 1977.

All correspondence with the Fogarty International Center concerning these fel-lowships must be clearly marked as either "Swedish Medical Research Council Fellowship" or "Swiss National Science Foundation Fellowship."

### POSITIONS OPEN

#### POSTDOCTORAL FELLOW

Endogenous Formation of Carcinogens Program needs recent Ph.D. to work with microbiologist in studying the metabolism of azo dyes by intestinal mi-croflora. Applicant should be knowledgeable in chromatographic and spectroscopic methods and experi-ence in biochemical metabolism would be helpful, but is not essential.

Oualified candidates should submit résumé to: M. L. Knill-Recruitment Department 400 FREDERICK\_CANCER\_RESEARCH\_CENTER Litton Bionetics, Inc. P.O. Box B Frederick, Maryland 21701

An Equal Opportunity Employer, M/F

#### PROFESSOR AND CHAIRMAN OF BOTANY

PROFESSOR AND CHAIRMAN OF BOTANY Professorship available for fall 1977. Experienced person with strong research and teaching record. Field of interest should be in biochemistry, biophys-ics, plant physiology, or other experimentally orient-ed aspects of molecular biology involving plant mate-rials. Appointee will be expected to aid in designing an elementary biology course and to initiate revi-sions leading to an integrated biology department. Candidate should have breadth appropriate to a fine liberal arts college. Scholarly distinction, enthusias-tic teaching ability, and capability for further profes-sional growth are essential. Deadline: 15 January 1977. Send curriculum vitae and at least three letters of reference to: Search Committee, Department of of reference to: Search Committee, Department of Botany, Pomona College, Claremont, California 91711

An Equal Opportunity/Affirmative Action Employer

PROTEIN CHEMIST, 2 to 3 years postdoctoral. Col-laborative research in peptide hormone laboratory. Experience in composition, sequencing, and syn-thesis. University appointment. Send résumé and re-search interests to Dr. David V. Cohn, VA Hospital, Kansas City, Missouri 64128. An Equal Opportunity/ Affirmative Action Employer.

A RESEARCH CENTER interested in hematology and oncology seeks an additional staff person. Can-didate should be capable of initiating own research projects. Salary and rank will be determined by expe-rience and training. Résumé, including three refer-ences, to: Walter Farkas, Chairman, Search Com-mittee, University of Tennessee Memorial Research Center, Knoxville, Tennessee 37920. The University of Tennessee is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

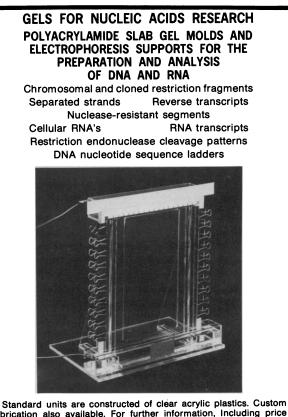
### RESEARCH DIRECTOR HEALTH SERVICES

Action Employer.

Immediate opening. New position M.D. or Ph.D. Develop and administer new Health Services Re-search and Development Center at large NP VA hosseatch and Development Center large AV A has pital. Conduct research in the organization and deliv-ery of health services. Joint appointment with the Johns Hopkins University H S R & D Center. Salary negotiable. Send résumé to Dr. William P. Paré, VA Hospital, Perry Point, Md. 21902. An Equal Employ-ment Opportunity Employer.

LABORATORY INSTRUMENT OR EQUIP-MENT SALESPERSON to train as advertis-ing space salesperson for major scientific journal. New York area. Contact Dick Charles Science Magazine Licenberg 212 Charles, Science Magazine, telephone: 212-736-1858.

