AAAS NEWS

(Continued from page 963)

about acceptances, requests for modifications or merging with other suggested symposia, or nonacceptance in early May. The preliminary program (the symposium as it is likely to take place at the Meeting) for those which have been accepted is due at the Meetings Office by the end of June.

Final program copy with all speakers and topics fully confirmed, typed to the format of the Meeting Program, is due at the end of August. Although this schedule is tight, it does not differ substantially from the old schedule we used to live by when the Annual Meeting took place over the Christmas-New Year's week.

Send your suggestions to: Dr. Arthur Herschman, AAAS Meetings Office, 1776 Massachusetts Ave., NW, Washington, D.C. 20036.

AAAS Project on the Handicapped in Science Seeking Names for Directory

The AAAS Project on the Handicapped in Science is developing a directory of scientists with handicapping conditions which will be distributed to public agencies, handicapped scientists, and consumer organizations to facilitate communication among them. Research for and publication of the directory is supported by a grant from the National Science Foundation.

Each directory entry will contain basic personal and professional biographical data, nature and age of onset of handicapping condition, and a summary of educational and professional experience including problems faced and overcome. The scientists will be asked if they would be willing to act as advisers, consultants, and/or evaluators in many areas concerning science and the handicapped. It is anticipated that the directory will identify handicapped scientists who are willing to provide input to the project by sharing experiences and information on coping strategies; educating the scientific community concerning their existence and their problems; organizing action when needed; and providing the basis for problem analysis and professional planning for scientific societies, educational institutions, consumer organizations, and federal agencies.

The project defines science broadly to include all the natural and social sciences, mathematics, engineering, and medicine—all fields for which a rigorous scientific education is required. It will seek to include those with degrees in these areas or equivalent training who are working in scientific, medical, or technological fields. The directory also will include individuals trained in science but working in other areas or presently unemployed.

At this time the AAAS has names of more than 500 disabled scientists who have been serving as a resource group to the Association. The Association is interested in increasing this number so that the directory will include as many handicapped scientists as possible. All handicapped scientists and graduate students of science not currently included in the resource group are urged to participate in the project by identifying themselves to Martha Ross Redden or Janette Alsford Owens, Project on the Handicapped in Science, Office of Opportunities in Science, at the AAAS address. The telephone number for the Project is (202) 467-4497 (TTY or voice).

For the Library

The AAAS Science Book List Supplement, extending the coverage of the AAAS Science Book List (3rd edition) from 1969 through 1977, will be available later this month. The Supplement includes citations and annotations of some 2600 trade and textbooks in mathematics and the pure and applied sciences. These titles are recommended selections from the more than 30,000 science and technical books published since 1969 for junior and senior high school students, college undergraduates, teachers, and the general reader. Available 31 March 1978, the Supplement is priced at \$16.50 (\$15 for AAAS members). Please direct all orders to AAAS, Sales Department, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005.

* * * *

"Interdisciplinary Research Management," a AAAS report dealing with assessment of factors influencing the performance of interdisciplinary policy-oriented research with recommendations for change, is available free of charge from the Office of Public Sector Programs. The 60-page publication identifies a spectrum of insights and recommendations of interest to interdisciplinary research performers, managers, sponsors, and others.

Personnel Placement

Personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, or handicap.

Positions Wanted: 40¢ per word; \$4 extra for use of box number. \$10 minimum charge, per insertion. Prepayment required. This rate is available only to individuals; personnel agencies, companies, colleges, and universities take display rate for all advertising.

Display (Positions Open, Market Place, and so forth): \$5.80 per millimeter: \$145 minimum charge, per insertion (covers 25 millimeters on single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads under 103 millimeters (4 inches). No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all other ads.

SCIENCE is published weekly, on Friday. Copy must be received in writing by Wednesday, 3½ weeks before Friday issue date required. Send copy for all positions wanted ads and display ads under 5 inches to:

SCIENCE, Room 207 1515 Massachusetts Ave., NW Washington, D.C. 20005 Telephone: 202-467-4456

Send copy for display ads, $1/6\ \text{page}$ and larger, to:

Scherago Associates, Inc. 1515 Broadway New York, N.Y. 10036 Telephone: 212-730-1050

Blind ad replies should be addressed as follows:

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

POSITIONS WANTED

Agricultural Biochemist: Ph.D. 1975. Background: cereal protein quality, analytical biochemistry, food analysis, and herbicide pesticide work. Previous international assignment; seeking supervisory R & D position. J. H. Wolfram, 68 New Road, Southampton, Pennsylvania 18966; telephone: 215-355-5826. X

Anatomist/Gross and Neuroanatomy. Competent also in histology and embryology. Excellent teacher. Experience with medical, dental, and paramedical students. D.D.S.; M.S. qualifications, with strong background in pathology. Administrative experience. Highest references. Desires stable position. Box 37, SCIENCE. X

Biochemical Endocrinologist. Ph.D. Two years of independent postdoctoral research and teaching. Extensive experience in human and experimental mammary cancers, hormone receptors, tissue culture, and RIA. Broad proficiency in biochemical techniques. Publications, societies, honors, and references. Prefers academic or industrial position. Available summer 1978. Box 18, SCIENCE. 3/3, 17

Biologist (Botanist), Ph.D., with broad interest and training, desires position at a southwestern or southern college or university that emphasizes excellence in teaching and working with students. Experience in research and consultation in plant ecology. Box 69, SCIENCE.

Histologist/Biologist, Ph.D. (1974), seeks research, teaching in United States-Canada; level: assistant professor medical, industry-toxicology. Cell biology, histochemistry, TEM, SEM, probe, multidisciplinary open. Available before or during summer 1978. Box 70, SCIENCE. X

Neuroscientist. Ph.D. (1976). Special pre- and postgraduate training and industrial practice in the field of comparative neuroanatomy, neuropharmacology, behavioural pharmacology, neurohistochemistry, and neuropathology. Background: neurotransmitters and receptors. Has experience in several kinds of advanced methodology, including routine neurohistology, microdissection, stereotaxic technique, histofluorescence, and in vitro and in vivo radio receptor assays. Looking for a research position (industry; university) in Canada or the United States. Box 71, SCIENCE. X

3 MARCH 1978

POSITIONS WANTED

Oncologist. ABIM, MO. Medical school faculty with administrative health care experience; desires relo-cation. Preference: medical school interested in de-veloping cancer program. Box 64, SCIENCE. 3/3. 10. 17

Physicist. Radiological physics and health physics Board-certified. Excellent credentials, experience. Seeks academic/clinical/governmental/industrial position, preferably in Sunbelt areas. Box 72, SCI-ENCE.

POSITIONS OPEN

ASSISTANT. A postdoctoral position is available immediately to study the organization, replication, and sequencing of plasmid DNA's in <u>Staphylococ</u>and sequencing of plasmid DNA's in *Staphylococcus aureus*. Applicants must have a Ph.D. in biochemistry or molecular biology with at least 2 years experience in chemical and enzymatic synthesis of DNA, DNA sequencing, in vitro protein synthesis and handling of restriction enzymes. Salary: \$14,000. Send curriculum vitae and two letters of reference to: Public Health Research Institute, Room 1213, 455 First Avenue, New York, N.Y. 10016.

An Equal Opportunity Employer

A new position of ASSISTANT DIRECTOR of blood bank and CLINICAL INSTRUCTOR in laboratory medicine open for M.D. with California license and research experience relevant to transfusion reac-tions and hepatitis. Submit résumé and names of three references to: Dr. Girish Vyas, University of California, San Francisco, Calif. 94143. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR to teach undergraduate courses in wood anatomy/identification and dendrology and graduate course in wood quality. Plan and carry forward research in general area of wood qual-ity, including the effects of silvicultural and genetic manipulation of wood properties. Guide graduate students. Ph.D. degree completed or nearly com-pleted. Applicants' qualifications will be considered without regard to race or sex. Women and minorities are urged to apply. Applications will be received un-til 30 April 1978. Write: Donald G. Arganbright, Search Committee, Forest Products Laboratory, Uni-versity of California, 47 and Hoffman Boulevard, Richmond, California 94804. University of California is an Equal Opportunity/Affirmative Action Employ-er.

