

Announcing the New AAAS Science Cover Calendar for 1980

On July 3, 1880, the first issue of *Science* magazine rolled off the presses.

AAAS is proud to commemorate this 100th anniversary with the publication of our annual $12'' \times 36''$ wall calendar of *Science* covers.

In addition to 14 striking full-color reproductions of covers from *Science* magazine, the calendar provides birth dates of notable contributors to scientific thought; dates for AAAS meetings, symposia and conferences; legal holidays; AAAS membership information; and large blocks for making notations.

Celebrate the *Science* centennial with us by ordering your **1980** *Science* **Cover Calendar** today.

Please send me _____ copy(ies) of the **1980** *Science* **Cover Calendar** at \$3.95 (\$3.25 for AAAS members) per calendar, check or money order enclosed.

Name _____

Address __

City ____

State ____

Calendars will be shipped in November. Please allow 4-6 weeks for delivery. AAAS Calendar, 1515 Massachusetts Avenue, NW, Washington, DC 20005.

_ Zip_

Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year. Advertising closing for a particular Friday issue is Wednesday, 3½ weeks **before**. Advertising is accepted only in writing; no abbreviations. Also, person-nel advertising is accepted only with the understanding that the advertiser does not discriminate among appli-cants on the basis of race, sex, religion, age, color, na-tional origin, or handicap.

POSITIONS WANTED: 40¢ per word, plus \$4 for use of box number, per insertion. \$10 minimum, per in-sertion. Prepayment required. This rate is available only to individuals seeking jobs.

DISPLAY (POSITIONS OPEN, COURSES, FELLOW-SHIPS, MARKET PLACE, and so forth): \$6,40 per milli-meter; \$160 minimum, per insertion (minimum charge covers 25 millimeters on a single column; 25 millime-ters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads less than 103 millimeters (4 inches). No cash discount. Prepayment required for all foreign ads. Purchase or-ders and billing information required for all other adver-tising.

Send copy for all **Positions Wanted** ads and **Display** ads less than 1/6 page in size (125 millimeters) 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. 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., F Washington, D.C. 20005 NW

POSITIONS WANTED

Biochemist/Biochemical Pharmacologist, Ph.D. 1979; 5 years of research experience in enzyme purifica-tion, structure, function relationship, biophysical techniques (ESR and so forth); 4 years of teaching experience. Seeks academic (teaching and/or re-search), postdoctoral position, industrial, research institute position. H. Zeidan, Department of Bio-chemistry, School of Medicine, University of Ha-waii, Honolulu, Hawaii 96826. Telephone: 808-955-4062. X

Biologist/Environmental Scientist. Ph.D. environmental biology, 1978. Experience in limnology, aquatic ecology, invertebrate zoology, water quality monitoring, project management. Teaching experi-ence. Seeks staff position in industry, government, or academia. Box 295, SCIENCE. X

Botanist/Geneticist. M.S. 1973. Seeks academic, in-dustrial, or governmental position with emphasis on research and development. Experience with both field and greenhouse plants and with writing scien-tific articles. Teaching experience. Publications. P.O. Box 3331, Logan, Utah 84321. X

Crop Physiologist, recent Ph.D. (Cambridge), seeks challenging position in growth regulator or plant breeding research. Box 303, SCIENCE. X

Cytogeneticist, M.S. 1979. Experience in cytogenetic Cytogeneticist, M.S. 1979. Experience in cytogenetic analysis of human tumor cells, soft-agar cloning, es-tablishment of human tumor cell lines and chro-mosome damage assay. Seeks position in academic/ industrial/clinical laboratory. Box 304, SCIENCE.

Pharmacologist/Toxicologist. Ph.D. Semi-retired pro-fessor with extensive experience in drug screening, scientific writing, and prepublication editing. Col-lege laboratory facilities available. Desires position as consultant. J.F. Reinhard, 41 Bay View Road, Wellesley, Mass. 02181. Telephone: 617-237-1797 (home); 617-734-6700, extension 154 (office). 11/2, 9

POSITIONS OPEN

AIR POLLUTION-OCCUPATIONAL HEALTH. The Department of Civil Engineering at West Virgin-ia University has a (tenure-track) faculty opening for ia University has a (tenure-track) faculty opening for an individual to direct a teaching and research pro-gram in air pollution and occupational health. Avail-able August 1980. Rank and salary open, commensu-rate with experience. Applicant should have an earned doctorate with background in monitoring and control of contaminants in air and in industrial hy-giene; experience highly desirable. Knowledge of governmental regulations necessary. Area of spe-cialization open; expected to teach both under-graduate and graduate courses. Applicants should submit résumé, statement of research interest, and names of three references to: Dr. Fred W. Beaufait, Chairman, Department of Civil Engineering. West Chairman, Department of Civil Engineering, West Virginia University, Morgantown, W. Va. 26506. Deadline: 31 January 1980. West Virginia University is an Equal Opportunity/Affirmative Action Employer

ANALYTICAL CHEMISTRY UNIVERSITY OF MARYLAND

The Chemistry Department plans to fill a tenure-track position, probably at the assistant professor level, although more senior candidates will be con-sidered. Outstanding applicants in any area of ana-lytical chemistry will be considered. Send curricu-lum vitae with list of publications to: Dr. Glen E. Gordon, Department of Chemistry, University of Maryland, College Park, Md. 20742 by 1 January 1980. The University of Maryland is an Equal Em-ployment Opportunity/Affirmative Action Institu-tion. tion.

