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, or national origin.

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

Display (Positions Open, Market Place, and so forth): \$145 per 25 millimeters (1 column inch), minimum, per insertion (25 millimeters equals 10 lines of 50 spaces and characters each). Ads over 25 millimeters billed at \$5.80 per millimeter. No charge for use of box number. Rates net. No agency commission for ads under 4 inches. No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all other ads.

Advertising closing is each Wednesday, 3½ weeks before Friday issue date requested. 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 page and larger, to:

Scherago Associates, Inc. 11 West 42nd Street New York, N.Y. 10036 Telephone: 212-736-1858

Blind Ad replies should be addressed as follows

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

POSITIONS WANTED

Administration-Bioscience. Established Ph.D. scientist, endocrinology-biochemistry-chemistry, with excellent publication and grant record, desires op-portunity to use administrative abilities. Politically knowledgeable. Active in scientific society. Fertility control area of special interest. Box 297, SCIENCE.

Ph.D. Biochemistry, Assistant Director of Research; rn.D. biocnemistry, Assistant Director of Research; ambitious, with experience in: allergy, antigens-antibodies, enzymes, lectins, glycoproteins, membranes, solid-phase techniques, radioimmunoassays, project management, budgeting, and personnel. Desires unlimited growth opportunity in industry. Box 298, SCIENCE. 7/29; 8/5

Biochemist. Ph.D. 1970. Experience in lipid metabolism, nucleotide biosynthesis, enzymology, and lipoprotein metabolism. Publications. Seeks stable position in industry, government, or academia. Box 299, 2015) [270, 265]

Biochemist/Nutritionist/Physiologist. D.V.M., Ph.D. (1969); strong in analytical biochemistry; college teaching experience in physiology; research interests in endocrine control of metabolic processes (cyclic nucleotides and protein kinases); several publications, scientific reviewer; seeks academic or research position. Box 300, SCIENCE. 7/29; 8/5

Ph.D. (London) Entomology. PDRF in behavioral ecology, certified tropical agriculture. Several papers, scholarships; presently commercial biological control; seeks high caliber research position anywhere in world, especially the Americas. Box 301, SCIENCE.

M.S. Genetic Counseling. Experience as clinic coordinator, mass screening program, 2 years in research laboratory, data analysis. Seeks position as clinic coordinator/health educator/genetic associate with possible research ventures. Box 302, SCIENCE. X

Microbiologist, Ph.D. 1977. Training in clinical microbiology and bacterial immunology. Teaching experience and several publications. Desires position in hospital, research, or teaching. Greater New York City area only. Box 303, SCIENCE.

Toxicologist. Ph.D. 1969. Industrial (contract laboratory) and academic experience, publications. Desires industrial management position, Northeast. Box 304, SCIENCE.

POSITIONS WANTED

Physiologist, two doctorates, 185 publications, member of 13 national and international scientific soper of 13 national and international scientific so-cieties, strong interests and research activities in neuroendocrinology, neurovisceral controls, food intake control, nutrition, experimental obesity, diur-nal cycles, seeking tenured teaching and/or research position. L. L. Bernardis, 112 Bondcroft, Egg-ertsville, N.Y. 14226.

POSITIONS OPEN

OPPORTUNITY AVAILABLE IN PHILADELPHIA-ANATOMIC SCIENCES

Temple University School of Dentistry, an Equal Opportunity/Affirmative Employer, invites applications for the full-time position of CHAIRPERSON, Department of Anatomic Sciences. Responsibilities include both undergraduate and graduate anatomic science programs. Academic rank and salary are commensurate with responsibility, preparation, and experience. Minority and women candidates are encouraged to apply. Applicants must submit a curriculum vitae and any other pertinent supportive data couraged to apply. Applicants must submit a curriculum vitae and any other pertinent supportive data to: Martin F. Tansy, Ph.D., Chairman of the Search Committee, Temple University School of Dentistry, 3223 North Broad Street, Philadelphia, Pa. 19140, not later than November 1977.

The Institute of Biological Sciences at Oakland University invites applications for the position of ASSISTANT PROFESSOR (January 1978) to conduct research in pharmacology of glaucoma. This is a full-time research position in an institute which is devoted exclusively to ophthalmic research. Applicants must have a doctoral degree in pharmacology, some research experience, and recognition in the field of glaucoma or intraocular fluid dynamics. Preference will be given to a candidate having publicafield of glaucoma or intraocular fluid dynamics. Preference will be given to a candidate having publications in the field and evidence of ability to conduct independent research. Candidates are expected to seek grant support for financing personnel and spring and summer salary. Applications should include a complete résumé, a brief description of the research interest, and names of three references, and be submitted by 1 September 1977. Address application to: Dr. V. Everett Kinsey, Chairman of Search Committee, Institute of Biological Sciences, Oakland University, Rochester, Michigan 48063. An Equal Opportunity Employer.

DEPARTMENT OF ANATOMY, GEORGETOWN UNIVERSITY MEDICAL CENTER

A faculty position is available at the assistant or associate professor level for a scientist with a record of excellence in research and teaching. Preference will excellence in research and teaching. Preference will be given to a candidate with an active and funded research program and the capability of participating in departmental teaching. Send curriculum vitae and names of three references by 1 October 1977 to: Search Committee, Department of Anatomy, Georgetown University Schools of Medicine and Dentistry, Washington, D.C. 20007. An Equal Opportunity Employer

ASSISTANT PROFESSORS: BIOCHEMISTRY

Applications are invited for two assistant profes-Applications are invited for two assistant professors in the Biochemistry Department. Applicants should submit a curriculum vitae, list of publications, names of three references, and brief description of their research interests. Promise of excellence in teaching and research will be stressed. Send applications to: Dr. Guido V. Marinetti, Department of Biochemistry, Box 607, University of Rochester School of Medicine and Dentistry, 601 Elmwood Avenue, Rochester, N.Y. 14642.

An Equal Opportunity Employer, M/F

ASSISTANT PROFESSOR IN CELL AND MOLEC-ULAR BIOLOGY, particularly in one of the following areas: immunology, molecular evolution, membrane biology, molecular biology of DNA. Tenure track position; 2 years or more of postdoctoral experience necessary. Please indicate in which specialty, if any, you wish to be considered. Submit curriculum vitae including bibliography, statement of research interests, teaching background, and names of four referees from whom references may be obtained to: Dr. O. P. Bahl, Chairman, Department of Biological Sciences, 102 Cary Hall, State University of New York at Buffalo, Buffalo, N.Y., 14214. Applications close 15 September. State University of New York at Buffalo is an Equal Opportunity and Affirmative Action Employer. ASSISTANT PROFESSOR IN CELL AND MOLEC-

POSITIONS OPEN

PROFESSOR-BIOLOGICAL ASSISTANT ASSISTANT PROFESSOR-BIOLOGICAL SCIENCES. Position available for September 1977. Responsible for: courses in human anatomy/physiology, medical physiology, and team teaching in general biology. Ph.D. and teaching experience required. Salary dependent upon qualifications. Applications including transcripts, curriculum vitae, and three letters of reference should be sent to: Sister Annette Bower, Mount St. Mary's College, 12001 Chalon Road, Los Angeles, Calif. 90049.