SPECTROSCOPIST in high resolution NMR. Ph.D. in one of exact sciences; experience in NMR and fa-miliarity with NMR theory and instrumentation, and extensive expertise in the field. Salary com-mensurate with experience. Send résumé and three letters of recommendation to: Dr. Oleg Jardetzky, Stanford Magnetic Resonance Laboratory, Stanford University, Stanford, Calif. 94305. The deadline for receipt of applications is 15 December 1976.



fabrication also available. For further information, Including price lists, specifications and drawings write to:

> DAN-KAR PLASTIC PRODUCTS P. O. Box 279 Reading, Mass. 01867

**3 DECEMBER 1976** 

TRANSPLANTATION IMMUNOLOGIST. M.D. or Ph.D. immunologist to direct tissue typing and other aspects of service, research, and teaching in trans-plantation biology in multidisciplinary trans-plantation program. Medical school faculty appoint ment. Rank and salary are negotiable. *Affirmative Action/Equal Opportunity Employer*. Mid-Atlantic Area. **Box 526, SCIENCE**.

#### TRAVELING LECTURERS

University of Maryland University College seeks ex-University of Maryland University College seeks ex-cellent teachers for non-lab introductory science courses offered to military students in its overseas di-visions. Geologists, zoologists, biologists, and bot-anists with capability of teaching in two of these areas may apply. Ph.D. or two M.A.'s, recent under-graduate teaching experience and U.S. citizenship essential. Families please note: positions require travel every 2 months; family housing not provided and costly, dependent schooling very difficult to ar-range and expensive. Apply (send résumé): Dean, University of Maryland University College, College Park, Maryland 20742.

### TUMOR IMMUNOLOGIST, ASSISTANT PROFESSOR

Qualifications: Doctoral degree in immunology with specialization in cellular immunity. Postdoctoral training desirable.

Duties: Carry out independent and team research in tumor immunology, particularly on tumor-specific antigenic determinants with the ultimate purpose of antigenic determinants with the ultimate purpose of detecting components which may be important in pathogenesis or detection of tumors. Teaching op-portunities will include graduate student preception and participation in courses in the Department of Pathobiology. Applicants should supply names of three references, curriculum vitae, and a letter de-scribing their interests to Dr. George E. Kenny, De-partment of Pathobiology, SC-38, University of Wash-ington, Seattle, Washington 98195. Affirmative Ac-tion/Equal Opportunity Employer.

#### PROGRAMS

ANATOMY GRADUATE PROGRAM TEXAS TECH UNIVERSITY

The Department of Anatomy provides graduate pro-grams leading to the M.S. and Ph.D. degrees. Re-search areas include: developmental and reproducsearch areas include: advelopmental and reproduc-tive biology, mineralized tissues, and neurobiology. Stipends available. Deadline 31 March. Address cor-respondence to: Dr. David L. Bolender, Department of Anatomy, Texas Tech University School of Medi-cine, P.O. Box 4569, Lubbock, Texas 79409.

#### CONFERENCE

### CONFERENCE ON INORGANIC AND NUTRITIONAL ASPECTS OF CANCER

Organized by The International Association of Bioinorganic Scientists. TOPICS: METAL CARCINOGENESIS, ENVIRONMENTAL CANCER, THERAPY, DRUGS, PREVENTION, DIET AND NUTRITION La Jolla, California, 3 to 5 January 1977 CONFERENCE FEE: \$65. Send check or money order together with dates of arrived departure and requests for room arrival, departure and requests for room reservations to

G. N. SCHRAUZER, Ph.D., Conference Organizer Department of Chemistry University of California, San Diego La Jolla, Calif. 92093 Telephone: 714-452-4463

#### ASSISTANTSHIPS

GRADUATE ASSISTANTSHIPS at the Oregon Grad-uate Center for Ph.D. students in chemistry and bio-chemical sciences, applied physics and electronic sci-ence, materials science, and environmental science. Small institution offers close, informal working rela-tionship between students and faculty. Wide variety of ongoing research programs with both govern-mental and industrial sponsorship. Minimum sti-pend: \$4500 plus tuition remission. Write: Director of Education, Oregon Graduate Center, 19600 N.W. Walker Road, Beaverton, Oregon 97005. An Equal Opportunity/Affirmative Action Employer. GRADUATE ASSISTANTSHIPS at the Oregon Grad-