ANATOMIST — Assistant professor level, Ph.D. or M.D. with biomedical training and postdoctoral re-search experience who shows evidence of devel-oping active research program. Research area open but some preference given to developmental and cell biology, pulmonary and reproductive biology. New Jersey Medical School has moved to new health sci-ence campus and the department has new facilities with well-equipped laboratories. Salaries are highly competitive. Interested individuals should submit current curriculum vitae before 15 January 1980 to: Dr. A. V. Boccabella, Chairman, Department of Anatomy, College of Medicine and Dentistry of New Jersey—New Jersey Medical School, 100 Bergen Street, Newark, N.J. 07103. Applications from wom-en and minority candidates are encouraged. Equal ANATOMIST-Assistant professor level, Ph.D. or en and minority candidates are encouraged. Equal Opportunity/Affirmative Action Employer.

ANATOMY

Two FACULTY POSITIONS are available in the Dereaction of Anatomy beginning January 1980. Prin-cipal responsibilities include gross anatomy and neu-roanatomy laboratories and histology lecture and laboratory. Applicants must hold the Ph.D. or master's degree in the discipline and have a strong com-mitment to teaching. Research is encouraged and research experience in neuroscience is preferred. Send curriculum vitae and names of three references by 1 December 1979 to:

Pat Thomason, Ph.D. Chairperson of Search Committee Cleveland Chiropractic College 6401 Rockhill Road Kansas City, Missouri 64131

ANIMAL PHYSIOLOGIST. The Department of General Biology at Vanderbilt University invites applications for a tenure-track position as assistant professor, with research and teaching responsibili-ties in the area of animal physiology. Ph.D. or equiv-alent degree required; postdoctoral experience pre-ferred. Send curriculum vitae and three letters of refrerence to: Chairman, Physiology Search Committee, Department of General Biology, Box 1812, Station B, Vanderbilt University, Nashville, Tenn. 37235. Dead-line for receipt of applications 1 February 1980. An Equal Opportunity/Affirmative Action Employer

TENURE-TRACK ASSISTANT PROFESSORSHIP

Candidate should be a specialist in the field of membrane biochemistry or membrane biophysics and should be interested in the teaching of biochem-istry. Applications, including curriculum vitae, bibli-ography, four names of references, and reprints, should be addressed to:

I. S. Edelman, M.D. 1. 5. Ederman, M.D. Chairman, Department of Biochemistry College of Physicians and Surgeons 630 West 168 Street New York, N.Y. 10032

Columbia University is an Equal Opportunity/Af-firmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR, Ph.D. or M.D., at University of Florida's C. V. Whitney Laboratory for Experimental Marine Biology and Medicine. The position is primarily research-oriented; candidates must have established research productivity in cell recognition biology, comparative immunobiology, or related areas of quantitative biology. They must qualify for academic appointment in appropriate university department. Address inquiries to: Richard T. Smith, M.D., Scientific Director, C. V. Whitney Laboratory, Route 1, Box 121, St. Augustine, Florida 32084. The University of Florida is an Equal Opportunity/Affirmative Action Employer. tunity/Affirmative Action Employer.

ASSISTANT PROFESSOR applications are invited for two positions in the Biology Department, avail-able January or September 1980. Teaching responsi-bilities will include: (i) genetics and population ecol-ogy, and (ii) biochemistry and cell biology. Earned doctorate and postdoctoral experience desirable. Applications including curriculum vitae, statement of research interests, and the names of three refer-ences should be sent by 15 November for January consideration or 15 February for September consid-eration to: Dr. J. Green, Chairman, Department of Biology, Roosevelt University, 430 South Michigan Avenue, Chicago, Ill. 60605.

ASSISTANT PROFESSOR: developmental biologist. A tenure-track appointment effective 1 July 1980. Applicant expected to establish a strong research program with preference in the area of comparative program with preference in the area of comparative or developmental endocrinology. Will also consider areas of developmental genetics, morphogenesis, or ontogeny of the immune system. Duties include teaching at the graduate level in the area of specialty and in one of the following undergraduate courses: histology, non-majors biology, or general zoology. Ph.D. required. Send curriculum vitae and names of three references to: Dr. Nathan H. Hart, Department of Zoology, Rutgers University, New Brunswick, New Jersey 08903. Rutgers is an Equal Opportunity/Af-firmative Action Employer. firmative Action Employer.