ASSISTANT PROFESSOR-PARASITOLOGY-Microbiology Department seeking person with Ph.D., advanced training in parasitology, preferably with D.V.M. and familiar with current diagnostic technical properties of the pro D. V. M. and tamiliar with current diagnostic techniques in animal parasitic problems. Independent research capabilities; teach professional, undergraduate, and graduate programs. Position open until filled. Apply to: Y. C. Zee, Professor-Chairman, Department of Veterinary Microbiology, University of California, Davis, Calif. 95616. An Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR-PHYSICAL OCEANOGRAPHY

We expect to have a tenure track position become available during the 1977-1978 academic year. Experience and a demonstrated capacity for outstanding research in such areas as dynamics of the upper ocean, ocean currents, geophysical fluid dynamics, shelf circulation and/or estuarine processes are deshelt circulation and/or estuarine processes are desirable. Our new research vessel will provide an excellent facility for developing seagoing programs and a well-equipped geophysical fluid dynamics laboratory is also available. Teaching responsibilities are at the graduate level. Ph.D. in physical sciences or equivalent required. Before 9 September 1977, reply with résumé, including references, to:

Mark Wimbush Chairman of the Search Committee Graduate School of Oceanography UNIVERSITY OF RHODE ISLAND Kingston, R.I. 02881

An Affirmative Action/Equal Opportunity Employer

ASSISTANT RESEARCH ENGINEER, Electronics Research Laboratory, University of California, Berkeley. Temporary full-time position (1 October 1977 to 14 November 1978, possibility of extension contingent upon receipt of additional funding). Current salary \$19,400 per year. Assist in design, construction, and operation of a multiple-mirror plasma containment experiment. Perform experiments to determine plasma containment properties. Design and operate required diagnostics. Perform theoretical and computer calculations as required for experiment design and interpretation of results. Ph.D. and 3 years of experience beyond Ph.D. in both experimental and theoretical plasma physics, including publications in both areas. Computation experience. ASSISTANT RESEARCH ENGINEER, Electronics permental and theoretical plasma physics, including publications in both areas. Computation experience. Send résumés to: Professor A. J. Lichtenberg, Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, Calif. 94720. University of California is an Equal Opportunity/Affirmative Action Employer. Minorities and women urged to apply.

GEORGIA TECH ATMOSPHERIC SCIENCE PROGRAM

Associate or full professor positions are open in the new atmospheric science program being developed in the School of Geophysical Sciences, Georgia Tech. Talented individuals who can be dynamic in both teaching and research are being sought with demonstrated experience and background in one or more of the following areas: aerosol chemistry, aerosol physics, atmospheric modeling, boundary layer meteorology, cloud physics, experimental atmospheric studies, global or mesoscale dynamics, and synoptic meteorology. Send résumé to: D. D. Davis or C. G. Justus, School of Geophysical Sciences, Georgia Institute of Technology, Atlanta, Georgia 30332. Georgia Tech is an Equal Opportunity/Affirmative Action Employer.

ASSOCIATE PROFESSOR-EPIDEMIOLOGY: The University of Minnesota School of Public Health announces the availability of a full-time research and teaching position in its Division of Epidemiology. teaching position in its Division of Epidemiology. Applicants should have teaching and research experience in epidemiology, preferably in cancer. The position will be available in September 1977 on a contract basis. Contact: Leonard M. Schuman, M.D., Director, Division of Epidemiology, 1–117 HSUA, 515 Delaware Street, SE, Minneapolis, Minn. 55455. An Affirmative Action/Equal Opportunity

POSITIONS OPEN

CELLULAR IMMUNOLOGIST: research associate position open immediately for individual with experience using in vitro techniques for studies of cellurience using in vitro techniques for studies of cellu-lar/tumor immunology in mice. Opportunity for Ph.D. or M.D. to establish and operate an in vitro laboratory. Experience with radioisotopes, mixed leukocyte cultures, chromium-release assays, and so forth, essential. Salary open. Send curriculum vitae, selected reprints, and names of three references to: M. M. Bortin, M.D., Director, Winter Research Lab-oratory, Mount Sinai Medical Center, 950 North 12 Street, Milwaukee, Wis. 53233.

CHAIRPERSON/ASSISTANT DEAN-College of Science, The National Technical Institute for the Deaf (NTID) at The Rochester Institute of Technical Institute of Institut Dear (N1ID) at The Rochester Institute of Technology. Manage direct instruction and support services delivered to hearing-impaired students; plan, control, and report for program, budget, and personnel. Ph.D. required in a basic science; prefer physics nel. Ph.D. required in a basic science; prefer physics or biology. Three years of college teaching/professional experience required; experience in administration or deaf education helpful. Must know or be willing to learn manual communication. Send résumé to: Personnel Coordinator-S, NTID, 1 Lomb Memorial Drive, Rochester, N.Y. 14623. NTID is an Equal Opportunity/Affirmative Action Employer.

DEAN OF NATURAL SCIENCE (Search Reopened)

Hampshire College seeks a dean for its School of Natural Science to begin in July 1978. Hampshire, an undergraduate college of 1300 students, opened in 1970, and operates in cooperation with Amherst, Smith, and Mt. Holyoke colleges and the University of Massachusetts. It is committed to effecting change in traditional undergraduate education. Interesting people are invited to submit appropriate information by 15 November 1977 to:

The Natural Science Dean Search Committee Box S Hampshire College Amherst, Massachusetts 01002 An Affirmative Action/Equal Opportunity Employer

DEAN COLLEGE OF ARTS AND SCIENCES

Virginia Polytechnic Institute and State University (VPI & SU) invites applications and/or nominations for the position of Dean of the College of Arts and Sciences. This key executive position carries supervisory responsibility for the conduct of instructional, research, and extension programs in a collegiate unit organized in some 17 departments with approximately 500 faculty and over 5000 undergraduate majors. Graduate programs are conducted at both masters and doctoral levels. State-supported and -sponsored research programs are important eleand -sponsored research programs are important ele-ments in the comprehensive commitment of the fac-

Candidates should have extensive experience in a major institutional setting and should have established a significant record of scholarship and teaching in a relevant discipline. While administrative experience appropriate to the position will obviously be weighed, the capacity to articulate the value of the basic disciplines and the purposes of liberal education will be expecially sought. cation will be especially sought.

Located in Blacksburg, in the attractive mountain setting of southwest Virginia, VPI & SU is the Commonwealth's land-grant university. Organized in seven degree-granting colleges, the university currently enrolls over 19,000 students with an annual budget in excess of \$100 million.

Applications or nominations may be sent to:

Provost John D. Wilson 201 Burruss Hall Virginia Polytechnic Institute and State University Blacksburg, Virginia 24061

Applications should include a current curriculum vitae and the names of at least three persons to whom the Search Committee can turn at the appropriate time for assessments of the candidate's strengths and experience. Confidentiality requirements of the candidate will be strictly observed. Applications will be received through 30 September 1977.

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

CYTOGENETICS LABORATORY DIRECTOR Centralized Laboratory for Prenatal Cytogenetic Diagnosis in New York City

This laboratory is part of a system of services to provide prenatal cytogenetic diagnosis to women in New York City. It is sponsored by the New York State and New York City Departments of Health and administered by the Medical and Health Research Association of New York City, Inc. It will eventually have the capacity to process 4000 amniotic fluid specimens a year for chromosome studies and alpha fetoprotein determination. Specimens will be referred to it by medical centers and other facilbe referred to it by medical centers and other facilities meeting standards for quality of amniocentesis and related services.

The laboratory director will be responsible for the operation of the laboratory, including the supervision of a staff of 25, and for the coordination and quality control of amniocentesis and related services. This person will also have an opportunity to develop a research program relevant to the aims of the project and to hold a medical school appointment in New York City.

Applicants must have an M.D. or a Ph.D., and at least 4 years of experience in cytogenetics, including 2 years of amniotic fluid cell culture, and they should feel comfortable in handling the administration of the referral system.