#### ASSISTANTSHIPS

GRADUATE RESEARCH and TEACHING ASSIS-TANTSHIPS in the Department of Biochemistry and Biophysics at Texas A & M University leading to M.S. and Ph.D. degrees. Wide range of research proj-ects available for students with undergraduate ma-jors in biochemistry, chemistry, physics, biology, or microbiology. Departmental interests include cell metabolism, x-ray crystallography, mass spectrom-etry, protein sequencing, lipid and nucleic acid re-search, neurobiochemistry, nutrition, and tissue cul-ture of mammalian cells. For more details write Dr. John B. Moore, Jr., Department of Biochemistry and Biophysics, Texas A & M University, College Station, Texas 77843. Texas A & M is an Equal Opportunity Employer GRADUATE RESEARCH and TEACHING ASSIS Employer

#### **FELLOWSHIPS**

#### POSTDOCTORAL FELLOWSHIP

Available January 1977, for recent Ph.D. with interstudy control of gene expression in cultured post-implantation stage mouse embryos. Send curriculum vitae and names of three references to:

Dr. Roger A. Pedersen Laboratory of Radiobiology LR 104 University of California San Francisco, Calif. 94143 The University of California is an Affirmative Ac-tion/Equal Opportunity Fungloyer

tion/Equal Opportunity Employer.

# SUMMER RESEARCH FELLOWSHIPS FOR BLACKS AND OTHER MINORITIES AT THE MARINE BIOLOGICAL LABORATORY

MARINE BIOLOGICAL LABORATORY The Josiah Macy, Jr. Foundation has provided funds to defray laboratory fees and housing costs (up to \$4500 per person) for teachers who wish to im-prove their research and teaching abilities during the summer of 1977, either through independent study or research in collaboration with a staff member or another visiting scientist. Special attention is to be given to needs of faculty members of 4-year black colleges, who will be designated Macy Scholars. Ap-plications must be completed by 1 February 1977. For applications and information, write the Direc-tor's Office, Marine Biological Laboratory, Woods Hole, Mass. 02543, specifying the Macy Program, or elephone Dr. James D. Ebert, 617-548-3705. Marine Biological Laboratory admits investigators of any Biological Laboratory admits investigators of any race, color, and national or ethnic origin.

## SUMMER RESEARCH FELLOWSHIPS AT THE MARINE BIOLOGICAL LABORATORY

MARINE BIOLOGICAL LABORATORY For summer 1977, funds are available to help de-fray laboratory fees and/or housing costs for a limit-ed number of postdoctoral investigators (up to \$4500 each). Applications are encouraged from investiga-tors with from 1 to 5 years of postdoctoral experi-ence whose research requires marine organisms or the Laboratory's special facilities. Applications must be complated by 1 February 1977. For applica-tions and information, write the Director's Office, Marine Biological Laboratory, Woods Hole, Mass. 02543. Marine Biological Laboratory admits stu-dents of any race, color, and national or ethnic ori-gin. gin.

### FELLOWSHIP IN MEDICAL GENETICS AND EPIDEMIOLOGY

The University of Iowa, College of Medicine, invites applications to the Cardiovascular Center for fellowships to study the genetic determinants of coronary risk factors beginning in 1977 and 1978. The program risk factors beginning in 1977 and 1978. The program combines clinical training in medical genetics and epidemiology with special emphasis in research. For further information, please contact Helmut G. Schrott, M.D., Department of Medicine, University of Iowa, Westlawn S-212, Iowa City, Iowa 52242.