DEPARTMENT OF ASTRONOMY UNIVERSITY OF MINNESOTA

Applications are invited for a tenure-track assistant professorship available for September 1980. We seek candidates whose research interests will enseek candidates whose research interests will en-hance the current activities of the department. These activities include work in theoretical astrophysics, radio and optical studies of galaxies, galactic struc-ture, optical and UV spectroscopy, radio inter-ferometry, image processing techniques, and in-frared astronomy and instrumentation. Astronomers with interests in optical or infrared research are es-necially encouraged to apply. The department operwith interests in optical or infrared research are es-pecially encouraged to apply. The department oper-ates the O'Brien Observatory and (together with University of California, San Diego) the Mt. Lem-mon Observatory. A multifaceted facility for the ma-nipulation of astronomical data is under develop-ment; it will include the Automated Plate Scanner for image-processing of optical material and a capa-bility for processing data from the VLA radio tele-scope. Candidates are invited to address appli-cations (including curriculum vitae and bibliogra-phy) and to arrange for three letters of reference to be sent to: Professor W. B. Burton, Department of Astronomy, School of Physics and Astronomy, Uni-versity of Minnesota, 116 Church Street, SE, Minne-apolis, Minnesota 55455 before 15 February 1980. The University of Minnesota is an Equal Opportu-nity Educator and Employer.

ASSISTANT PROFESSOR: NEUROPATHOLOGY

The Department of Pathology, New York State College of Veterinary Medicine, Cornell University, Ithaca, New York, is seeking a candidate to join the faculty as assistant professor in neuropathology. The position entails the usual teaching, research and service responsibilities of departmental faculty, with emphasis on diseases of the central nervous system.

emphasis on diseases of the central nervous system. The successful candidate must be experienced in diagnostic pathology and eligible for specialty Board-certification by the American College of Vet-erinary Pathologists. Previous teaching and research activity in the neural sciences is essential. The appointment is available 1 January 1980. Sal-ary is commensurate with background and experi-ence. Application and inquiries should be directed, prior to 1 December 1979, to: Dr. Robert M. Lewis, D.V.M., Chairman, Department of Pathology, New York State College of Veterinary Medicine, Cornell University, Ithaca, New York 14853. Cornell University is an Affirmative Action/Equal Opportunity Employer.

Opportunity Employer.



ASSISTANT PROFESSOR OF BIOCHEMISTRY

Tenure-track position beginning September 1980. Candidates should have Ph.D. and postdoctoral experience in biochemistry or closely related field and should show unusual promise in research and in graduate and undergraduate teaching. Send résumé, bibliography, an account of research plans, and the names of three references to: David J. Cox, Head, Department of Biochemistry, Kansas State University, Manhattan, Kansas 66506. Applications should be complete by 15 December 1979. Kansas State University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOPHYSICS DEPARTMENT OF BIOPHYSICS AND MEDICAL PHYSICS UNIVERSITY OF CALIFORNIA, BERKELEY

Pending final budgetary approval, an opening at this level will be available beginning 1 July 1980. Applicants should hold the Ph.D. degree, have a strong background in the physical sciences, have a cquired a thorough knowledge of the relevant biology, and be engaged in research in basic processes of neural structure and function, transduction or transmission processes fundamental to a neurological process, integrative aspects of neurobiology, or a related field. Preference will be given to those applicants having teaching and postdoctoral research experience. This appointment is full-time and tenure-track, with duties including: teaching at the undergraduate and graduate levels, research in the field of neurobiophysics, and supervision of graduate thesis research in this area. Applications including a letter specifying qualifications and research interests, curriculum vitae, a list of publications, reprints, and the names of four persons whom we may contact for letters of evaluation should be sent to: Professor Alan Bearden, Chairman, Department of Biophysics and Medical Physics, University of California, Berkeley, California 94720. The closing date for receipt of applications is 2 January 1980. The University of California is an Affirmative Action Employer.

ASSISTANT PROFESSOR—COMMUNITY ECOL-OGY. Fall 1980. Tenure-track. Conduct research, advise graduate students, teach graduate and undergraduate courses. Biostatistics expertise and postdoctoral experience desirable. Ph.D. required. Send résumé, three letters of reference, transcripts, and research plan by 15 January 1980 to: Dr. Stephen Vessey, Biological Sciences, Bowling Green State University, Bowling Green, Ohio 43403. An Affirmative Action/Equal Opportunity Employer.

The DEPARTMENT OF PHYSIOLOGY has an opening for an ASSISTANT PROFESSOR who will participate in teaching of medical students and add research strength to a program concerned with neurobiology of the gastrointestinal tract. The position requires a Ph.D., M.D., or equivalent degree and a minimum of 2 years of postdoctoral experience. We desire someone with research experience in epithelial transport mechanisms and with an interest in neuro-humoral regulation of transepithelial transport in the gastrointestinal tract. Teaching competency in renal and gastrointestinal physiology. Send curriculum vitae and arrange for three letters of recommendation to be sent to: Chairman, Physiology School of Medical Sciences, University of Nevada, Reno, is an Equal Opportunity/Affirmative Action Employer. Deadline for receipt of applications is 1 December 1979.