The Division of Biological Sciences, University of Georgia, Athens, Georgia, has an opening for a tem-porary ASSISTANT PROFESSOR to teach general biology beginning 1 September 1978. Applicants must have a Ph.D. and a demonstrated ability to lecmust have a Ph.D. and a demonstrated ability to lec-ture before large classes. Interested persons should submit a curriculum vitae and three letters of recom-mendation to: Dr. Richard DeSa, Room 400, Biologi-cal Sciences Building, University of Georgia, Athens, Georgia 30602. Application deadline is 15 April 1978. The University of Georgia as an Equal Employment Opportunity/Affirmative Action Institution encour-ance applications from woman and minorities. ages applications from women and minorities.

ASSISTANT PROFESSOR OF BIOLOGY. A posi-ASSISTANT PROFESSOR OF BIOLOGY. A posi-tion in the Department of Science at the College of Santa Fe (a Catholic liberal arts institution) will be available beginning 15 August 1978. Area of exper-tise should be in ecology and microbiology. Appli-cants must have a Ph.D. and some teaching experi-ence. Participation in the non-major introductory course is expected. Send curriculum vitae, all tran-scripts, and three letters of recommendation to: A. P. Carroll, Chairman, Department of Science, Col-lege of Santa Fe, Santa Fe, New Mexico 87501.

BIOCHEMIST

The Department of Biochemistry in the College of Human Medicine at the University of Wyoming has several faculty positions open. The candidates will be expected to participate in an active research and be expected to participate in an active research and graduate and undergraduate program in biochemis-try. Salary and rank will depend on qualifications and experience. Individuals with research interests and experience in endocrine, nutritional, or physical biochemistry are especially encouraged to apply. Applicants should send their curriculum vitae and a description of their future research plans by 1 April 1978, to:

Chairman, Department of Biochemistry College of Human Medicine University of Wyoming Laramie, Wyoming 82071

POSITIONS OPEN

DEPARTMENT OF BIOLOGICAL SCIENCE FLORIDA STATE UNIVERSITY

TWO ASSISTANT PROFESSORSHIP appointnents will be made from the following areas, ef-fective September 1978: (i) vertebrate biology, (ii) microbiology, and (iii) immunology.

The appointees will be expected to teach undergraduate and graduate courses, supervise the re-search activity of graduate students and maintain an active independent research program. The depart-ment is a large broadly based biological science unit with cooperation and interaction with numerous related interdisciplinary programs.

We are an Afirmative Action/Equal Opportunity Employer and welcome applications from women and minority group members. Applicants should send curriculum vitae, representative reprints to: A. Gib DeBusk, Chairman, Department of Biological Science, Florida State University, Tallahassee, Flor-ida 32306. Letters of reference may be requested at a later date.

CORNELL UNIVERSITY ASSISTANT PROFESSOR DEPARTMENT OF MICROBIOLOGY

Applicants are invited for the position of assistant professor, in the Department of Microbiology, Col-lege of Agriculture and Life Sciences. The appointee will be expected to establish and teach a course in microbial diversity, in addition to accepting responsibility for teaching a portion of an advanced general microbiology course. The appointee will also be ex-pected to undertake a vigorous research program and to contribute to advanced undergraduate and graduate training in general microbiology and microbial physiology. Inquiries are invited from all qualified applicants.

Inquiries are invited from all qualified applicants. Applicants should possess the Ph.D. in microbiology or a related area, have postdoctoral research experi-ence and have demonstrated research ability. *Wom-en and minority candidates are encouraged to ap-ply*. Curriculum vitae, including names of at least three persons who can be contacted for letters of ref-erence, should be sent to: Dr. H. W. Seeley, Jr., Search Committee, Department of Microbiology, Stocking Hall, Cornell University, Ithaca, New York 14853, bv 25 March.

14853, by 25 March. Cornell University is an Equal Opportunity/Af-firmative Action Employer.

POSITION:	ASSISTANT PROFESSOR IN RAD	ю-
	LOGICAL HEALTH	
LOCATION:	The University of Michigan	
	School of Public Health	
	Ann Arbor, Michigan 48109	
CONTACT:	Dr. G. Hoyt Whipple	
	Telephone: 313-764-0523	
Desider incert	A	the.

Telephone: 313-764-0523 Position involves teaching graduate courses in the areas of radiation physics and dosimetry. Work with other faculty and graduate students on research proj-ects currently funded, and assist with the develop-ment of new projects. Candidate must have a Ph.D. degree in physics or radiological health, experience with californium-252 neutron sources, gamma-ray spectrometry including use of GE(LI) detectors, cal-ibration and use of cobalt-60 teletherapy units and x-ray machines, and a thorough knowledge of radia-tion survey instruments including enough inventive-ness to maintain radiation detection instruments. The candidate must also have teaching experience at the college level and an interest in the medical as-pects of health physics. The University of Michigan is an Affirmative Action/

he University of Michigan is an Affirmative Action/ Equal Opportunity Employer.

CHAIRPERSON, MATH-SCIENCE DIVISION (Botanist/Ecologist) University of Maine at Machias

Professor or associate professor rank; \$15,000 to \$20,000 for academic year, depending upon experi-ence and qualifications; to begin 15 August 1978. **Requisites:** Ph.D. with both laboratory and field experience: Teaching competence in plant taxonomy is essential, plus courses in terrestrial or aquatic ecol-ogy appropriate to individual expertise and institu-tional needs. Candidates should be open to in-novation and committed to undergraduate teaching novation and committed to undergradulate teaching and student-oriented research. Experience in aca-demic administration desired. A letter of application which refers specifically to the above "Requisites" and a detailed résumé should be submitted before 10 March 1978 to: Dr. James M. Aldrich, Dean of Aca-demic Affairs, University of Maine at Machias, Ma-chias, Maine 04654. The University is an Equal Op-portunity/Affirmative Action Employer and does not discriming a gainet a gained hand/compade persons discriminate against qualified handicapped persons.

POSITIONS OPEN

ASSISTANT PROFESSOR, VERTEBRATE PHYSI-OLOGY, to begin August 1978, pending funding. Ph.D. qualified to teach introductory and advanced animal physiology courses and freshman biology. Tenure-track position. Application deadline: 1 April 1978. Send brief statement of teaching and research interests, curriculum vitae, official transcripts, and three letters of recommendation to: Dr. Debra Pearce, Biological Sciences, Northern Kentucky Uni-versity (NKU), Highland Heights, Ky. 41076. An Equal Opportunity/Affirmative Action Employer. NKU is in the greater Cincinnati area.

ASSOCIATE PROFESSOR

Immediate position available for pharmacologist, Ph.D. or M.D.; must have experience with tox-icology, microscopic pathology, electron micros-cology teaching required. Send curriculum vitae to: Search Committee, Department of Pharmacology, Medical College of Wisconsin, 561 North 15 Street, Milwaukee, Wisconsin 53233.

Equal Opportunity Employer, M/F

BIOLOGICAL OCEANOGRAPHY ZOOPLANKTON PRODUCTION

Applications are invited for a research assistant pro**fessor** position in the Department of Oceanography, University of Washington. Ph.D. and seagoing experience required. Applicant initially will be expected to develop a field and laboratory zooplankton program to complement ongoing primary production re-search and gradually to evolve a self-sustaining re-search program. Participation in the teaching pro-gram and supervision of graduate students is encouraged. Position available as early as June 1978. Send complete résumé and four letters of reference to: Dr. Dora P. Henry, Chairman, Faculty Recruit-ment Committee, Department of Oceanography, WB-10, University of Washington, Seattle, Wash. 98195, by 15 April 1978. The University is an Equal Oppor-tunity/Affirmative Action Employer.