Those interested should send inquiries and curricu-Those interested should send inquiries and curriculum vitae to: Coordinator, Centralized Laboratory for Prenatal Cytogenetic Diagnosis, Medical and Health Research Association of New York City, Inc., Room 720, 40 Worth Street, New York, N.Y. 10013. An Equal Opportunity/Affirmative Action Employer. The deadline for submitting applications is 15 September 1977.

CHAIRPERSON, DEPARTMENT OF HORTICULTURE

Established scientist with demonstrated research, Established scientist with demonstrated research, instruction, and/or public service productivity and leadership experience. Applicants must have a Ph.D. and a desire to continue professional activity in addition to administrative responsibility. The chairperson acts as executive officer of the department with responsibilities to the dean, College of Agriculture and Life Sciences, and to the departmental faculty which he/she chairs. The department has 25 faculty members, established graduate and undergraduate instructional programs, a well-developed extension and public service program, and a recognized research program in several phases of recognized research program in several phases of horticulture and plant breeding. Nominations and applications are invited through 15 September 1977. To apply, send a curriculum vitae, list of publications, and at least three letters of recommendation

Robert W. Hougas, Associate Dean Chairperson, Search and Screen Committee 140 Agriculture Hall University of Wisconsin-Madison Madison, Wisconsin 53706

Equal Opportunity/Affirmative Action Employer

CHAIRPERSONS: Departments of Medicine, Surchairpersons: Departments of Medicine, Surgery, Pediatrics, Obstetrics/Gynecology, Psychiatry/Behavioral Sciences, and Family/Community Medicine. Closing date: 30 September 1977. Respond to: Thomas J. Scully, Mp, Associate Dean for Academic Affairs, University of Nevada, Reno, School of Medical Sciences, Reno, Nev. 89557. Telephone: 702-784-6001. Affirmative Action/Equal Opportunity

ECOLOGIST-Assistant professor, Ph.D., to teach ECOLOGIST-Assistant professor, Ph.D., to teach undergraduate ecology course to biology majors and to participate in undergraduate and graduate program. Strong research commitment essential. Prefer physiological or field ecologist, with research interest in animal ecology. Reply with curriculum vita to: Personnel Department, Cleveland State University, 1983 East 24 Street, Box C104, Cleveland, Ohio 44115. An Equal Opportunity/Affirmative Action Employer, M/F.

EM LABORATORY TECHNICIAN

Fully trained and experienced in basic techniques of tissue preparation for TEM. Must be proficient in ultrathin sectioning. Salary from \$10,000 to \$12,000 per year, depending on qualifications. Write Dr. Greta E. Tyson, Head, Electron Microscope Center, Drawer EM, Mississippi State University, Mississippi State, Miss. 34762.

Mississippi State University is an Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

CHAIRPERSON-BIOLOGY

Applications are invited for the position of chairperson of the Department of Biological Sciences, Wichita State University. The university is located in a metropolitan area of nearly 400,000 people and enrolls more than 15,000 students. The department, with 16 full-time faculty, is housed in a new building and offers the B.A., B.S., and M.S. degrees. There are approximately 210 majors and 36 graduate students

Candidates should have the Ph.D., experience in university teaching, a strong record of scholarly achievement, and evidence of or potential for academic and administrative leadership. Rank and salary will be commensurate with qualifications.

Send letter of interest, curriculum vitae, and names of at least three references by 16 September 1977 to:

Chairperson, Selection Committee Department of Biological Sciences Wichita State University Wichita, Kansas 67208

Wichita State University is an Affirmative Action Employer and operates under affirmative action pol-icy. Applications from minority persons and women are encouraged.

DIRECTOR

The Marine Biological Laboratory, Woods Hole, Mass., invites applications for the position of director or director-president, which will become open on I July 1978. Qualified applicants are invited to submit a curriculum vitae, summary of experience, and at least three references to: Chairman of Search Committee, Marine Biological Laboratory, Woods Hole, Mass. 02543. An Equal Opportunity Employer.

DIRECTOR. Tennessee Water Resources Research Center. Open 1 January 1978. Application letter and curriculum vitae by 31 July 1977 to: Dr. Carl O. Thomas, Chairman, Search Committee, 404 Andy Holt Tower, University of Tennessee, Knoxville, Tennessee 37916. University of Tennessee is an Affirmative Action/Title IX Employer.

EARTH SCIENCES Staff Officer

The Committee on Radioactive Waste Management of the National Academy of Sciences/National Research Council seeks a staff officer with a Ph.D. or equivalent in geology, hydrogeology, geochemistry, geophysics, or geological engineering, with experience in fields related to radioactive waste management (such as radiobiology, nuclear technology, and so forth), and demonstrated competence in writing and editing technical English. Send résumé to: ing and editing technical English. Send résumé to: Dr. John H. Pomeroy, NAS/NRC, 2101 Constitution Avenue, NW, Washington, D.C. 20418, or telephone: 202-389-6727. An Equal Opportunity Employer.

MARINE GEOLOGY

The Committee on Radioactive Waste Management of the National Academy of Sciences/National Research Council seeks a senior staff officer. The candidate's qualifications should include a Ph.D. or equivalent in marine geology, with experience in fields related to radioactive waste management (such neids related to radioactive waste management (such as ocean engineering, radiobiology, rock mechanics, and so forth), and demonstrated competence in writing and editing technical English. Send résumé to: Dr. John H. Pomeroy, NAS/NRC, 2101 Constitution Avenue, NW, Washington, D.C. 20418, or telephone: 202-389-6582. An Equal Opportunity Employer.

GENETICIST. New position, tenure track. Assistant or associate professor (depending on qualifications). Salary negotiable. Teaching duties include elementary genetics, experimental genetics, and upper level course in the person's specialty. Seeking a person with interest in organismic populations, not theoretical or molecular. Research expected. Ph.D. required. Position may be filled either in September 1977 or January 1978. Send résumé to: Dr. Steele R. Lunt, Box 688, Department of Biology, University of Nebraska at Omaha, Omaha, Nebraska 68101. University of Nebraska at Omaha is an Equal Opportunity Employer.

MASTER GLASSBLOWER for University Science Shop. Must have extensive experience with design, fabrication, and repair of glass, quartz, metal to glass, and vacuum systems of intricate and original nature. Salary range: \$15,700 to \$17,000. Send résumé to: Ralph Barnhard, Science Services, University of Oregon, Eugene, Oregon 97403.

An Affirmative Action/Equal Opportunity Employer

BIOCHEMIST

Postdoctoral Trainee \$10,000 - \$11,500

Lawrence Livermore Laboratory, an applied science R&D laboratory, located in the San Francisco Bay area, offers a postdoctoral trainee assignment under an Institutional National Research Service Award. The individual will receive training and carry out research under the direction of Drs. B. and V. Shore in lipoprotein and apolipoprotein structure and function in normal individuals, subjects with clinically defined hyperlipoproteinemias, and appropriate animal models. Applicants should possess an M.D. or PhD in biochemistry, chemistry, nutrition, cell biology, molecular biology or related science and 0-2 years' relevant postdoctoral experience in fields related to job duties.

Send resume to: Ted Wilson, Employment Division, LAWRENCE LIVERMORE LABORATORY, P.O. Box 808, Dept. SC-077, Livermore, California 94550.

U.S. Citizenship Required



An Equal Opportunity Employer

LAWRENCE LIVERMORE LABORATORY

THE AUSTRALIAN MUSEUM SYDNEY, N.S.W., AUSTRALIA CURATOR/ ASSISTANT CURATOR OF MOLLUSCS DEPARTMENT OF MALACOLOGY

SALARY: CURATOR-A\$15,775 to A\$16,741 range, with progression to A\$17,901 subject to certain conditions. ASSISTANT CURATOR-A\$9,914 to A\$15,085 range.