2 NOVEMBER 1979

ASSISTANT PROFESSOR CELLULAR NEUROPHYSIOLOGY

The Department of Physiology and Biophysics at The University of Iowa College of Medicine invites applications for tenure-track appointment at the assistant professor level. Applicants must have the Ph.D. and/or M.D. degree and two or more years of postdoctoral training, with a record of productivity in original research. Candidates should be prepared to conduct a strong, independent research program in vertebrate, preferably mammalian, neurophysiology, with focus on regulatory mechanisms at the cellular level. Departmental interests include, but are not limited to, neurotransmitter and neuropeptide cell biology, neuroendocrinology, regulation of brain development, electrophysiology of excitable cells, and properties of CNS cells in culture. Applicants should also be prepared to take an active part in the medical and graduate teaching activities of the department. Please send curriculum vitae and a brief description of research interests, teaching experience, and career objectives, with names of at least three references, to: Dr. Robert E. Fellows, Department of Physiology and Biophysics, The University of Iowa College of Medicine, Iowa City, Iowa 5224. The University of Iowa is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF PHYSIOLOGY—The Department of Physiology, New Jersey Medical School, has two openings for an assistant professor who will participate in and strengthen the departmental teaching and research programs. He or she will be expected to teach in courses for medical, dental, and graduate students, develop a research program, attract graduate students and posidoctoral fellows, and interact with and complement the current research programs in the department. Candidates should have a minimum of 2 years of postdoctoral experience. We are specifically interested in individuals with expertise in excitation-contraction coupling of skeletal, cardiac, or smooth muscle, or membrane transport of excitable membranes. Please send curriculum vitae, bibliography, and three letters of recommendation to: Chairman, Department of Physiology, College of Medicine and Dentistry of New Jersey-New Jersey Medical School, 100 Bergen Street, Newark, New Jersey 07103. Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

ASSOCIATE PROFESSOR OF MICROBIOLOGY

Applications are invited for a tenured position in the Department of Microbiology, Vanderbilt University School of Medicine. Candidates should have a strong background in tumor immunology and virology. Candidates must demonstrate clear evidence of past research productivity and of a promising research program. Applications should consist of curriculum vitae, a brief description of research goals, and the names of three or four references. Send applications to: Dr. Albert S. Kaplan, Chairman, Department of Microbiology, Vanderbilt University School of Medicine, Nashville, Tenn. 37232. An Equal Opportunity/Affirmative Action Employer

ASSOCIATE PROFESSOR/ PROFESSOR OF ANATOMY

Must have a good research record and an ongoing research program. Experience in teaching neuroanatomy required. Send curriculum vitae to: Dr. R. G. Hibbs, Department of Anatomy, Louisiana State University School of Medicine, P.O. Box 33932, Shreveport, La. 71130.

An Equal Opportunity Employer

POSITIONS OPEN

ASSISTANT PROFESSOR OF PLANT BIOLOGY

A well-equipped modern Department of Biological Sciences located outside Baltimore is seeking a plant biologist with postdoctoral experience, who has demonstrated an ability to initiate a vigorous research program and has a commitment to quality graduate and undergraduate teaching. Candidates should have a strong background in physiology and/ or biochemistry of plant systems, specializing in areas such as morphogenesis, tissue culture, plant hormones, water relations, algology, or virology. Submit curriculum vitae, bibliography, names of suggested referees, and a description of research interests to: Dr. Thomas F. Roth, Chairman, Faculty Search Committee, Department of Biological Sciences, University of Maryland Baltimore County, Catonsville, Maryland 21228. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR, WILDLIFE MANAGE-MENT. Tenure-track. Teaching and research. Closing date for applications: 1 February 1980. Contact: Dr. J. W. Caslick, Chairman, Search Committee, Department of Natural Resources, New York State College of Agriculture and Life Sciences, Cornell University, Ithaca, New York 14853. Cornell University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT RESEARCH PHYSICIST

There is an opening in the Department of Physics, University of California, Irvine, for an assistant research physicist with background in the theory of electron/surface interactions, surface response, and the theory of energy transfer processes in condensed matter. Applications from all qualified candidates are welcome; women and members of minority groups are encouraged to apply. Send résumé to: Professor D. L. Mills, Department of Physics, University of California, Irvine, California 92717.

The University of Notre Dame, Department of Microbiology, invites applications and nominations for the position of ASSOCIATE PROFESSOR OF MI-CROBIOLOGY, with special competence in immunology. We wish to fill this position by August 1980. Applicants should have demonstrated aptitude to develop independent research programs. They should have experience in teaching immunology at the undergraduate and graduate levels. Send curriculum vitae, bibliography, and three reference names and addresses to: Dr. Morris Pollard, Department of Microbiology, University of Notre Dame, Notre Dame, Indiana 46556. The University of Notre Dame is an Equal Opportunity/Affirmative Action Employer.