BIOLOGICAL SCIENCES

Two positions open, September 1978. Ph.D. in mibiology and advanced and graduate course in spe-cialty. Research encouraged. Send résumé to:

Dr. Ann N. Bond, Chairman Department of Biological Sciences Chicago State University 95 and King Drive Chicago, Illinois 60628

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

BIOLOGY. Sabbatical replacement for 1978-1979 academic year in: (i) animal physiology, and (ii) inacademic year in: (1) animal physiology, and (11) in-troductory biology for non-science majors. Recent Ph.D. in zoology or biology is preferred, but can-didate near completion of degree is acceptable. Send curriculum vitae and three recommendation letters by 15 March 1978 to: Chairman, Recruiting Com-mittee, Department of Biological Sciences, State Uni-versity of New York, Box 1000, Plattsburgh, N.Y. 12901. An Equal Opportunity/Affirmative Action Employer. Employer

BIOLOGIST. Continuing appointment expected in the Department of Biology, The Pennsylvania State University, Mont Alto Campus, Mont Alto, Pa. Po-sition available September 1978; appointment is ex-pected to be at rank of assistant professor. The posi-tion requires teaching introductory courses in gener-al biology and general botany, and intermediate level courses in genetics. Research expected. Candidate must have terminal degree (Ph. D.). Salary commen-surate with qualifications. Application deadline: 15 April 1978. Send curriculum vitae, transcripts, and three letters of reference to: Dr. William H. Neff, Box F, 208 Life Science I, University Park, Pa. 16802. The Pennsylvania State University is an Affirmative Action/Equal Opportunity Employer. Action/Equal Opportunity Employer.

University of California, Irvine, Department of Pa-University of California, Irvine, Department of Pa-thology, recruiting for faculty position at assistant or associate professor level as CHIEF OF SURGICAL PATHOLOGY. Required: M.D. Board-qualified, service experience in surgical and autopsy patholo-gy, demonstrated interest in independent research. Duties: teach medical students and house staff; limit-ed administrative responsibility. All qualified can-didates welcome; minorities and women encouraged didates welcome; minorities and women encouraged to apply. Send curriculum vitae and references to: Edward R. Arquilla, M.D., University of California, Irvine, Medical Center, Department of Pathology, 101 City Drive South, Orange, California 92668 by 1 April 1978.

SCIENCE, VOL. 199

CELL BIOLOGIST. Assistant professor to teach in areas of cell biology, genetics, and development, and to participate in introductory course. We require and to participate in introductory course. we require the Ph.D., demonstrated potential for teaching ex-cellence, and a real desire to work with under-graduates. \$12,000 to \$16,000; good fringe benefits. Send application, curriculum vitae, transcripts, and three letters of recommendation to: Margaret Simp-son, Chairman, Department of Biology, Sweet Briar College (SBC), Sweet Briar, Va. 24595, by 1 April. SBC is an Equal Opportunity Employer.

CLINICAL PATHOLOGIST to join two pathologists in Department of Pathology Laboratories in center with general acute hospital operating 160 beds and medical group of 70 doctors. As assistant to chair-man responsible for administration of Clinic Labora-tories, approved in 1977 by C.A.P. and J.C.A.H. Af-filiated with local medical school for resident and fel-hum, training. Located in metrapelitan area of Initiated with local medical school for resident and fel-low training. Located in metropolitan area of 375,000 population, with advantages of Southwest living. Contact: David J. Ottensmeyer, M.D., Medi-cal Director, Lovelace-Bataan Medical Center, 5200 Gibson Boulevard, SE, Albuquerque, New Mexico 87108. Telephone: 505-842-7073.

COORDINATOR OF EXPERIENTIAL LEARNING PROGRAMS

Rochester Institute of Technology is seeking an Kochester institute of Technology is seeking an outstanding professional to coordinate experiential learning programs (including cooperative education) for the College of Science. Primary responsibilities will be: (i) development of new cooperative work experiences with major corporations, governmental agencies, and health care organizations throughout the United States; (ii) maintenance and improvement of existing cooperative education programs; and (iii) development of other imaginative forms of experiential learning.

An individual with unusual blend of education and experience is required. Minimum qualifications are: (i) M.S. in science or mathematics (doctorate pre-ferred); and (ii) 3 to 5 years of industrial experience in people-oriented technical positions.

Faculty rank, salary: competitive, depending on qualifications and experience. Starting date: no later than 1 July 1978.

Send letter, résumé, graduate transcript, and names of three references (letters will be requested by committee if desired) to:

R. E. Gilman, Head Department of Chemistry Rochester Institute of Technology One Lomb Memorial Drive Rochester, N.Y. 14623

DEAN, COLLEGE OF BIOLOGICAL SCIENCES

The Ohio State University is seeking an out-The Ohio State University is seeking an out-standing scholar with superior credentials in re-search and teaching, as well as administrative expe-rience, to serve as dean of the College of Biological Sciences. The college is comprised of 110 salaried faculty in seven departments: Biochemistry, Bio-physics, Botany, Entomology, Genetics, Micro-biology, and Zoology, each of which has an under-graduate major program as well as graduate pro-grams. In addition there are graduate programs in developmental biology. grams. In addition there are graduate programs in developmental biology and environmental biology. The college also has administrative responsibility for the Ohio Biological Survey, The Center for Lake Erie Area Research, and the F. T. Stone Laboratory Field Station at Lake Erie. An awareness of current trends in research and education in the above dis-ciplines is essential to the position. The college has an enrollment of approximately 1100 undergraduate majors and 350 graduate students. Course enroll-ments total approximately 25,000 per year.

Salary is competitive and position is to be filled after 1 July 1978. Send résumé with references to: Dr. Patrick R. Dugan, Department of Microbiology, 484 West 12 Avenue, The Ohio State University, Co-lumbus, Ohio 43210. An Equal Opportunity Employ-

FACULTY POSITIONS available immediately. One in wildlife ecology and one in forest pathology-virol-ogy. Teaching undergraduate and graduate levels, research, and public service in respective areas. Ph.D. required. Rank and salary negotiable. Send curriculum vitae, transcripts, and three letters of recommendation to: M. Alexander (Wildlife Ecol-ogy) or R. A. Zabel (Forest Pathology), Department of Environmental and Forest Biology, State University of New York College of Environmental Science and For-setry, Syracuse, N.Y. 13210. Equal Opportunity/Afestry, Syracuse, N.Y. 13210. Equal Opportunity/Af-firmative Action Employer.

3 MARCH 1978

POSITIONS OPEN

INTERIM DEAN FOR VETERINARY PRO-**GRAMS**. Tufts University seeks an experienced ac-ademic leader for the planning and development of a proposed School of Veterinary Medicine. The school is conceived as an integral part of an academschool is conceived as an integral part of an academ-ic health center and as a medical, agricultural, and scientific resource for New England. It will join the Tufts University Schools of Medicine and Dental Medicine, the New England Medical Center Hospi-tal, and a major nutrition research center at the Tufts Boston campus, and will share and strengthen exist-ing basic science departments. The school will have its own clinical campus and will also provide clinical education at a number of eminent associated institu-tions throughout New England. Specialties are ex-pected to develop in comparative medicine laborapected to develop in comparative medicine, labora-tory animal medicine, nutrition, public health, tox-icology, pathology, and aquatic animal and equine medicine. Candidates for the interim deanship should be veterinarians who have extensive and successful experience in the planning, administration, and support of veterinary institutions or health sci-ences programs. Distinguished research accomplish-ments and teaching and clinical experience are also important. Position available immediately. Send nominations and applications to: President Jean Mayer, TUFTS UNIVERSITY, Medford, Mass. 02155. An Equal Opportunity/Affirmative Action Employer.

TULANE UNIVERSITY DEAN OF THE GRADUATE SCHOOL

Tulane is seeking to fill the position of dean of the Graduate School. The school has a faculty of 306 and some 900 students, with Ph.D.'s in 28 fields and master's programs in 45 areas. In addition to running the Graduate School, the dean is responsible for var-ious institutes, centers, and programs, as well as links with the Basic Medical Sciences. The Search Committee is particularly avience to attract a school Committee is particularly anxious to attract a schol-ar who would perform not only these multifarious functions, but also would be prepared to act as a spokesman for the liberal arts and sciences complex. Send replies to:

Dr. Munro S. Edmonson Chairman, Search Committee The President's Office Tulane University New Orleans, Louisiana 70118

An Equal Opportunity/Affirmative Action Employer

ENTOMOLOGIST ARIZONA STATE UNIVERSITY

Applications are invited from qualified candidates for a position as **assistant professor of zoology**. The Ph.D. is required. Responsibilities will include de-veloping a research program in entomology and teaching general entomology, insect ecology, and aquatic entomology. Applications, including cur-riculum vitae, undergraduate and graduate transcripts, three letters of recommendation, and a state-ment of research interests and future research plans should be sent to:

Dr. Gordon L. Bender Chairman, Search Committee Department of Zoology Arizona State University Tempe, Arizona 85281

Deadline: 15 March 1978. Appointment begins 15 August 1978. Arizona State University is an Equal Opportunity/Affirmative Action Employer.