QUALIFICATIONS: Essential-degree with major in zoology or palaeontology and postgraduate qualifications. Candidates must be able to demonstrate research experience in molluscan taxonomy. Desirable-previous experience in the management of mu-seum collections and a broad working knowledge of molluscan taxonomy and biology is required. Experience with Australian and Indo-Pacific molluscs would be an advantage.

DUTIES: Research on taxonomy of Mollusca; curation of the collections of mollusca; answering public and professional scientific enquiries.

GENERAL: The Australian Museum has a total staff of more than 150 with 12 departments covering all systematic groups of animals plus environmental studies, palaeontology, mineralogy, and anthropology. The scientific staff numbers 55. Field research is emphasised and a wide range of field equipment is

CONDITIONS: Subject to certain conditions, the successful applicant will be eligible for:

- Payment of fares to Sydney,Financial assistance towards cost of removal ex-
- penses, and
 Financial assistance towards initial accommodation expenses.

ENQUIRIES: Further information can be obtained contacting: Dr. W. F. Ponder of the Australian Museum.

APPLICATIONS CLOSE: The Director, The Australian Museum, P.O. Box A285 G.P.O., Sydney, N.S.W. 2001, Australia, at the expiration of two calendar months from the date of publication of this advertisement.

IMAGE PROCESSOR

Sandia Laboratories, a prime Energy Research and Develop-ment Administration contractor, has need for an expert in image processing. The successful applicant will develop a library of image processing codes, instruct in their use, assist in problem structuring, and develop new algorithms. The candidate must have a PhD in Electrical Engineering or Computer Science and at least two years experience in image processing and image enhancement. The ability to work effectively with others is absolutely necessary

Sandia Laboratories is located in Albuquerque, New Mexico, in the beautiful Rio Grande Valley. A stimulating work environment, great climate, and a beautiful city in which to live produce a unique job opportunity.

Please forward resume and salary requirement to:

A. J. Fuller PhD Recruiting Coordinator Division 3531 Sandia Laboratories Albuquerque, NM 87115



An Equal Opportunity Employer Male/Female

Isotope Chemist/ Immunologist

The Diagnostics Division is seeking a research and development scientist to participate in one of the fastest growing and most dynamic divisions of our health care firm

Candidates having the following qualifications are invited to apply. A PhD in biochemistry, immunology or immunochemistry is required. Active work experience in research and/or development of RIA's, enzyme kinetics, antibody production/characterization, and/or fluorescence will be essential. Experience with human clotting factors/platelet systems and industry experience preferred.

We will look for a strong track record of accomplishments in the above areas as indicated by publications, patents, and independent research experience. The person we need will be highly motivated, capable of independent work, and will possess the ability to manage a research project.

ABBOTT IS AN AFFIRMATIVE ACTION EMPLOYER AND WELCOMES APPLICATIONS FROM ALL QUALIFIED SCIENTISTS.

Abbott Laboratories is located in North Chicago, Illinois midway between Chicago and Milwaukee, Wisconsin. Please send resume, publications, references and salary history, in confidence to:



Melissa Brown Corporate Placement

Abbott is an Affirmative Action Employer

Clinical Research **Associate**

Our internationally successful health care corporation is seeking an individual with the following qualifications:

- Ph.D. in one of the BioSciences—ideally from a medical school;
- 2 or more years of clinical research experience involving investigative drugs in the pharmaceutical industry;
- Fluency in a language besides English;
- Outstanding written/oral communications
- Willingness to travel approximately 30% outside of the U.S.

If you have the above qualifications and are interested in joining one of the most progressive and innovative members of the health care community, this opportunity is for you.

We also offer an excellent salary and benefits program and genuine growth potential. Send a detailed resume with salary history, in complete confidence, to:



Brad Herbeck Corporate Placement

Abbott is an Affirmative Action Employer



POSITIONS OPEN

The Department of Physiology at the University of Texas Health Science Center is seeking an ENDO-CRINE PHYSIOLOGIST at the assistant professor, associate professor, or professor level depending on qualifications. The position involves the teaching of endocrine physiology as well as other subject areas to professional students. Individuals with research experience and current research activity in thyroid, experience and current research activity in thyroid, pancreatic hormones, or adrenal cortex preferred. A minimum of 2 years of postdoctoral training or experience required. Please send your curriculum viate to: Dr. Edward J. Masoro, Physiology Department, University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, Texas 78284.

An Affirmative Action/Equal Opportunity Employer

FORENSIC TOXICOLOGY

The Office of the Medical Examiner, County of Cook, is seeking a candidate at the M.S.-Ph.D. lev-Cook, is seeking a candidate at the M.S.-Ph.D. level. Preferred: 3 to 5 years experience in a forensic toxicology laboratory. Position requires extensive background in GC, RIA, spectrofluorometry. Preference given for GC/mass spectrometry experience. Salary commensurate with experience. Individuals interested in the position should send résumé, transcripts, personal statement of research interest, and names of three references by 15 August 1977, to:

Robert J. Stein, M.D.
Chief Medical Examiner
The Morris Fishbein Institute of Forensic Medicine
1828 West Polk Street
Chicago, Illinois 60612

Equal Opportunity/Affirmative Action Employer

HEALTH SERVICES RESEARCH COORDINATOR University of California-Fresno, Calif.

Research associate position, University of California, San Francisco School of Medicine, Fresno-Central San Joaquin Valley Medical Education Program. The program, based in Fresno, encompasses medical student and house-staff clinical training with emphasis on primary care and rural health service. Doctorate degree related to health services research, or M.D.-M.P.H. required.

Responsibilities include: health services research with orientation to rural health service problems in central California; design and evaluation of experi-

central California; design and evaluation of experimental, demonstration models of rural health delivery; evaluation of educational programs; consultation; modest administrative responsibilities; and teaching opportunities.

Apply with curriculum vitae to: David Werdegar, M.D., Associate Dean, Fresno University of California Medical Education Program, 2615 East Clinton Avenue, Fresno, California 93703.

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

INSECT PHYSIOLOGIST

Assistant professor; salary commensurate with experience. Research/teaching, academic year appointment. Available spring 1978. Teaching responsibilities include courses in insect physiology and comparative insect morphology. The candidate will be expected to establish a strong research program in insect physiology and to direct graduate students. Closing date for submission of applications is 31 October or until a suitable candidate is found. Address inquiries or applications to: Dr. Pedro Barbosa, Chairperson, Fernald Hall, University of Massachusetts, Amherst, Mass. 01003. Telephone: 413-545-2283. An Affirmative Action/Equal Opportunity Em-Assistant professor; salary commensurate with exsetts, Amherst, Mass. 01003. Telepnone: 413-343-2283. An Affirmative Action/Equal Opportunity Employer.

LOYOLA UNIVERSITY OF CHICAGO STRITCH SCHOOL OF MEDICINE

NEUROANATOMIST. A position at the assistant/ associate professor level is available in the Department of Anatomy. Applicants should hold the Ph.D. or M.D. degree or expect to receive their degree during 1977. Teaching responsibilities of the position will be primarily concerned with instruction in neuroanatomy to medical students and graduate students. An active independent or collaborative research program is expected and encouraged. Letters of application and curriculum vitae should be sent to:

Dr. Charles C. C. O'Morchoe Professor and Chairman Department of Anatomy Stritch School of Medicine Loyola University of Chicago 2160 South First Avenue Maywood, Illinois 60153

An Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

SYDNEY EYE HOSPITAL DEPARTMENT OF PATHOLOGY

A vacancy exists for a person experienced in processing of biological specimens for electron microscopy and in ultramicrotomy. Experience in biochemistry and histology is desirable. The appointee will be expected to assist with photographic processing of electron micrographs and to undertake assignments related to eye pathology. Salary in accordance with Hospital Employees Medical Technologists (State) Award.