BIOCHEMIST RESEARCH POSITION

RESEARCH POSITION The Biology Division at Oak Ridge National Laboratory has an immediate opening for an individual to assist in conducting an interdisciplinary research program on the biologic effects of aerosol exposures in an inhalation facility. Responsibilities may include assessing alterations in pulmonary biochemistry, susceptibility to infection, and animal behavior. A Ph.D. in biochemistry or toxicology is required. Postdoctoral experience preferable. Send résumé and three letters of reference to: M. Douglas Fore, Ph.D. Box X, Oak Ridge, Tennessee 37830. An Equal Opportunity Employer.

BIOCHEMISTS AND ANALYTICAL BIOCHEM-ISTS with a Ph.D. or M.S. degree are invited to apply for several research associate positions in the area of protein research and development at Genentech, Inc. These positions require investigators with a drive and imagination to carry out a successful research program with minimal supervision. Previous research experience is highly desirable. Genentech is a rapidly growing, research-oriented company ideally located on the San Francisco peninsula. We offer a stimulating working environment with competitive salaries and extensive fringe benefits. Please send a résumé and list of three references to: Dr. Michael J. Ross, GENENTECH, INC., 460 Point San Bruno Boulevard, South San Francisco, Calif. 94080.

POSTDOCTORAL POSITIONS available for spring 1980, in protein research topics related to problems in expression of foreign genes in *E. coli*. Positions are for 1 to 2 years at a starting salary of \$15,000 to \$16,000 per year. Genentech strongly encourages their scientific staff to publish. Send curriculum vitae, a brief description of research experience and interests, and names of three references to: Dr. Ronald Wetzel, GENENTECH, INC., 460 Point San Bruno Boulevard, South San Francisco, Calif. 94080.

CELL BIOLOGIST/BIOCHEMIST

Active research group using cell culture model systems to study mechanisms of hydrocarbon car-cinogenesis and the effects of tumor promoters on cell differentiation has two openings for postdoctoral fellows and associate scientists. Strong research background with experience in cell biology, bio-chemistry and/or chemical carcinogenesis in vitro is required.

required. Please send curriculum vitae with names of three references to: Dr. Leila Diamond or Dr. Giovanni Rovera, Wistar Institute of Anatomy and Biology, 36th Street at Spruce, Philadelphia, Pa. 19104.

CHAIRMAN, DEPARTMENT OF PEDIATRICS THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

The University of Michigan Medical School is seeking an outstanding academic physician to as-sume the chair of its Department of Pediatrics. Qualifications:

M.D. degree; Board-certification in pediatrics,
Experience in academic medical program admin-

istration, and 3) Established reputation in biomedical research. Respond to:

Dr. Robert E. Reed Member, Search Committee M7320A Medical Science I The University of Michigan Ann Arbor, Michigan 48109

A nondiscriminatory, Affirmative Action Employ er. Code 100BH.

DEAN SCHOOL OF MEDICINE

Because of the rapid expansion of health-related academic programs in a vigorous young university, it has become necessary to divide the responsibili-ties of the present Vice President for Health Affairs/ thes of the present Vice President for Health Affairs) Dean, School of Medicine, to achieve the total de-velopmental potential of the university and its com-ponent programs, effective 1 July 1980, or sooner. The School of Medicine has enrolled 100 students (design size) in its fourth class and is fully operational in a decentralized community-based mode.

The dean is the major academic and administra-tive officer of the School of Medicine and, as such, must have prior experience as a dean or associate dean of a school of medicine or equivalent major addean of a school of medicine of equivalent major ad-ministrative experience in an academic health cen-ter. Familiarity with the university environment, ap-propriate faculty experience, the M.D. degree, and demonstrated management, planning, and budget-ary/fiscal experience are needed. A large number of clinical affiliations have been developed, as well as programs in graduate medical education. The posi-tion demads a philosophical commitment to a comprograms in graduate medical education. The posi-tion demands a philosophical commitment to a com-munity-based medical educational program, and a willingness to participate in, and work closely with, the practicing medical community. A letter of appli-cation, including curriculum vitae and the names of three references, should be sent to: John R. Beljan, M.D., Vice President for Health Affairs, Deaton, School of Medicine, Wright State University Deaton. Obla of Medicine, Wright State University, Dayton, Ohio 45435. Closing date for applications or nominations is 30 November 1979. Wright State University is an Equal Opportunity Employer.