ENVIRONMENTAL STUDIES DARTMOUTH COLLEGE

Two individuals with interest and experience in teaching and research in environmental studies are sought. We are seeking one person with a strong dis-ciplinary base in the humanities and one with a base ciplinary base in the humanities and one with a base in one of the natural sciences. Candidates must have the ability to work with colleagues from other dis-ciplines in teaching and research on environmental problems. Both appointments would be initially for 3 years at the assistant professor level and would be joint appointments between the Environmental Studies Program and departments in the Humanities and Science Divisions of Dartmouth College. Can-didates would be avageded to teach undependent and science Divisions of Dartmouth College. Can-didates would be expected to teach undergraduate students and carry out a program of creative work. A well-equipped Environmental Measurements Lab-oratory is available with GC/MS and related instru-mentative Application check and under the distrumentation. Applicants should submit their curricu-lum vitae, lists of publications, and names of three references to: Dr. James F. Hornig, Chairman, Envi-ronmental Studies Program, Dartmouth College, Hanover, N.H. 03755. An Equal Opportunity/Affir-mative Action Employer.

POSITIONS OPEN

PACIFIC STUDIES PROGRAM UNIVERSITY OF HAWAII, MANOA

DIRECTOR AND ASSOCIATE PROFESSOR. Position is half-time on an 11-month basis, commencing approximately 1 July 1978. It involves program administration, including a Pacific Islands Studies Center; chairmanship of the graduate program and the offering of a graduate seminar; and research coordination. Applicants should possess a Ph.D. degree and academic experience sufficient to qualify for associate rank, including a record of research concerned with the Pacific area (Pacific Islands, Australia, and New Zealand). A disciplinary focus within the social sciences and with additional experience in the humanities and natural sciences is desirable. Applications, including a résumé and list of references, should be sent to: Professor C. S. Ramage, Department of Meteorology, University of Hawaii, 2525 Correa Road, Honolulu, Hawaii 96822. Application deadline is 31 March 1978. **DIRECTOR AND ASSOCIATE PROFESSOR.** Posi-

An Affirmative Action/Equal Opportunity Employer

ECOLOGY POSTDOCTORALS (TWO)

Positions available immediately for a **physiological plant ecologist** and a **systems ecologist** for integrated studies of grass physiology and modeling of an East African grazing ecosystem where large ungulates are African grazing ecosystem where large ungulates are major herbivores. The physiological ecologist will be responsible for studies of the effects of soil water and foliage clipping on gas exchange, growth, and assimilate distribution in grasses; previous experi-ence with IRGA, radioisotopes, or root growth physiology is desirable. The systems ecologist will be responsible for developing a grazing ecosystem model; some knowledge of Box's statistical methods for defining response surfaces is desirable. Starting salaries are \$12,000 annually; continuation beyond 1 year is contingent upon mutual consert. Send cursataries are \$12,000 annual?; continuation beyond 1 year is contingent upon mutual consent. Send cur-riculum vitae and three letters of evaluation to: Pro-fessor S. J. McNaughton, Biological Research Labo-ratories, 130 College Place, Syracuse, New York 13210 by 15 April 1978. Syracuse University is an Equal Opportunity/Affirmative Action Employer.

PHARMACOLOGY (GI)

Expanding U.S. subsidiary of major worldwide pharmaceutical firm seeks experienced (2-5 vears) laboratory assistant to join Gastrointestinal research program.

Should have sound academic training (B.S. or M.S.) in life science, and demonstrated initiative and skill in laboratory investipations. Solid foundation in organic/medicinal chemistry as a supplement will proven an advantage.

Research program undergoing \$28 million expansion doubling laboratories at suburban location. Compensation and benefits compare favorably in American drug industry.

Please write, indicating salary expected, also your plans regarding the FASEB meetings in Atlantic City in early April.



ICI

ICI Americas Inc. Wilmington, Delaware 19897 An Equal Opportunity Employer M/F

Florida State University wishes to hire an EXPERI-MENTAL PSYCHOLOGIST for a regular tenure-track position at the level of assistant professor be-ginning September 1978. We would like someone who has an active research program in human visual perception and who will provide a link between existing faculty strengths in the physiological bases of vision and in human memory. Teaching duties will include undergraduate and graduate courses in per-ception and human information processing. Nomi-nations and applications are invited. Include curricu-lum vitae and, if possible, copies of representative publications. Send to: Dr. Darryl Bruce, Department of Psychology, Florida State University, Tallahassee, Florida 32306. Equal Opportunity/Affirmative Action Employer. Employer

The Department of Biology, Southwest Texas State University, has **THREE FACULTY POSITIONS** open for the fall semester 1978. All are tenure-track positions at assistant professor rank and require Ph.D. degrees. Responsibilities of each position inrh.D. degrees. Responsibilities of each position in-clude undergraduate teaching, graduate teaching, and thesis supervision on the master's degree level, and individual research in the field of specialty. **CELL PHYSIOLOGY.** Teaching includes cell physiology, human physiology, and introductory biology. **PLANT ECOLOGY.** Teaching includes develop-ment of plant ecology courses to strengthen botany ment of plant ecology courses to strengthen botany and wildlife programs and introductory courses in biology and botany. SCIENCE EDUCATION. Re-quires training in practice teacher supervision. Teaching includes general science, earth science, and nature study. Applicants forward curriculum vitae and at least three letters of recommendation prior to 1 April 1978 to: W. C. Young, Chairman, Biology Department, Southwest Texas State Universi-ty, San Marcos, Texas 78666. An Equal Opportunity/ Affirmative Action Employer.

MICROBIOLOGIST. Assistant professor to teach undergraduate virology and general microbiology and to establish an independent research program in some area of microbiology. Ph.D. required; post-doctoral experience preferred. Initial 2-year term ap-pointment. Submit curriculum vitae and names of three referees to: Dr. J. K. Morton, Chairman, De-partment of Biology, University of Waterloo, Water-loo, Ontario, Canada N2L 3G1.

MOLECULAR BIOLOGIST WITH EXPERTISE IN MOLECULAR BIOLOGIST WITH EXPERTISE IN BIOCHEMICAL PHYSIOLOGY. Applications are invited for a regular faculty position at the assistant professor level starting September 1978. Completed Ph.D. required. Teaching responsibilities include ad-vanced courses in molecular biology and biochemi-cal physiology and participation in a cell biology course. Research facilities available include labora-tories well-equipped for structural and phys-icochemical studies of proteins. Please send résumé and arrange to have three letters of recommendation and arrange to have three letters of recommendation sent by 1 April 1978 to: Molecular Biology Search Committee, Department of the Biological Sciences, Smith College, Northampton, Mass. 01063.

NEUROBIOLOGIST

The Department of Physiology is seeking a neu-robiologist at the assistant professor level. Prefer-ence will be given to individuals whose work relates to the function of the central nervous system. The position permits considerable time for research; op-portunities exist for graduate and medical student teaching. teaching.

Please send curriculum vitae, bibliography, and the names and addresses of three references to:

Chairman, Neurobiologist Search Committee Department of Physiology Yale University School of Medicine 333 Cedar Street

New Haven, Conn. 06510

Applications from women and members of minor-ity groups are encouraged. An Equal Opportunity/ Affirmative Action Employer. Applications should be received before 30 March 1978.