For further information and application please contact: The Director of Personnel Services Department, Sydney Hospital, Macquarie Street, Sydney, N.S.W. 2000, Australia.

POSITION AVAILABLE

The Department of Entomology, Purdue University, is seeking a full-time faculty member at the assistant professor level. Requisite to this position is a the professor level. Requisite to this position is a strong commitment to teaching entomology at both the undergraduate and graduate level. In addition to this primary function, the faculty member will be expected to conduct research and supervise graduate students. This faculty position is for an entomologist students. This faculty position is for an entomologist having research expertise in and ability to interact in the areas of organismal biology, biosystematics, and/or field ecology presently in the department, and have an appreciation for the potential applications of these areas to entomological problems.

Applicants must have attained a Ph.D. and demonstrate a broad background in the entomological

and biological sciences.

Salary is to be commensurate with training and experience. Send detailed résumé including transcripts and three letters of recommendation to:

Eldon E. Ortman
Department of Entomology
Purdue University
West Lafayette, Indiana 47907

Applications will be received until 1 August 1977.

An Equal Opportunity Employer: Purdue University is an Equal Access/Equal Opportunity Employ-

Position open for POSTDOCTORAL FELLOW in biochemistry, trained in HPLC and GC techniques, preferably with background in enzymology and protein sequencing. Rank and salary depending on qualifications and experience. Salary \$12,000 to \$18,000 plus 17 percent fringe benefits. Available 15 September 1977. Send résumé to: Dr. E. M. Gál, Neurobiochemistry Research Laboratories, Department of Psychiatry, The University of Iowa, 500 Newton Road, Iowa City, Iowa 52242. An Equal Opportunity Employer. Only United States citizens or permanent residents may apply.

POSTDOCTORAL POSITION-MUSCLE PHYSI-OLOGY: available immediately for a person with a doctoral degree interested in the study of cardiac muscle contraction at the single-cell level: kinetics of sarcomere shortening and relaxation during a contraction cycle. Strong background in physics, biophysics, or bioengineering desirable. Send curriculum vitae including names of three references to: Dr. Merrill Tarr, Department of Physiology, University of Kansas Medical Center, Kansas City, Kansas 66103. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

An opening for a recent Ph.D. is immediately available in the laboratory of Dr. William Crain to study relationship of DNA sequence organization and chromatin structure. Background in molecular or cellular biology with interest in organization of genetic material and control of gene expression preferred. Send curriculum vitae and request three referees to send references directly to: Personnel Office. Worcester Foundation for Experimental Biology. fice, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545.

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL RESEARCH ASSOCIATE IN BIORHEOLOGY

Position available now for interdisciplinary research Position available now for interdisciplinary research on physicochemical properties of epithelial secretions. Ph.D. in engineering or physical chemistry preferable. Salary dependent on background and experience. Send curriculum vitae and names of three references to: **Dr. Mitchell Litt, Department of Bioengineering/D3, University of Pennsylvania, Philadelphia, Pa. 19104.** An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to study the structure of the anion transport sy tem in the erythrocyte membrane. Experience tem in the erythrocyte memorane. Experience in some aspect of membrane biochemistry is highly desirable. Starting salary is \$10,000. Send curriculum vitae, any reprints of publications, and three letters of reference to: Dr. Philip S. Low, Department of Chemistry, Purdue University, West Lafayette, Ind. 47907. Purdue University is an Equal Opportunity/ Equal Access Institution.

POSTDOCTORAL POSITION available immediately for theoretical research on the conformation, properties, and interactions of polynucleotides. Candidates should have experience with Fortran IV scientific programming. Submit two letters of reference and curriculum vitae to: Professor W. K. Olson, Department of Chemistry, Rutgers University, New Brunswick, N.J. 08903. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Available 1 August 1977 for up to 2 years. The successful applicant will participate in virologic and immunologic studies of human hepatitis viruses. Prefmuniologic studies of numan neparitis viruses. Free-erence will be given to applicant with strong back-ground in basic virology and viral immunology. Teaching obligation optional. Salary: \$13,000 plus fringe benefits. Send curriculum vitae and names of three references to:

Phil Olson Employment Interviewer
Rush-Presbyterian-St. Lukes Medical Center
1725 West Harrison
Room 346 Chicago, Illinois 60612

Affirmative Action/Equal Opportunity Employer, M/F

A POSTDOCTORAL POSITION IN COM-PARATIVE BIOCHEMISTRY is available beginning 1 September 1977 for research in the solubilization and purification of membrane bound enzymes from and purification of membrane bound enzymes from insects. Ph.D. in biochemistry preferred with experience in enzyme purification techniques. Send curriculum vitae and references (two) to: Dr. C. F. Wilkinson, Department of Entomology, Cornell University, Ithaca, N.Y. 14853. Cornell University is committed to an Affirmative Action program to seek applications from women and members of minority groups.

UNIVERSITY OF CALIFORNIA, DAVIS Departments of Pathology and Chemistry Postdoctoral Position

Postdoctoral position associated with the Departments of Pathology and Chemistry is available to study bile pigments for 1 to 2 years. Experience with labeled metabolites, enzyme separations, and assays is desirable. Reply with curriculum vitae and two reference letters by 1 September 1977 to: Dr. Shula G. Blumenthal, Department of Pathology, School of Medicine, University of California, Davis, Calif.

POSTDOCTORAL POSITION IN ENZYMOLOGY/NEUROCHEMISTRY. Ph.D. in biochemistry OGY/NEUROCHEMISTRY. Ph.D. in biochemistry or related field to work on purification and regulatory properties of brain glutamate decarboxylase. Experience in enzyme or protein purification or with enzyme structure or mechanisms is desirable. Studies may include tests of regulatory mechanisms in brain slices or in vivo. Submit curriculum vitae, brief résumé of your research experience, and names of three referees to: Dr. David L. Martin, Division of Biochemistry, Department of Chemistry, University of Maryland, College Park, Maryland 20742.

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

TWO POSTDOCTORAL RESEARCH ASSOCIATES, positions available immediately: one to study regulation of gene expression in yeast, requires Ph.D. and experience in area of microbial genetics, preferably fungal genetics. The other to do nucleic acid sequence work on ribosomes and DNA, requires Ph.D. and experience in area of nucleic acid chemistry or biochemistry. Both positions NIH-funded, 1 to 2 years, in small labs at research-oriented undergraduate college, with opportunity to teach individual advanced research students. Salary about \$11,000 per year. Send résumé and three references to: Doctors C. Goff and M. Santer, Biology Department, Haverford College, Haverford, Pa. 19041. An Equal Opportunity/Affirmative Action Employer.

QUEEN'S FELLOWSHIPS IN MARINE SCIENCE

To commemorate the Royal visit to Australia in 1970, the Australian Government established the Queen's Fellowships Scheme. tablished the Queen's Fellowships Scheme. Under this scheme, up to five fellowships may be awarded each year for full-time research by scientists of exceptional promise and proved capacity for original work. These awards are tenable at an Australian university or approved research institution normally for 2 years. Tenure of a fellowship is expected to commence within 9 months of the announcement of the award.

Queen's QUALIFICATIONS: should have a Ph.D., or equivalent qualifica-tions, or equivalent research or professional experience, in a discipline applicable in marine science such as coastal engineering.

STIPEND: \$15,576 (Australian) per annum, increased to \$16,742 per annum.

ALLOWANCES: Allowances are payable (\$500 per annum), each dependent spouse (\$500 per annum), each dependent child (\$200), superannuation payments (up to 10 percent of stipend), appropriate insurance coverage, and necessary travel expenses.