DIRECTOR FOR ALLIED HEALTH PROGRAMS

The director for allied health programs will be a major associate of the vice president for health af-fairs and will have primary responsibility for allied health programs in a growing major university. The director must have prior experience in a major ad-ministrative position in an academic health center, familiarity with a university environment, a terminal degree and faculty member experience in a record familiarity with a university environment, a terminal degree, and faculty member experience in a recog-nized health profession. Appropriate planning, man-agement, budgetary and fiscal experience, including new program development, is expected. The newly created administrative unit for health affairs at Wright State University includes an existing medical school, a new School of Professional Psychology, and other major health-related entities. A large num-ber of important clinical affiliations have been devel-oped. A letter of application, including curriculum vitae and the names of three references, should be sent to: John R. Beljan, M.D., Vice President for Health Affairs, Wright State University, Dayton, Ohio 45435. Closing date for applications or nominations is 30 November 1979. Wright State University is an Equal Opportunity Employer. Equal Opportunity Employer.

POSITIONS OPEN

TEXAS A & M UNIVERSITY HARRIS CHAIR IN GEOLOGY

The Department of Geology at Texas A & M University invites applications for a newly endowed professorship. The appointment will be at the distinguished professor level; salary is negotiable. Field of specialization is open; the applicant should be able specialization is open; the applicant should be able to provide vigorous leadership in his or her field of research and teaching. Nominations or applications should be submitted to: Robert J. Stanton, Head, De-partment of Geology, Texas A & M University, Col-lege Station, Texas 77843. Texas A & M University is an Equal Opportunity/ Affirmative Action Employer

Affirmative Action Employer.

DEAN-SCHOOL OF SCIENCE ENGINEERING AND TECHNOLOGY

Chief academic/administrative officer of the school reporting to the Vice President for Academic Af-fairs. The dean assumes responsibilities for lead-ership, supervision, and administration of the school. Periodic teaching will be expected with the assignment. The School of Science, Engineering and Technology includes Departments of Biology, Chemistry, Engineering and Technology, Mathe-matics, and Physics. The college is accredited by the North Central Association.

Desired qualifications include an earned doctorate in one of the above disciplines with prior experience at the higher education level, both in teaching and administration. Academic preparation or experience in both science and engineering-related areas is preferred. Candidates should possess the necessary in-terpersonal skills to effect successful leadership. Send letter of application before 14 January 1980 to:

Dr. Robert Yien Dr. Kobert Yien Chairperson, Search Committee School of Science, Engineering and Technology Saginaw Valley State College 2250 Pierce Road University Center, Mich. 48710

Saginaw Valley State College is an Equal Opportu-nity/Affirmative Action Employer.

DIRECTOR OF POLICY STUDIES AND IMPLE-MENTATION. The Institute of Ecology (TIE) seeks a director for its Policy Studies and Implementation Program. In cooperation with TIE's member institu-Program. In cooperation with TIE's member institu-tions, the director will be expected to develop a re-search program in policy analysis as related to eco-logical issues. Candidates should have a record of effective policy research. Send résumé and three letters of reference by 15 December to: Dr. Thomas F. Malone, President, The Institute of Ecology, Hol-comb Research Building, Butler University, Indianap-olic Indiane 45208 olis, Indiana 46208.

DIRECTOR DOUGLAS POINT ECOLOGICAL LABORATORY

Charles County Community College has a position of director of the Douglas Point Ecological Labora-tory available 1 January 1980. The position is a year-to-year contract depending on grant funds. Require-ments are: Ph.D. in environmental management or related fields, college administration experience, 3 to 5 years of experience in terrestrial and atmospheric provide a state of the Denart 5 years of experience in terrestrial and atmospheric monitoring, and a working knowledge of the Depart-ment of Energy, Environmental Protection Agency, and the Nuclear Regulatory Commission. Salary: \$28,000 to \$35,000.

Send letter of interest, résumé, transcripts, and three letters of reference to: Charles County Com-munity College, P.O. Box 910, LaPlata, Maryland 20646. Closing date: 20 November 1979.

Equal Opportunity Employer, M/F

ELECTRON MICROSCOPIST

Experience in all facets of electron microscopy, in-cluding fixation, ultramicrotomy with a diamond cluding fixation, ultramicrotomy with a diamond knife, photographic procedures, and instrument op-eration preferred. Research areas will involve the ul-trastructure of green algae (G. L. Floyd) and pollen (T. N. Taylor). B.S. degree in biological sciences or equivalent education and experience. A minimum of 1 year of training and experience in TEM is desir-able. Salary range is \$11,760 to \$14,280 per year. Starting date: 15 January 1980. Curriculum vitae, in-cluding three letters of recommendation, should be sent by 20 December 1979 to: Dr. Gary L. Floyd, Department of Botany, The Ohio State University, 1735 Neil Avenue, Columbus, Ohio 43210 (telephone: 614-422-5703 or 422-3564). An Equal Opportunity/ Affirmative Action Employer. All qualified persons, including women, members of minority groups, and the handicapped, are encouraged to apply. the handicapped, are encouraged to apply.