PLANT POPULATION GENETICIST. To partici-pate in the Lehman College-New York Botanical Garden Joint Doctoral Program in Plant Biology. Graduate- and undergraduate-level teaching and the development of an individual research program ex-pected. Assistant professor rank with salary up to \$17,630, depending on qualifications and experience. Send résumé to: Dr. Dominick V. Basile, Department of Biological Sciences, Herbert H. Lehman College of the City University of New York, Bronx, New York 10468. An Equal Opportunity/Affirmative Action Employer. Employer

POSITIONS OPEN

PHYSICAL OCEANOGRAPHER

The Department of Oceanography of Texas A & M University solicits applications for an academic faculty position in physical oceanography beginning in the fall semester of 1978. Appointment will be made at the level of assistant professor. Salary will be commensurate with experience. Applicants are invited to submit a curriculum vitae, one-page summary of research interests, and three letters of recommendation to:

> Dr. Worth D. Nowlin, Jr Dr. Worth D. Nowlin, Jr. Department of Oceanography Texas A & M University College Station, Texas 77843 Telephone: 713-845-7211

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

PHYSIOLOGIST—Indiana University School of Medicine. Faculty position in physiology, assistant or associate professor, beginning on or before 1 Sep-tember 1978. Postdoctoral experience desirable. Teach physiology to freshman medical students and establish productive research program. Excellent fa-cilities to support research program. Excellent fa-cilities to support research are available at the Evansville Center. In addition, the center faculty is engaged in collaborative, interdisciplinary research on alcohol and other abused substances and partici-pation in these activities would be encouraged. Send curriculum vitae by 1 April 1978 to: Dr. George D. Guthrie, Associate Director, Evansville Center for Medical Education, 8600 University Boulevard, Evansville, Indiana 47712. An Equal Opportunity/Af-firmative Action Employer. PHYSIOLOGIST-Indiana University School of firmative Action Employer.

POSTDOCTORAL FELLOW

Position open for postdoctoral fellow with extensive experience in protein chemistry and radioactivity work. Experience in protein turnover in vivo or in vitro preferred. The research project is on brain fila-

vitro preferredi. The research project is on bra ment proteins. Contact: Dr. A. Bignami Spinal Cord Injury Research Veterans Administration Hospital Boston, Mass. 02132 Telephone: 617-323-7700, extension 365

POSTDOCTORAL FELLOW interested in carcinogenesis, nuclear proteins, gene expression. Strong background in biochemistry and chemistry desir-able. Please send résumé and references to: Mrs. Luckhardt, Personnel Department, Sloan-Kettering Institute for Cancer Research, 145 Boston Post Road, Rye, New York 10580.

POSTDOCTORAL POSITION

Postdoctoral position available immediately in a Postdoctoral position available immediately in a stimulating and challenging research environment. Participation in ongoing preclinical as well as clinical psychopharmacology research, with particular emphasis on the involvement of cholinergic mechanisms in psychiatric disorders. Experience with GC/MS methodology and enzyme techniques useful. Appointment is for a minimum of 2 years. Salary range: \$11,000 to \$13,000, depending on experience. Please send curriculum vitae and names of three references to: Israel Hanin, Ph.D., Associate Professor of Psychiatry, WPIC, University of Pittsburgh, Pa. 15261. An Equal Opportunity/Affirmative Action Employer. Employer.

POSTDOCTORAL POSITION available immediate-POSTDOCTORAL POSITION available immediate-ly for qualified person with experience in seed-pro-tein biochemistry, or cytogenetics, or root-rot, nematode, or insect resistance in wheat. Annual sti-pend: \$11,880 to \$12,420, depending on experience. Send curriculum vide, transcripts, and references to: Dr. J. G. Waines, Department of Plant Sciences, University of California, Riverside, Calif. 92521.

POSTDOCTORAL POSITION. Available immedi-ately. Cyclic nucleotides, adenylate cyclase, phosphodiesterase in sensory and developmental model system *Phycomyces blakesleeanus*. Experi-ence in similar proteins. Salary \$11,000 per annum. Send curriculum vitae and names of references to: Dr. R. J. Cohen, Department of Biochemistry and Molecular Biology, University of Florida, Gainesville, Florida 32610. Florida 32610.

POSTDOCTORAL POSITION available June/July PUSTDOCTORAL POSITION available June/July 1978 for study of effects of radiation and carcinogens on eukaryotic DNA structure and function. Ph.D. in biochemistry/molecular biology preferred. Send cur-riculum vitae and names of three references to: Dr. E. N. Brewer, Division of Radiation Biology, Depart-ment of Radiology, Case Western Reserve University, Cleveland, Ohio 44106.

POSITIONS OPEN

POSTDOCTORAL POSITIONS: MEMBRANE PRO-**TEIN CHEMISTRY**. Two positions available spring/ summer 1978 in an immunology laboratory involved in plasma membrane isolation and component purifi-cation. Experience with protein or glycoprotein fractionation. Experience with protein of gycoprotein mac-tionation. electrophoretic techniques, and mem-brane proteins is desirable. Send curriculum vitae and names of three references to: Dr. Amiel Cooper, Department of Pathology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, Mass. 02111. An Affirmative Action Employer.

POSTDOCTORAL POSITION MOLECULAR VIROLOGY

A Ph.D. active in biochemical or molecular biologi-cal research with an interest in RNA tumor viruses. Send curriculum vitae and professional references to: Dr. Dan Moore, Department of Microbiology and Immunology, Hahnemann Medical College, 230 North Broad Street, Philadelphia, Pa. 19102. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS in the Division of Nutritional Sciences at Cornell University are avail-able periodically in several aspects of nutritional science and nutritional biochemistry. Interested indi-viduals should inquire as to availability and send curriculum vitae to: M. C. Nesheim, Director, Divi-sion of Nutritional Sciences, Cornell University, Ith-aca, New York 14853. Cornell University is an Equal **Opportunity**/Affirmative Action Employer

POSTDOCTORAL POSITION available for studies on nucleic acid structure and metabolism during meiosis and sporulation in yeast. Strong background in biochemistry and/or cell biology required. See curriculum vitae and names of two references to: Send

Dr. P. T. Magee Department of Microbiology and Public Health Michigan State University East Lansing, Mich. 48824

POSTDOCTORAL POSITIONS available in 1978 for a 2- to 3-year period to study mechanisms of im-munity to infectious diseases and cancer. Applicants should possess a broad appreciation of the homeo-static functions of the immune system. Send curriculum vitae to:

Dr. Robert J. North Director Trudeau Institute, Inc. Saranac Lake, N.Y. 12983

Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION

Biochemistry, immunology; effective 1 July 1978. The Research Guild with biochemical and functional studies of factors produced by mouse tumors which affect macrophages and lymphocytes. Nature of work would inand lymphocytes. Nature of work would in-clude biochemistry, tissue culture, cellular immunology, and in vivo studies to a small degree. Recent Ph.D., with good back-ground in biochemistry preferred. Apply to: Secretary, Immunolobiology Research Cen-ter, University of Wisconsin, 1150 University Avenue, Madison, Wis. 53706. An Affir-mative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Recent Ph.D. in biochemistry to work in the area of Recent Ph.D. in biochemistry to work in the area of protein phosphorylation-dephosphorylation reac-tions in glycogen metabolism. Specific projects in-volve the isolation and characterization of protein phosphatases of liver and skeletal muscle. Available about September 1978. Send curriculum vitae and names of three references to: Dr. E. Y. C. Lee, De-partment of Biochemistry, University of Miami, Box 520875, Miami, Florida 33152.

An Affirmative Action/Equal Opportunity Employer

A POSTGRADUATE RESEARCHER IN OCEAN-A POSTGRADUATE RESEARCHER IN OCEAN-OGRAPHY (\$11,880 to \$14,916) at the Scripps Insti-tution of Oceanography in the following areas: ocean climate dynamics, large-scale ocean variability, or analysis of large data sets. Inquiries and curriculum vitae by 31 March 1978 to: Dr. Warren White, Scripps Institution of Oceanography, A-030, Universi-ty of California, San Diego, La Jolla, Calif. 92093. University of California, San Diego, is an Equal Op-portunity/Affirmative Action Employer.

SCIENCE, VOL. 199

MICHIGAN STATE UNIVERSITY POSTDOCTORAL RESEARCH ASSOCIATES IN ENVIRONMENTAL CARCINOGENESIS

Openings for research associates with strong background in molecular biology, biochemistry, microbiology, or biophysics to study the relationship between DNA repair, mutagenesis, and oncogenic transformation of human cells in culture by physical, chemical, and viral carcinogenic agents. Send application, including curriculum vitae, reprints, and letters of recommendation, to: Dr. V. M. Maher or Dr. J. J. McCormick, Co-Directors, Carcinogenesis Laboratory, COM, Michigan State University, East Lansing, Michigan 4824.