#### POSTDOCTORAL RESEARCH FELLOWSHIP

M.D. or Ph.D. Position available for 1 to 3 years in basic research on the pathophysiology of vascular diseases, using animal and tissue culture models. Background in cell biology, biochemistry, or pharma-cology preferred. Send letter, curriculum vitae, and names of three references to:

Dr. R. S. Cotran Pathologist-in-Chief Peter Bent Brigham Hospital 721 Huntington Avenue Boston, Mass. 02115

#### **FELLOWSHIPS**

POSTDOCTORAL RESEARCH FELLOWSHIPS IN RESPIRATORY PHYSIOLOGY AVAILABLE 1977–1978

Apply with curriculum vitae and names of two references to: S. M. Tenney, Department of Physiology, Dartmouth Medical School, Hanover, N.H. 03755. Equal Opportunity Employer

#### POSTDOCTORAL FELLOWSHIPS

Postdoctoral fellowships are available at the Rosen-stiel School of Marine and Atmospheric Science, University of Miami.

The interests of the faculty include, but are not limited to, experimental studies and modeling of: inter-actions in controlled environments; the benthic boundary layer of the deep sea; the ocean as a clishelf ecosystems; large tropical weather systems; and in the development of methods for the optimal utilization of ocean resources.

Applications should include a statement of research interests, curriculum vitae, and references, and be addressed to: Dr. Warren J. Wisby, Associate Dean, Rosenstiel School of Marine and Atmospheric Science, University of Miami, 4600 Rickenbacker Causeway, Miami, Florida 33149.

The University of Miami is an Equal Opportunity Employer

# PRE- AND POSTDOCTORAL TRAINING OPPORTUNITIES AT THE UNIVERSITY OF ALABAMA MEDICAL CENTER

Research fellowships at the predoctoral (\$5,100 and up) and postdoctoral (\$10,000 and up) levels are available commencing during the summer 1977 un-der preceptors from the Departments of Biochemis-try, Medicine, Microbiology, Pediatrics, Pathology and Surgery. Areas and preceptors represented in NIH supported training programs include:

Animal Virology: Alford, Bishop, Compans, Francis, Hunter, Lebowitz, Reynolds, Stagno. Allergic and Immunologic Diseases: Ball, Bennett, Cooper, Lawton, Lee, Habeeb, Holley, Nagasawa, Niedermeier, Schrohenloher, Stroud, Tomana, Vol-

anakis Connective Tissues: Baker, Butler, Miller, Montes,

Connective Tissues: Baker, Butler, Miller, Montes, Niemann, Roden, Thompson. Molecular Cell Biology and Genetics: Bastia, Bugg, Curtiss, Finley, Frazer, Gauthier, Lebowitz, Roo-zen, Schutzbach, Shiota, Suddath, Yielding. Immunology and Cell Membranes: Acton, Balch, Bennett, Cooper, Ghanta, Hiramoto, Johnson, La-mon, Lawton, Mole, Segrest. Infectious Diseases and Host Defense: Avent, Bobo, Cassell, Cobbs, Derrick, Dillon, Dismukes, Griffin, McGhee, Mestecky, Polt. Individuals interested should send a letter describing

Individuals interested should send a letter describing their research interests to the Training Office, De-partment of Microbiology, Box 11 DSB, University of Alabama in Birmingham, Birmingham, Alabama 35294. An Equal Opportunity/Affirmative Action Employer.

#### MARKET PLACE

#### ADDITIONAL INCOME

ADDITIONAL INCOME An unusual opportunity available for qualified pro-fessionals in biology, chemistry, or related fields to gain extra income without significant distraction from other interests. We are a highly successful orga-nization preparing medical school applicants for the MCAT exam in over 25 states. We are accepting in-quiries from the following areas only: Boston, Mass; Philadelphia, Pa., Columbus/Dayton, Ohio; Madi-son, Wis.; St. Paul/Minneapolis, Minn. If interested, send brief résumé to Evergreen MCAT Review Course, Inc., 33 Evergreen Place, East Orange, New Jerson Ministry (1998)

### **AUTHORS WANTED BY** NEW YORK PUBLISHER

Your book can be published, promoted, distrib-uted by a reliable company on a subsidized basis. Fiction, non-fiction, poetry, scholarly, sci-entific and even controversial manuscripts wel-comed. For free booklet, write: Vantage Press, Dept. SC, 516 W. 34 St., New York 10001.