APPLICATIONS: Persons interested in applying for the above fellowships should ob plying for the above fellowships should obtain application forms and a statement of the conditions of award from: the Secretary, Queen's Fellowships Committee, Department of Science, P.O. Box 449, Woden, A.C.T. 2606, Australia; The Minister (Scientific), Canberra House, 10-16 Maltravers Street, London WCZR 3EH England; or the Counselor (Scientific), Australian Embassy, 1601 Massachusetts Avenue, NW, Washington D.C. 20036. Applications for the next round of awards, which will be announced in Deof awards, which will be announced in December 1977, close at the Canberra address on 22 August 1977.

CSIRO RESEARCH SCIENTIST DIVISION OF MINERAL PHYSICS NORTH RYDE, N.S.W.

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

FIELD: ROCK MAGNETISM.

BACKGROUND: The Division of Mineral Physics, a part of CSIRO Minerals Research Laboratories, contributes to research in geophysical techniques and their application to mineral exploration and exploitation. The division has established a compreploitation. The division has established a comprehensive laboratory for investigating remanent mag-

DUTIES: To collaborate in a study of the magnetic properties of Australian rocks. Current investigations include the application of magnetostratigraphy to the understanding of both regional and selected local geological problems and the application of palaeomagnetism to the study of Archaean-Proterozoic tectonics. Concurrent studies of the fundamental nature of magnetism in rocks will be made.

QUALIFICATIONS: A Ph.D. or equivalent qualifications in geology or physics and demonstrated re-search ability. A thorough knowledge of methods and techniques in rock magnetism/palaeomagnetism is essential.

SALARY: research scientist or senior research scientist: A\$14,012 to A\$20,414 per annum.

TENURE: Fixed term of 3 years.

Applications stating full personal and professional details, the names of at least two referees, and quoting reference number 589/41 should reach:

The Chief Division of Mineral Physics P.O. Box 136 North Ryde, N.S.W. Australia

by 5 August 1977.



SCIENCE APPLICATIONS, INC. (SAI)

Oak Ridge, Tennessee

Staff Scientists—Environmental Research

SAI, a well-established scientific research corporation invites applications for several Ph.D. level positions at its Oak Ridge. Tennessee, office. Generalists with broad. interdisciplinary and quantitative (statistical, modeling and programming) backgrounds are especially encouraged to apply. Selected candidates will work as part of an interdisciplinary research team on environmental aspects of energy related technologies. Positions to be filled are:

Environmental Chemistry and Engineering Marine Ecology Plant/Soil Ecology Water Resources

Salary levels are competitive with the Oak Ridge/Knoxville scientific market and the company offers a liberal fringe benefit package. SAI is an equal opportunity employer. Interested persons should send a curriculum vitae, including a research synopsis, and the names of three references by September 1, 1977 to:

> DR. C. W. CRAVEN, JR. SCIENCE APPLICATIONS, INC. P.O. BOX 843 OAK RIDGE, TENNESSEE 37830 PHONE 615/482-2438

THE INTERNATIONAL LABORATORY FOR RESEARCH ON ANIMAL DISEASES

> P.O. Box 30709, Nairobi, Kenya Telephone: 592244/45/46, Telex: 22040

IL.RAD is recruiting SCIENTIFIC STAFF for employment in 1978. Positions will be available in 1978 for CORE SCIENTISTS, VISITING SCIENTISTS, and POSTDOCTORALS in immunology, cell culture, pathology, and parasitology. Visiting scientist and postdoctoral posts will be open in biochemistry, epidemiology, and clinical medicine. Core and postdoctoral posts will be available in electron microscopy. The individuals appointed to core and visiting scientist positions must be well-established investigators with excellent training and experience in the relevant discipline and must show evidence of past research productivity. In addition, these individuals must be interested in interacting with other staff in multidisciplinary approaches to relevant questions leading to the control of trypanosomiasis and theileriasis. Postdoctoral candidates must have a strong science background in the relevant discipline and must have shown excellent potential and aptitude for research. Salary is based upon the background, training, and experience of the candidate. In addition to salary, ILRAD pays housing, moving expenses, commutation, insurance, retirement, and other perquisites.

Positions will be available in 1978 for a STAFF SCIENTIST, VISITING SCIENTISTS, and POSTDOCTORALS. These positions are open to people with research experience and interests in: basic cell biology, including cell synchronization and division analysis, mutation screening, and cell cloning; molecular biology, including mRNA analysis, cDNA probe analysis, and DNA cloning; and protein chemistry, including antigen isolation and purification and peptide analysis. Experience in protozoology would be advantageous. Salary and overseas benefits will be commensurate with age and experience.

The International Laboratory for Research on Animal Diseases (ILRAD) is a newly established international institute in Nairobi, Kenya, which conducts research on African trypanosomiasis and theileriasis, two vector-borne, hemoparasitic diseases of widespread importance in approximately 50 developing countries. Multidisciplinary research involving immunology, biochemistry, cell culture, pathology, parasitology, ultrastructure, epidemiology, and clinical medicine is being carried out and will be expanded in 1978. The scientific staff is recruited internationally and is composed of corescientists, visiting scientists, and postdoctorals. Core scientists have a pointments for 1 to 2 years and generally are on leave from their home institutions. Postdoctorals are appointed for 2 to 3 years.

ILRAD has a position available immediately for a SENIOR TECHNICIAN IN DIAGNOSTIC SEROLOGY. The individual in this position must be well trained, have 6 to 10 years of experience in a diagnostic laboratory, and be familiar with various serologic techniques including fluorescent antibody, haemagglutination, complement fixation, gel diffusion, and others. The personal provided in the provided in this position must be well trained, have 6 to 10 years of experience in a diagnostic laboratory, and be familiar with various serologic techniques including fluorescent antibody, haemagglutination, complement fixation, gel diffusion, and others. The personal provided in this position must be well trained, have 6 to 10 years of experience in a diagnostic laboratory, and be familiar with various serologic techniques including fluorescent antibody, haemagglutination, complement fixation, gel diffusion, and others. The personal provided in this position must be well trained, have 6 to 10 years of experience in a diagnostic laboratory, and be familiar with various serologic techniques including fluorescent antibody, haemagglutination, complement fixation, gel diffusion, and others. The personal must be well trained, have 6 to 10 years of experien quisites include moving, commutation, insurance, retirement, and others

quisites include moving, commutation, insurance, retirement, and others. ILRAD has SENIOR POSITIONS available in 1977 and 1978 for TECHNICAL STAFF for both short-term (1 or 2 years) and longer-term appointments in biochemistry, immunology, cell culture, and parasitology. Individuals filling these positions must be well trained, with 6 to 10 years experience in the discipline, be capable of supervising the functions of a laboratory, including junior grade staff and have the interest and ability to train junior staff. Positions in immunology are for research in both cellular immunology and in immunoglobulins. One post is for a senior technician in serology for diagnostic work. Openings in cell culture are for individuals with training and experience in the initiation and maintenance of mammalian or insect cell cultures and their use in infectious disease research. Positions are available in parasitology for persons experienced in tick and tsetse fly rearing and research techniques as well as in research relating to trypanosomiasis and theileriasis. Individuals with experience in other hemoparasitic diseases will also be considered. Biochemistry openings are available for persons well versed in techniques involving protein, lipid, and enzyme chemistry. The salary range is \$8,000 to \$15,000 and is dependent upon the training and experience of the candidate. Also included are perquisites for transportation, housing, insurance, and other things.