UNIVERSITY OF CALIFORNIA, IRVINE

The Program in Social Ecology invites applications for a **POSTDOCTORAL RESEARCH POSITION** which is contingent on the award of a grant. Candidates must have a Ph.D. in microbiology or in an equivalent field. The research will involve the study of the relationship between bacterial populations in water distribution systems and inhibition of coliform organisms. Knowledge of physical and chemical components of aquatic systems which affect coliform bacteria, and the effect of particulates on bacteria are needed. To ensure consideration, apply be fore 1 April 1978. *The University of California is an Equal Opportunity Employer; minorities and women are encouraged to apply*. Send curriculum vitae and three references to: Dr. B. H. Olson, Program in Social Ecology, University of California, Irvine, Calif. 92717.

RESEARCH ASSOCIATE. Postdoctoral position available to study kinetics and energetics of active Na/K transport, employing electrical, radiotracer, and biochemical methodologies on single cells and tissues. The laboratory is part of an active group concerned with the mechanisms of ion regulation in cells. Send curriculum vitae and names of three references to: Dr. Paul De Weer, Department of Physiology, Washington University School of Medicine, St. Louis, Missouri 63110.

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

PREDOCTORAL RESEARCH TRAINING IN PLATELET BIOCHEMISTRY

A predoctoral position is available from September 1978 for a qualified individual who wishes to receive research training in enzymology with emphasis on platelet biochemistry. Research will lead to the Ph.D. degree in biochemistry, Applicants should have training in chemistry, biochemistry, or biology beyond the B.S. degree (M.S. preferred). Stipend and tuition remission is included. For application materials write before 1 April 1978 to: Dr. J. K. Hoober, Director of Admissions, Department of Biochemistry, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, Pa. 19140. Equal Opportunity/Affirmative Action Employer.

Applications are invited for:

1) PROFESSIONAL RESEARCH ASSOCIATE

Plant physiologist with training and experience in the area of water relations and/or stress physiology. Minimum qualification: Ph.D. Must join project by 15 April 1978. Commencing salary: \$16,498.

 PROFESSIONAL RESEARCH ASSOCIATE
 Plant physiologist with several years of postdoctoral research in the areas of biochemistry and regulation of germination. Commencing salary: \$16,498.

Applications for both positions close on 15 March and should include curriculum vitae, transcripts of marks, and three letters of reference. Send to: Professor G. M. Simpson, Crop Science Department, University of Saskatchewan, Saskatoon, Saskatchewan, Canada S7N 0W0.

RESEARCH ASSOCIATE. Person with biochemical background (M.D./Ph.D.) wanted for Department of Physiology and Biophysics. Please send curriculum vitae and references to: _____T. C. Welbourne

T. C. Welbourne Personnel Department LSU Medical Center P.O. Box 33932 Shreveport, La. 71130 An Equal Opportunity Employer

POSITIONS OPEN

QUANTITATIVE FISH ECOLOGIST

Teaching/research position; Ph.D. required; rank open. Courses include fishery biology, ichthyology, and others in area of interest. Demonstrated ability in securing research funds and interest in Lake Superior research. Salary is dependent on qualifications. Send curriculum vitae and three letters of recommendation to: Dr. Robert C. Stones, Head, Department of Biological Sciences, Michigan 49931. Michigan Technological University is an Equal Opportunity Educational Institution/Equal Opportunity Employer.

RANGE ANIMAL NUTRITIONIST

Faculty position, assistant professor step II-V and assistant range nutritionist step II-V (teaching: research, 50:50), Department of Forestry and Resource Management, College of Natural Resources, University of California, Berkeley, available 1 July 1978. Appointee will be expected to develop a productive research and teaching program within the broad area of range animal nutrition (wildlife and/or livestock) with emphasis on nutrition as a measure of habitat or range quality. Academic background should include Ph.D. in range, wildlife, or animal science and training in range ecology, ruminant animal nutrition, and range management. The appointee will be encouraged to develop his/her research program to include interrelationships of livestock grazing with wildlife and other land management practices, recognizing both his/her own special interests and the needs of the state. Applications (letter, curriculum vitae, college transcripts, and names of three or more references) will be accepted until 1 May 1978 or thereafter until the position is filled. Send materials to: **Professor John W. Menke**

Professor John W. Menke Department of Forestry and Resource Management University of California Berkeley, California 94720

The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are urged to apply.

BIOCHEMIST-ANIMAL METABOLISM

Shell Development's Biological Sciences Research Center needs an experienced biochemist to design and carry out metabolic fate studies in large and small animals, with assistance of veterinary medicine and animal care specialists.

Work involves using isotope-labeled organic compounds—¹⁴C distribution in tissues, overall ¹⁴C balance, and separation and characterization of metabolites. Program includes similar studies on microbial and soil systems.

Candidates should have Ph.D. in biochemistry, physiology, or closely related field. Only those M.S. candidates with significant accomplishments will be considered.

Experience in studies of the type described, and background in pharmacokinetic analysis, will weigh heavily. Expertise in toxicological aspects of metabolic processes and intermediates is also valuable.

Excellent salary progression and benefits program.

¹ Please send résumé to: Manager—Employee Relations, Shell Development Company, Biological Sciences Research Center, P.O. Box 4248, Modesto, California 95352.

> The Shell Companies Shell Oil Co., Shell Chemical Co., Shell Development Co., Shell Pipe Line Corp. An equal opportunity employer. M/F

• Whenever you write us about your member-ship or subscription, please attach a Sci-ence address label to ensure prompt ser-• Mail to: Membership and Subscription Rec-ords, AAAS, 1515 Massachusetts Ave., NW, Washington, D.C. 20005. ATTACH LABEL □ Change of Address: Please provide 6 weeks' notice. Paste an address label from a recent issue in the space provided. Print new ad-HERE dress below. Query: If you have a question, place your address label here and attach this form to your letter. • To join or subscribe: Mail this form with your payment, mark the appropriate boxes, and print your name and address in the space below. (For renewals, attach label.) □ Membership rates (individual only) □ \$31 USA □ \$41 Canada, PUAS □ \$61 Air-surface delivery via Holland □ \$44 Foreign □ Subscriber rates □ \$65 USA □ \$75 Canada, Pl □ \$95 Air-surface delivery via Holland □ \$75 Canada, PUAS □ \$78 Foreign Payment enclosed Bill me later Name Please print Address City State Zip MT03

AAAS Memberships

and Subscriptions

RESEARCH ASSOCIATE: limited to 1 year, possible renewal for an additional 2 years, available im-mediately. Must have Ph.D. or equivalent in food science and technology, microbiology, food tox-icology, nutrition, or other related fields; training and knowledge of food microbiology, food process-ing, and toxicological evaluation of chemical com-pounds using laboratory animals. Responsible for reing, and toxicological evaluation of chemical com-pounds using laboratory animals. Responsible for re-search program to investigate the nutritional effect of Maillard Browning of foods. Reply by 20 March 1978, to: Dr. Tung-Ching Lee, Department of Food Science and Technology, Nutrition and Dietetics, Uni-versity of Rhode Island, Kingston, R.I. 02881. Affir-mative Action/Equal Opportunity Employer.

RESEARCH CHEMISTS

Syva Company, a rapidly growing San Francisco Peninsula medical diagnostics manufacturer, has several openings for experienced professionals. **PROTEIN CHEMISTRY:**

Protein purification and characterization, and pro-tein immunoassay development. B.S. or M.S. in biochemistry, immunochemistry, or related areas and postgraduate work in protein chemistry research re-quired. Devise new immunoassay technology or concepts for macromolecular substances. A Ph.D. in biochemistry of immunology and 2 to 3 years of postdoctoral experience in protein purification and immunochemistry required.

IMMUNOCHEMISTRY:

IMMUNOCHEMISTRY: Immunoassay methods research using a variety of techniques including: gel, ion-exchange, and affinity chromatography, fluorescence spectroscopy, elec-trophoresis, radio-tracer methods, and related tech-niques. M.S. in biochemistry or a B.S. plus related experience required. At least 1 year of additional ex-perience in enzyme chemistry, fluorescence meth-ods, or characterization of proteins desired. OBCANE SYNTHESIS.

ORGANIC SYNTHESIS:

ORGANIC SYNTHESIS: Synthetic and structural modification of organic compounds. B.S. or M.S. in organic chemistry and 1 to 3 years of experience required. Must be experi-enced in handling micro quantities and be familiar with recent spectrophotometric and analytical tech-niques. Experience in protein chemistry, enzymol-ory and immunchoux preferred. ogy and immunology preferred.