#### PHYSICS DEPARTMENT IOWA STATE UNIVERSITY AMES LABORATORY-ERDA

AMES LABORATOR TERDA Applications are invited for three possible tenuretrack faculty positions to begin 1 September 1977. Each position is planned to be a joint appointment as an assistant professor in the Physics Department and an associate physicist in the Ames Laboratory, with possibly higher rank for exceptionally qualified individuals. Candidates must have demonstrated both research capabilities in one of the areas listed below and potential for teaching physics at both the undergraduate and graduate level. At most, one appointment is planned for each research area.

Solid State Experiment. The research interests and experience of candidates should relate to one or more of the programs of the present solid-state staff, including neutron scattering, superconductivity, surface science, and optical properties. Persons whose research plans include a neutron scattering component are particularly encouraged to apply.

Nuclear Experiment. Candidates should have an interest in the spectroscopy of nuclei far from stability, and in carrying out a research program using the TRISTAN on-line mass separator at the Ames Laboratory Research Reactor. Past experience in  $\beta$  and  $\gamma$ spectroscopy is desirable but not essential.

Elementary Particle Theory. Applicants should have experience in both theoretical and phenomenological aspects of the interactions of fundamental particles, in order to complement, as well as collaborate within, the department's existing particle theory program.

Applications should include, in résumé form, a description of educational background, a summary of research and teaching experience, a listing of all publications and submitted manuscripts (with a brief summary of the latter), a statement of current research interests and future plans, and the names of four referees who are willing to give an evaluation of the candidate if contacted. The above materials should be sent to: Dr. C. A. Swenson, Chairman, Department of Physics, Iowa State University, Ames, Iowa 50011. The applicant should ask one referee to send a letter before the deadline for applications, 31 January 1977.

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Send requests for application forms and information to:

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

### UNIVERSIDAD AUTONOMA DE CIUDAD JUAREZ

PROGRAMA ACELERADO BILINGUE PARA DOCTORADOS (Accelerated Bilingual Program for PhD's) APARTADO POSTAL 231, TELEFONO 2-75-60 CD, JUÁREZ. CHIHUAHUA. MEXICO

The Universidad Autonoma de Ciudad Juarez School of Medicine has established an additional route to the M.D. qualification whereby selected candidates who already hold a Ph.D. degree in biological, physical, or engineering science can enter an accelerated course of study. Social sciences may be considered provided there is a strong background in the physical, chemical, or biological sciences.

The Ph.D.-M.D. Program is now considering applications for the third Class which will commence sessions on 5 September 1977. Successful students will complete the M.D., training within 22 months. Social service of 12 months will be required and probably be devoted to teaching and clinical service.

#### LANGUAGE:

Spanish Language instruction will be given during the Io. May to 31 August 1977 time period for those students who are not proficient. Proficiency in Spanish must be achieved by 5 September 1977.

#### APPLICATIONS:

Inquiries for the Ph.D.-M.D. Program and requests for standard application forms should be addressed to:

ROBERTO MORENO RAZO M.D. Chairman, Admissions Committee Ph.D.-M.D. Program Universidad Autonoma de Ciudad Juarez Apartado Postal 231 Cd., Juarez, Chihuahua, MEXICO

The Admissions Committee will not accept applications postmarked after 15 February 1977 for the 1977 Program.

#### TUITION AND FEES:

Tuition is \$6000 for each of the two academic segments. Spanish Language tuition is \$600. Fees include a registration fees of \$15 and an application fee of \$50. The application fee must accompany each application and is non-refundable. Checks should be made payable to the Universidad Autonoma de Ciudad Juarez School of Medicine Ph. D. -M.D. Program.

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If interested, submit Personal Qualifications Statement (SF-171), or detailed resume, including personal references and information on education, experience, publications and professional activities not later than 31 December 1976 to:

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