Interested individuals should submit a synopsis of past research activities, curriculum vitae, publications, and the names of three references who could be contacted on behalf of their candidacy to the **Director**, **ILRAD**, **P.O.** Box 30709, **Nairobi**, **Kenya**. Additional information can be obtained by writing to

のじゅうしゅうしゅうしゅ

POSITIONS OPEN

POSTDOCTORAL POSITION

A position is available immediately for a Ph.D. biochemist in protein chemistry to study the mechanism of inactivation of a specific class of lens proteins during cataract formation. Salary \$11,000 to \$13,000 depending upon qualifications. Curriculum vitae and three references should be sent to: Dr. B. J. Orthwerth, Eye Research Foundation, University of Missouri, 404 Portland Avenue, Columbia, Missouri 65201.

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL RESEARCH ASSOCIATE

Opening available immediately in RNA viral oncology program. Experience or interest in virology, molecular biology, immunology, or genetics preferred. Salary is commensurate with experience and starts at \$11,700. Send curriculum vitae and request two referees to send references to: R. F. Shea, The Jackson Laboratory, Bar Harbor, Maine 04609. An Equal Opportunity Employer.

PROGRAM MANAGER-Special research associate: The University of Texas, Marine Science Institute at Port Aransas, Texas, is seeking highly qualified applicants for program manager of a large multi-university, multidisciplinary marine research program funded by the Bureau of Land Management. Duties include program wide coordination and scheduling funded by the Bureau of Land Management. Duties include program wide coordination and scheduling of field collecting, sample inventory, quality control, data management, program monitoring, financial allocations, and report production. He/she will be assisted by an associate program coordinator, a secretary, and a data manager. A Ph. D. in one of the marine sciences (biology or chemistry) and research and management experience required. Send résumé detailing education and experience to: Dr. O. A. Roels, Director, the University of Texas Marine Science Institute, Port Aransas Marine Laboratory, Port Aransas, Texas 78373. For further information, call 512-749-6757. Equal Opportunity/Affirmative Action Employer. Employer.

PROGRAM MANAGER-ENVIRONMENTAL QUALITY

The National Science Foundation's Office for the International Decade of Ocean Exploration, Division ternational Decade of Ocean Exploration, Division of Ocean Sciences, is seeking qualified applicants for program manager of the Environmental Quality Program. The position is excepted from the competitive civil service and is equivalent to a GS-13 to -15 (\$24,308 to \$43,923 per annum). Applicants should have a Ph.D. in chemical oceanography, plus several years of academic research/graduate teaching experience in chemical oceanography programs. A broad general knowledge of the field, familiarity with the United States oceanographic community, and administrative experience are also required. All applications must be received no later than the closing date of 31 August 1977. Applicants should submit a Personal Qualifications Statement, Standard Form 171, to: the Division of Personnel and Management, 171, to: the Division of Personnel and Management, Attn: Section III, Room 212 (telephone: 202-632-4106), 1800 G Street, NW, Washington, D.C. 20550. An Equal Opportunity Employer.

RESEARCH ASSOCIATE Department of Animal and Poultry Science University of Guelph, Guelph, Ontario, Canada

Availability: 1 September 1977.

Availability: I september 19//.
Duties: this position primarily involves participation in the swine systems management program. Applicants should have a strong background in and knowledge of the North American swine industry. A Ph.D. degree in nutrition, physiology, or animal breeding is required. Appointment is on a 12-month basis with opportunity for continuance for a second year.

year.

Interested persons should send résumé, transcripts, experience, and names of three references to: Dr. R. R. Hacker or Dr. G. H. Bowman, Animal and Poultry Science Department, University of Guelph, Guelph, Ontario, Canada N1G 2W1.

SENIOR SOLAR ENERGY RESEARCH ENGI-NEER to conduct and manage applied research in solar energy, energy conservation, energy storage, and related areas at Desert Research Institute, Energy Systems Laboratory, Boulder City, Nevada, Requires M.S., Ph.D., or equivalent degree in mechanquires M.S., Ph.D., or equivalent degree in mechanical or chemical engineering; substantial experience in solar energy systems highly desirable. Salary: approximately \$18,000. Application deadline: 31 August. Send résumé and three letters of reference to: J. O. Bradley, Personnel Office, Desert Research Institute, University of Nevada System, P.O. Box 60220, Reno, Nevada 89506. Affirmative Action/Equal Operaturity. Employer. portunity Employer.

POSITIONS OPEN



PRESIDENT UNIVERSITY OF OREGON

HEALTH SCIENCES CENTER

The University of Oregon Health Sciences Center is a unit of the Oregon State System of Higher Educa-tion and includes the professional Schools of Den-tistry, Medicine, and Nursing, the University Hospi-tal and Clinics, Crippled Children's Division, and other programs in the health sciences area. A search is under way for a president of the complex who will report to the chancellor of the State System of High-er Education

er Education.

The search committee, appointed by the Board of Higher Education, is seeking candidates to lead the center in the coordinated development of educational, research, and service programs in the health sciences and health care delivery, and who can interact effectively with public and private agencies at the community, state, and national levels.

Nominations and applications with supporting material should be submitted by 1 October to: Dr. Robert C. Neerhout, Chairman, Presidential Search Committee, University of Oregon Health Sciences Center, Portland, Oregon 97201.

An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE IN SOIL-PLANT NUTRIENT RELATIONS

Position in ongoing ecosystem project; directing field research and working with persons developing process-based ecosystem models. Competency in plant nutrient relations, soil chemistry, decomposition, and nutrient release required. Postdoctoral experience and interest in teaching desirable. Availperience and interest in teaching desirable. Available for 3 years. May lead to tenured position. Salary: \$16,000 to \$18,000 for 12 months. Send curriculum vitae, statement of research interests, and three letters of reference to: Chairman, Ecology Program, Department of Biology, San Diego State University, San Diego, Calif. 92182. Closing date is 12 August 1977.

Affirmative Action/Equal Opportunity/ Title IX Employer

RESEARCH ASSOCIATE

A 1- to 2-year appointment for a Ph.D. trained in the biochemistry and physiology of pituitary hormones, including their isolation and assay methodology.

We have an intellectually stimulating environment and well-equipped laboratories. Salary commen-surate with experience and training, and liberal ben-

For immediate consideration send résumé and references to:

> John F. McGough Manager-Personnel Research and Development SANDOZ, Inc. Route 10 East Hanover, New Jersey 07936

RESPIRATORY PHYSIOLOGIST

Applications are invited from candidates with research interest in respiration physiology for an appointment at the rank of assistant professor. Applicants with an M.D. degree are preferred, but suitable candidates with research experience will be considered. Duties include teaching at the undergraduate and postgraduate level and to medical students. Potential for developing and carrying on an independent research programme is also a requirement. Send applications with curriculum vitae and names of three referees to: J. Milic-Emili, M.D., Professor and Chairman, Department of Physiology, 3655 Drummond Street, Montreal, Quebec, Canada H3G 1Y6.

SOMATIC CELL GENETICIST

New staff position available for Ph.D. experienced in chromosome biology, somatic cell hybridization, and cell biology for the Viral Oncology Program. Qualified candidates should send curriculum vitae, list of publications, and names of three references

M. L. Knill, Recruitment
Position No. 721
FREDERICK CANCER RESEARCH CENTER Litton Bionetics, Inc. P.O. Box B Frederick, Md. 21701

An Equal Opportunity Employer, M/F

COURSES

SCANNING ELECTRON MICROSCOPY 15 to 19 August 1977

This course is designed to provide an introduction This course is designed to provide an introduction to scanning electron microscopy. Topics to be covered include: coating techniques, critial point drying, x-ray fluorescence, vacuum techniques, cathode luminescence, photography, and maintenance. Contact: Dr. William Sawyer, Electron Microscopy Laboratory, Department of Physics, Elmhurst College, Elmhurst, Ill. 60126. Telephone: 312-279-4100, ext. 476.