Syva Company offers excellent company-paid bene-fits, pleasant surroundings, and is located near Stanford University.

Please send résumé to: Syva Company Employment Office, 3300 Hillview Avenue, Palo Alto, Calif. 94304. Syva is an Equal Opportunity Employer, M/F. SYVA

RESEARCH TRAINING IN SALIVARY SECRETION

Positions are available 1 July 1978 for research Positions are available 1 July 19/8 for research training in the biochemistry, cell-biology, pharma-cology, physiology and/or pathology of salivary se-cretion. Applicants should have Ph.D. or a profes-sional degree (M.D., D.D.S., D.V.M., or equiva-lent) and must be U.S. citizens or have permanent visas. Graduate programs leading to Ph.D. or M.S. are available. Stipends: \$10,000 to \$14,000, depend-ing on experience

are available: Superiors: 510,000 to \$14,000, depending on experience. Send curriculum vitae and statement of research interests to: Dr. Patricia Keller, Department of Oral Biology, University of Washington School of Den-tistry, Seattle, Wash. 98195. University of Washington is an Equal Opportunity Francover.

Employer.

VISITING ONE-YEAR ASSOCIATE/FULL PRO-VISITING ONE-YEAR ASSOCIATE/FULL PRO-FESSOR in experimental analysis of behavior and/or behavioral pharmacology, to serve on temporary ap-pointment for faculty on leave. Offer undergraduate courses and graduate seminars in behavior and be-havioral pharmacology, and work with students on individual projects. Research space, facilities, and support services are available. For information, contact: Dr. Lewis R. Gollub, De-partment of Psychology, University of Maryland, Col-lege Park, Md. 20742. The University of Maryland is an Equal Opportunity/Affirmative Action Employer.

Note change in previously announced position for **VERTEBRATE PALEONTOLOGIST**, University of VERTEBRATE PALEONTOLOGIST, University of Kansas. The 9-month half-time position in systems and ecology will be expanded to 12 months half-time. The Museum of Natural History position re-mains 12 months, half-time, and the combined sala-ries will be \$16,000 to \$18,000. The closing date for applications is extended to 30 March 1978. Apply: Larry Martin, 602 Dyche, University of Kansas, Law-rence, Kan. 66045. Equal Opportunity Employer.

POSITIONS OPEN

The Arab Development Institute in the Socialist People's Libyan Arab Jamahiriya, Tripoli, Libya, announces the availability of positions for highly qualified and experienced specialists in the following areas of research: 1) INDUSTRIAL DEVELOPMENT, and 2) AGRICULTURAL DEVELOPMENT.

All related aspects of scientific, technical, economic, and social development are included.

Appointees are to be assigned to plan and to un-dertake scientific and integrated studies directly dealing with agricultural, industrial, and develop-mental processes in this country. Factors of evaluation include: level of academic

qualification, length and scope of practical experi-ence, and willingness to relocate. Among benefits included are: paid annual leave, travel and medical expenses, and childrens' educa-

tional assistance.

Details relative to salary and related inquiries will be furnished to those whose applications may be considered suitable. Positions for both short-term and regular contractual arrangements may be available

If interested, please apply to either:

Office of the Technical Counselor for Scientific Research Embassy of the Socialist People's nbassy of the Socialist People Libyan Arab Jamahiriya 1118 22 Street, NW Washington, D.C. 20037 or Arab Development Institute Post Office Box 8004 Tripoli, Libya, N. Africa

SOIL SCIENTIST

Anticipated position to begin 1 September 1978 for an assistant professor to teach undergraduates in soil science and introductory environmental science, to conduct research, and to supervise undergraduate research projects in soil science at a satellite campus in Chazy, New York. Ph.D. required. Preference will be given to candidates demonstrating an interest in involving undergraduates in local research projthe involving undergraduates in local research pro-ects in soil profile analysis. Send résumé and three letters of reference by 10 April 1978 to: Dr. James C. Dawson, Director, Institute for Man and Environ-ment, State University of New York, Plattsburgh, N.Y. 12901. Equal Opportunity/Affirmative Action Employer.

PROGRAMS

VIROLOGY—IMMUNOLOGY—PATHOLOGY TRAINING PROGRAM

An NIH-sponsored training program for postdoctoral An NIH-sponsored training program for postdoctoral fellows in virology, immunology, and pathology of nervous system diseases is available at the Neurol-ogy Research Laboratory, Veterans Administration Hospital, San Francisco, California 94121. Interested individuals should contact: Dr. J. Richard Baringer or Dr. Kenneth P. Johnson at 415-752-0223.

DOCTORAL PROGRAM IN MOLECULAR AND CELLULAR BIOLOGY AND PATHOBIOLOGY

Interdisciplinary program leading to Ph.D. degree seeks qualified candidates interested in fundamental molecular and cellular biology and its application to disease states in man. Research training is available in a broad range of basic and clinical disciplines. Stipends are available on a competitive basis. Con-Superiors are available on a competitive obsise. Con-tact: Graduate Training Director, Program in Molec-ular and Cellular Biology and Pathobiology, Dean's Office, College of Graduate Studies, Medical Universi-ty of South Carolina, Charleston, South Carolina 29403.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP IN HUMAN BIOCHEMICAL GENETICS. Available for Ph.D. or M.D. with strong laboratory interest to study human lysosomal storage distribution and inborn errors of steroid metabolism. Experience in enzymology, stesteroid metabolism. Experience in enzymology, ste-roid chemistry, or cell culture technique is desirable. Applicants should respond with curriculum vitae by 15 March to: Larry J. Shapiro, M.D., University of California, Los Angeles-Harbor General Hospital, Division of Medical Genetics, 1000 West Carson Street, Torrance, Calif. 90509. Equal Opportunity/ Affirmative Action Employer.

FELLOWSHIPS

POSTDOCTORAL POSITION

Postdoctoral **fellowship** available 1 July 1978 in clinical laboratory immunology at North Carolina Memorial Hospital. Applicant should have Ph.D. or M.D. degree with strong background in immunology and an interest in clinical immunology. The purpose of the program is to train individuals to develop and of the program is to train individuals to develop and run clinical immunology laboratories. In addition to receiving training in serology, immunochemistry, cellular immunology, immunohematology, and ra-dioimmunoassay, participating fellows will be en-couraged to pursue research in any of the above areas. Interested applicants should send curriculum vitae and two letters of reference to: Co-ordinator, Clinical Laboratory Immunology Program, Clinical Microbiology Laboratories, North Carolina Memorial Hospital, University of North Carolina, Chapel Hill, N C 27514 An Faul Opportunity Fundower N.C. 27514. An Equal Opportunity Employed

FELLOWSHIPS available 1 July 1979 at St. Jude Children's Research Hospital, Memphis, Tenn., for physicians or basic scientists: David A. Karnofsky Fellowship for training beyond postdoctoral level in cancer research, and Leon J. Journey Fellowship for cancer research, and Leon J. Journey Fellowship for postdoctoral training in biomedical research. Areas of training include: biochemistry, hematology-oncol-ogy, immunology, infectious diseases, nutrition and metabolism, pathology, pharmacology, radiology, surgery, and virology. Stipends: \$12,000 to \$18,000. Open to international competition. 1 September 1978 deadline. Write: Medical Director, St. Jude Chil-dren's Research Hospital, P.O. Box 318, Memphis, Tennessee 38101.

COURSES

MARINE BIOLOGICAL LABORATORY (MBL) WOODS HOLE, MASSACHUSETTS

WOODS HOLE, MASSACHUSETTS Will present residential laboratory courses on elec-tron microscopy from 14 to 19 May. Lee Peachey will teach STERECOLOGY, MORPHOMETRY AND OPTICAL ANALYSIS OF ELECTRON MICRO-GRAPHS. Extensive explanation and practice in in-terpreting into the third dimension, extracting quan-titative information, and optically diffracting and fil-tering electron micrographs will highlight this course. Russell Steere will direct FREEZE-ETCH-ING IN ELECTRON MICROSCOPY, 21 to 26 May. Intended for experienced microscopists, this course will emphasize production of freeze-etched replicas and their microscopical interpretation. Denton Freeze-Etch Modules will be used. These programs are limited to 16 participants. Applications and addi-tional information are available from: The Director of Admissions, Marine Biological Laboratory, Woods Hole, Mass. 02543; telephone: 617-548-3705. MBL is an Equal Opportunity Employer.