POSITIONS OPEN

CARDIOVASCULAR PHARMACOLOGIST

Applications are invited for a position in pharmacology at the assistant or associate professor level, starting July 1980. Applicants should be prepared to starting July 1960. Applicants should be prepared to conduct a strong research program in the area of car-diac electrophysiology and to take an active role in the medical and graduate teaching in the depart-ment. Excellent facilities are available in a fully equipped laboratory. The position is funded by the state of New York with a competitive salary scale. Send curriculum vites list of nublications and two state of New York with a competitive salary scale. Send curriculum vitae, list of publications, and two letters of recommendation to: I. M. Weiner, Chair-man, Department of Pharmacology, Upstate Medical Center, Syracuse, N.Y. 13210. Deadline for receipt of applications: 15 January 1980.

An Equal Opportunity/Affirmative Action Employer

EDITORIAL STAFF OF SCIENCE

The American Association for the Advancement of Science (AAAS) is seeking a staff editor for the weekly magazine *Science*. The individual will be responsible for editing reports and articles related to the biological sciences and medicine.

sciences and medicine. Applicants should have excellent English skills, a strong background in biology and chemistry, and a thorough knowledge of publication techniques. Minimum require-ments: a degree in science; 2 years of editing (including rewriting) documents of a scien-tific nature; a high level of accuracy, inter-ect and metivation, and an shillty to meat est, and motivation; and an ability to meet deadlines.

Please send letter of application, résumé. Please send letter of application, resume, salary requirements, and names of three pro-fessional references to: Personnel Office, AAAS, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005.

An Equal Opportunity Employer

Department of Pathology seeks an ELECTRON MICROSCOPIST (M.D. or Ph.D.) to supervise EM facility. Experience with TEM, SEM, and freeze-fracture is essential. Interest in applications of ultrastructural analysis to the study of disease is desir-able. Candidates should write: David Lagunoff, M.D., Department of Pathology, St. Louis University School of Medicine, 1402 South Grand Boulevard, St. Louis, Mo. 63104, and include curriculum vitae with bibliography and two references.

EUKARYOTIC GENETICS/CELL BIOLOGY

EUKARYOTIC GENETICS/CELL BIOLOGY A faculty position in the Department of Pathology for a person with research interests in somatic cell genetics and hybridization, cytogenetics, dif-ferentiation, neoplastic transformation, or cell mem-brane structure and function. A person with re-search experience in immunology or experimental pathology would be of particular interest. Applicants should have demonstrated abilities to pursue an in-dependent research program and participate in the teaching of cell biology and genetics to medical and veterinary students. Send curriculum vitae, bibliog-raphy, references, and a brief synopsis of research plans to: Dr. Henry H. Wortis, Department of Pathol-ogy, Tufts University School of Medicine, 136 Harri-son Avenue, Boston, Mass. 02111. Tufts University is an Equal Opportunity/Affirmative Action Employer. an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS (THREE) IN MICRO-BIOLOGY. The Genetics and Cell Biology Group in the Department of Microbiology, University of Ala-bama in Birmingham, has three vacancies for assist-ant professorships (tenure-track) for individuals with Dama in Birmingnam, nas three vacancies for assist-ant professorships (tenure-track) for individuals with research expertise in one or more of the following areas: microbial physiology and biochemistry, ge-netic and biochemical aspects of pathogenicity of nonviral agents of dental or medical significance, and microbial and molecular genetics. Preference will be given to those who have strong credentials for and commitment to developing an independent research program working with prokaryotic or lower eukaryotic organisms and who have interest and ap-titude for teaching graduate, medical, and dental stu-dents. Positions available during 1980. Salary com-mensurate with experience but not less than \$22,000 for a 12-month appointment. Send letter outlining current and future research interests, curriculum vitae, bibliography, and names and addresses of Microbiology, Box 11 SDB, The Medical Center, The University of Alabama in Birmingham, Birmingham, Ala. 35294. An Equal Opportunity/Affirmative Ac-tion Employer.

FACULTY POSITION IN PHARMACEUTICS

The Department of Pharmaceutics of the University of Nebraska College of Pharmacy is seeking a full-time faculty member beginning 1 January 1980, full-time faculty member beginning 1 January 1980, for a tenure-track position with the rank of assistant or associate professor, depending upon the individ-ual's qualifications. This faculty person will have primary teaching responsibilities in basic pharma-ceutics and will be required to participate actively in the department's graduate and research programs. Salary is negotiable. Candidates should possess an undergraduate de-trea in hormory form on posteriative prime and

gree in pharmacy from an accredited institution and a Ph.D. in the area of pharmaceutics or a related field. Prior teaching experience and/or a clear dem-onstration of research productivity are desired. Elisibility for licensure as a registered pharmacist in the state of Nebraska is desirable. Send a letter of application, curriculum vitae, and

three references to:

Clarence T. Ueda, Ph.D. Department of Pharmaceutics College of Pharmacy University of Nebraska Medical Center 42nd and Dewey Avenue Omaha, Neb. 68105

The University of Nebraska is an Equal Opportu-nity/Affirmative Action Employer.

UNIVERSITY OF PRINCE EDWARD ISLAND FACULTY POSITION DEPARTMENT OF BIOLOGY

Applications are invited for a 5-month term sabbatical-leave replacement position at the assistant professor level for the period 1 January 1980 to 31 May 1980. Teaching duties will consist of lectures and laboratories in cell physiology and animal physiology.