FELLOWSHIPS

MEMBRANE BIOCHEMISTRY AND STRUCTURE. POSTDOCTORAL FELLOWSHIPS (TWO) AVAILABLE. To do biochemical or ultrastructural studies on plasma membranes on differentiated and undifferentiated and normal and transformed cells. Glycoprotein labeling and isolation, membrane enzymes, effects of various agents including hormones on differentiated and undifferentiated cells; interstudies involve TEM, freeze fracture, immuno-cytochemistry, and SEM; experience in all not re-quired. Experience with isolation and antibody production of contractile proteins beneficial. Salary negotiable. Send curriculum vitae and three letters of recommendation to:

Dr. Leo T. Furcht Box 198 Mayo
Department of Laboratory Medicine and Pathology
University of Minnesota Medical School
Minneapolis, Minnesota 55455

RESEARCH FELLOWSHIPS TO SWEDEN AND SWITZERLAND

The Fogarty 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 1978 several research fellowships to qualified United States biomedical scientists. Fellowships are awarded usually for a 12-month period to scientists in a formative stage of research careers, preferably with less than 10 years of postdoctoral experience, for training in basic or clinical areas of biomedical research. Applications must include a complete and explicit plan for the research training and evidence expirit plan for the research training and evidence of acceptance by a training institution and preceptor. Stipend levels depend upon age and experience but range from approximately \$10,000 to \$14,000. Other benefits include travel costs and allowances for dependents.

Applications are processed and initially reviewed by the Fogarty International Center. The deadline for both Swedish and Swiss applications is 1 January 1978. Further information and application materials for either program may be obtained from: The Schol-ars and Fellowships Program Branch, Fogarty Inter-national Center, National Institutes of Health, Bethes-da, Md. 20014.

POSTDOCTORAL FELLOWSHIP: an interdisciplinary group of faculty at the University of Pittsburgh is seeking applicants for a postdoctoral program in psychiatric epidemiology to begin in the fall 1977. Program is based in the Department of Psychiatry (Western Psychiatric Institute and Clinic) of the School of Medicine and coordinated with the Department of Epidemiology at the Graduate School of Public Health. Program emphasizes research training with a particular focus on the epidemiology of affective disorders, children's psychiatric disorders, and environmental correlates of mental illness. Predoctoral fellowships for applicants with masters degrees are also available. Send curriculum vitae and inquiries to: Dr. Evelyn Bromet, Western Psychiatric Institute and Clinic, 3811 O'Hara Street, Pittsburgh, Pa. 15261. An Equal Employment Education Institution, Title IX/Title VI. POSTDOCTORAL FELLOWSHIP: an interdiscipli-

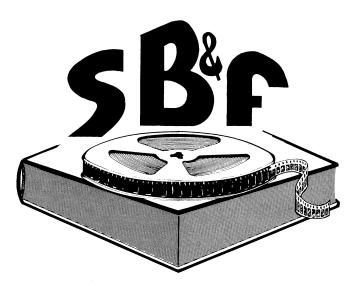
MARKET PLACE

MINIPIGS

For Use in Biomedical Research

Vita Vet Laboratories MARION, INDIANA

do you know about





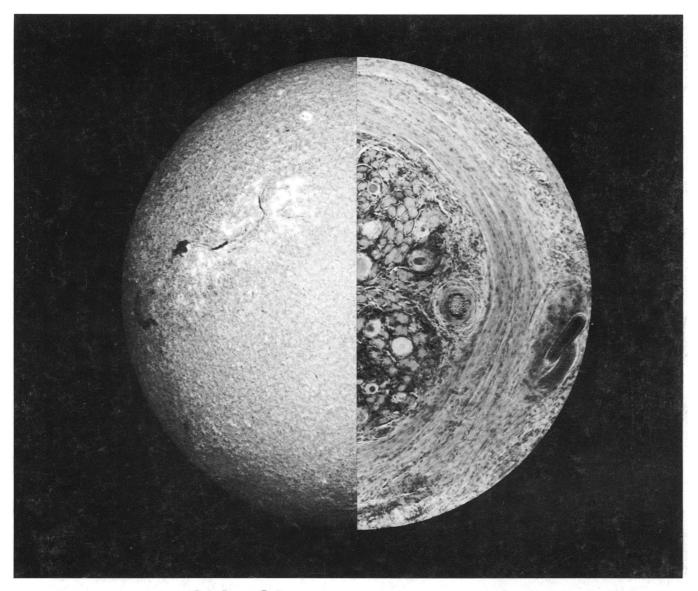
you should... You should, that is, if you're responsible for selecting science books and films for library or classroom use. SB&F is Science Books & Films, a quarterly review journal with the most comprehensive coverage of new science books and 16mm films in the pure and applied sciences, social and behavioral sciences. archeology, science education almost everything, in fact, except religion and literature. Each issue of SB&F presents the professional opinions of scientists, teachers, and librarians in their reviews of new books and films — more than 1,200 each year — for readers and viewers at all levels, from kindergarten through college. Our reviewers examine the hot topics and the staple fare, giving you their opinions on how accurate the science is, how long your audience will stay awake and, when appropriate, how many pairs of 10-year-old hands the binding will survive. Sound interesting? Then try us! Subscribe for a year (or two) and let our reviewers help you select just the right science film for that special class, the most accurate book for that inquisitive reader, or the best additions to your library or collateral reading lists.

Science Books & Films

the quarterly review journal that can save you time and money!

Subscriptions are \$16.00 per year (\$15.00 for AAAS members) or \$28.00 for two years. Contact you subscription agency or write directly to us.

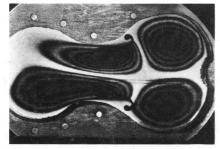
American Association for the Advancement of Science Science Books & Films Subscriptions Department #1 1515 Massachusetts Avenue, N.W. Washington, D.C. 20005



A new Kodak film to improve your view of the cosmos-micro or macro.

For astrophotography or photomicrography—and the worlds between—an improved black-and-white film, Kodak technical pan film (Estar-AH base) SO-115. For those familiar with Kodak solar flare patrol film (Estar-AH base) SO-392 or Kodak photomicrography monochrome film SO-410, this film retains their best features and improves upon them.

Not for portraits, but for just about any technical photorecording situation, you should consider SO-115 film. This versatile film combines these features:
• exceptionally high speed/grain ratio
• extremely high resolving power (320 lines per millimeter) • extremely fine granularity • contrast and maximum density controllable in processing over a wide range (1 to 4) • higher sensitivity in the green spectral region than SO-392/SO-410 film • dyed-gel backing for sup-



Bessel-function fringes from holographic vibration analysis.

pressing both halation and curl.

The improved green sensitivity of this new film is especially useful when you use green filtration for photography through the microscope. With red filtration, exposure times are reduced in the photomicrography of cyan-stained specimens. And its fine grain permits high

magnification at the printing step.

Expanding our view in another direction, the film is highly useful for discerning solar phenomena occurring at green wavelengths as well as at the familiar H-alpha line. It also has valuable application for recording laser wavelengths in the blue, green and red spectral regions, for recording LED displays, plasma displays and more.

SO-115 film is available now in 35 mm format (both 36-exposure and 150-foot rolls) and in 4 x 5-inch sheets.

Rediscover your portion of the cosmos with Kodak technical pan film SO-115. If you'd like more information about the spectral sensitivity and other improvements found in this film,

write to Eastman Kodak Company, Department 412-L-78, 343 State St., Rochester, N.Y. 14650.