CALL FOR PAPERS

CALL FOR PAPERS to be presented at and pub-lished in the Proceedings of the Second International Conference on Toxic Dinoffagellate Blooms, 31 Octo-ber to 5 November 1978, Key Biscayne, Florida. Sessions include organisms, environments, toxins, and pharmacology. Data on environments of non-toxic forms will be considered. Abstracts must be received prior to 15 April 1978. Further information and appropriate forms: Carrie Lewis, Bigelow Labo-ratory. West Boothbay Harbor. Maine 04575. ratory, West Boothbay Harbor, Maine 04575.

CALL FOR SAMPLES of motile stages and resting cyst forms of dinoflagellates. Resulting identifica-tions given to those submitting samples and summarized at the Sample Preparation and Identification Workshop at the Second International Conference on Toxic Dinoflagellate Blooms. Collection, preserva-tion, and shipping deadlines/instructions: Carrie Lewis, Bigelow Laboratory, West Boothbay Harbor, Maine 04575.

MARKET PLACE

MINIPIGS

For Use in Biomedical Research

Vita Vet Laboratories Marion, Indiana Telephone: 317-668-8988

SCIENCE, VOL. 199

Diamonds

Besides having a high refractive index diamonds are:

- Uniquely hard
- Highly incompressible
- Chemically inert
- Uniquely transparent (0.23 µm to 1000 µm)
- Uniquely excellent thermal conductors.
- Either dielectric or semi-conductive.

If you have a special need that diamonds can fulfill, we can shape and polish to your specifications from Type Ia, IIa or IIb material. We'd be pleased to hear from you.

M.D. Beals, Mgr., R&D Division

Lazare Kaplan & Sons, Inc.

666 FIFTH AVENUE NEW YORK, N.Y. 10019 (212) 757-5200

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE FOOD AND DRUG ADMINISTRATION (FDA) BUREAU OF FOODS WASHINGTON, D.C.

SCIENTIFIC POSITIONS: Civil Service openings for pathologists with a degree in veterinary medicine and postgraduate train-ing in tissue pathology to fill the position of petition review pathologist.

petition review pathologist. Experience in the practice of pathology is desirable. Principle responsibilities will be the review of scientific data contained in petitions filed for food additive, color addi-tive, investigational new animal drug ap-plications, generally recognized as safe (GRAS) petitions, contaminant data review, and the like. Special emphasis will be on the gross and histopathology findings with pro-curement and review of slides when appro-priate. These activities will consume approx-imately two-thirds of the professional time; one-third will be concerned with participa-tion in the in-house toxicologic-pathology program involving gross necropsies, histoprogram involving gross necropsies, histo-pathology study, and preparation of pathology reports.

Salary range is approximately \$21,883 to \$33,825 (GS-12 and -13) depending upon qualifications.

U.S. CITIZENSHIP REQUIRED Send curriculum vitae or Standard Form 171 (Personal Qualifications Statement), bibliog-raphy, and transcript or listing of college and university courses to:

DHEW/Food and Drug Administration Division of Personnel Management, Room 1825 Koom 1825 Personnel Operations Branch (HFA-410) 200 C Street, SW Washington, D.C. 20204 Attention: E. J. Echols

This is a Civil Service position. FDA/An Equal Opportunity Employer.



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

requires a

SENIOR AQUACULTURE ADVISER

for the Latin American Regional Centre for Aquaculture being established in Pirassununga, State of São Paulo, Brazil.

The incumbent will be responsible for the organization of research teams for implementing systems oriented research on selected production systems and will coordinate the overall research and training activities of the centre.

The incumbent should possess:

University degree in biology, zoology, fisheries science or other related disciplines, preferably to the level of Doctor of Philosophy.

At least 10 years experience in planning and execution of aquaculture research preferably in developing countries.

Applications with detailed Curriculum Vitae, guoting the reference FID 309 should arrive at the following address not later than 31 March 1978.

Personnel Officer Fisheries Department Food and Agriculture Organization Via delle Terme di Caracalla 00100 Rome, Italy

******************************* FACULTY POSITIONS College of Medicine, King Faisal University Dammam, Saudi Arabia

Applications invited from qualified men and women

Biology Chemistry Physics

Anatomy Human Physiology Pathology Epidemiology

Biochemistry Hematology Biostatistics Microbiology Parasitology Pharmacology General Sur Internal Medicine

Community Medicine Doctorate or equivalent degree required. Language of instruction is English. Positions available starting September 1978; interviews scheduled with the dean in the United States and Great Britain early in 1978. Salary ranges (monthly salary in Saudi riyals or ap-

Satary ranges (monthly satary in Satar Hyans or approximate annual equivalent in U.S. dollars)—pro-fessor: SR6,000 to 6,600 or \$20,300 to \$22,300; asso-ciate professor: SR4,800 to 5,800 or \$16,300 to \$19,600; and assistant professor: SR3,600 to 4,600 or \$12,200 to \$15,600.

(M.D. degree commands a higher salary, up to 50 percent if a clinical as well as academic appointment held.)

Free furnished accommodations. Airfare to and from Saudi Arabia once a year plus a 45- to 60-day holiday. No Saudi income tax.

Send complete curriculum vitae plus addresses and telephone numbers of three references to:

Mohammed T. Altorki, M.D., MRCP Dean of the Medical Faculty King Faisal University c/o Saudi Arabian Educational Mission 2223 West Loop South, Suite 400 Houston, Texas 77027 Mohammed T. Altorki, M.D., MRCP Dean of the Medical Faculty King Faisal University P.O. Box 9 Isleworth, Middlesex TW7 4LZ England

Specify dates of teaching appointments and avail-ability.

TITLE OF POSITION. Professional Assistant

QUALIFICATIONS REQUIRED.

Applications are invited from the field of Applications are invited from the field of Reproductive Medicine. The Candidate should have a Ph.D. or equivalent with two or more years of experience in research in steroid and peptide hormone metabolism and action. An especially strong background in biochemistry and an interest in reproductive problems are required.

NATURE OF DUTIES.

1) To study the aromatization of andro-

gens to estrogens in various tissues. 2) To study the metabolism of primary estrogens to catechol estrogens in tissues, including measurement and mechanism of

action.
3) To collaborate in additional studies on puberty, parturition and other similar areas.
4) Supervision of students and junior technical personnel working in these areas.

SALARY OFFERED, ETC.

Salary according to qualifications and ex-perience.

PERSONS TO WHOM INQUIRIES SHOULD BE ADDRESSED.

Dr. F. Naftolin, Department of Obstetrics and Gynecology, Women's Pavilion, Royal Victoria Hospital, McGill University, Montreal, Quebec, Canada.

EFFECTIVE DATE OF APPOINTMENT. Immediately.

CLOSING DATE FOR RECEIPT OF APPLICATIONS. March 31, 1978



Lucky shots? Hah!

Pictures like these you don't get by strolling along whistling a tune and whipping out your camera now and then. Here, for example, is a hint of



what it took to catch that pileated woodpecker tending her brood.

The bittern, freezing on her nest to blend in, was easier. Dick Robinson, our bird man, merely waited the days out until the eggs were about to hatch and her maternal juices suppressed her flight reaction.

Robinson, whose job with us is to tell Canadians how to get more out of their photography, has written a detailed and magnificently illustrated essay which leaves the impression that the way for a birder to understand wild birds and graduate from the numbers game of "life lists" is to photograph them. To follow his ingenious suggestions is most timeconsuming, but they should prove inspiring to both the field biologist and those to whom time is given to be happily consumed. They appear in *The 10th Here's How,* Kodak Publication No. AE-110, available through photo retailers.

The book also contains how-todo-it articles on photographing sports, crystal patterns by polarized light, wildflowers, nature trails, and attractive specimens of humanity in a home studio. Mr. Robinson would prefer you turn your mind to one of those themes if you know you are the type for whom getting your bird pictures could become as important as the subsequent welfare of your feathered subject with its task of perpetuating its own species.