Applicants should have a Ph.D., and teaching ex-perience is preferred. Salary will be according to qualifications, but will be approximately \$10,000. Send curriculum vitae and the names of three references to:

I. G. MacQuarrie, Chairman Li G. Macquarre, Charman Biology Department University of Prince Edward Island Charlottetown, Prince Edward Island Canada C1A 4P3

FACULTY POSITION. Available fall 1980.

The Department of Bacteriology and Public Health at Washington State University invites appli-cations from highly qualified individuals who have cations from highly dualined individuals who have demonstrated research competence in the areas of host-parasite or cell-cell interactions. Emphasis should be placed on cell surface interactions which might include recognition, attachment and/or com-munication events. Applicants must have a Ph.D., strong background in microbiology, and postdoc-toral experience. The successful candidate will be expected to share in the taophing of denot morth course and establish

in the teaching of departmental courses and establish a productive research program. The position is tenure-track at the assistant or associate professor lev-el. Review will begin 1 December 1979. Applicants should submit curriculum vitae, summary of re-search objectives, and names of three references to: K. D. Spence, Search Committee Chairman, Depart-Marker State Community and Public Health, Washington State University, Pullman, Washington 99164. An Equal Opportunity/Affirmative Action Employer, M/ F/H.

STANFORD UNIVERSITY GEOCHEMIST-PETROLOGIST

The Department of Geology in the School of Earth Sciences invites applications for a faculty position beginning September 1980. Areas of interest include (but are not limited to) geochemical processes in the (but are not limited to) geochemical processes in the crust and mantle of the earth including isotope geo-chemistry, thermodynamics, kinetics, element dis-tribution and phase equilibria studies. Teaching re-sponsibilities might include graduate and under-graduate courses in geochemistry and igneous petrology. Level of appointment is open, but we are particularly interested in a creative person, with a well-established record in research. Applications should include (i) a résumé of education, profession-al experience, and published research, (ii) a brief statement of plans for future research, and (iii) the names of four references. Send to: **Professor J. G. Liou, Department of Geology, Stanford University, Stanford, Calif. 94305**, by I December 1979. Stan-ford University is an Equal Opportunity/Affirmative Action Employer. Action Employer.

2 NOVEMBER 1979

POSITIONS OPEN

FACULTY POSITION Department of Forest Science Texas A & M University

FOREST ECONOMIST, with strong background in quantitative methods, to teach and conduct re-search. Emphasis on intensive management of southern forests

Qualifications: Ph.D. or equivalent with at least degree in forestry.

Position: open 1 January 1980. Tenure-track. As-sistant professor. Salary dependent on qualifica-

Application: send résumé and three letters of reference by 1 December 1979 to:

Chairman, Search Committee Department of Forest Science Texas A & M University College Station, Texas 77843

For further information write above address or telephone: 713-845-5033.

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

FERMENTATION MICROBIOLOGIST

M.S. or Ph.D. with specialized knowledge of fer-mentation processes, ideally in the area of biochemi-cal engineering. Duties include operation of laboraculture equipment. Will work closely with other ferrentation biochemists in the production of chem-icals, enzymes, and so forth, and devise either ge-netic or screening procedures for producing and op-timizing various end products. Highly instrumented facilities for all phases of product analysis and re-covery, including extensive computer capabilities. Modern research facility located in north suburban Chicago. Please send confidential résumé to:

Director of Personnel Administration



Research & Development 801 Waukegan Road Glenview, Illinois 60025

An Equal Opportunity Employer, M/F

GENETICIST. To conduct research in molecular genetics of human or other vertebrates and to teach molecular and human genetics. The level of appointment is at the assistant or associate professorship and will depend on qualifications and experience. Interested persons should apply with complete cur-riculum vitae, including a statement of research and teaching interests, plus the names and addresses of three references. Applications will be accepted through 31 December 1979 and should be addressed the out of the section of the sectio

INSTRUCTOR IN PATHOPHYSIOLOGY

The City College Physician Assistant Program is Seeking a candidate to join the adjunct faculty as lec-turer for a clinically oriented course in patho-physiology. Application and inquiries should be di-rected to: T. W. Fonville, M.D., Physician Assistant Program, City College of New York, 506 Lenox Ave-nue, Room 6207, New York, New York 10037.

City College is an Equal Opportunity Employer

NEUROSCIENCE POSTDOCTORAL FEILOW-SHIPS – Princeton University offers NIMH-support-ed postdoctoral training under the supervision of the Departments of Psychology and Biology. A slot is currently available for a candidate interested in mammalian neuropharmacology. The research will be conducted under the supervision of Dr. B. Jacobs and Dr. B. Hoebel and would involve neurophys-iological, behavioral, pharmacological, and neu-rochemical approaches to understanding brain monoamines and behavior. This is a 2-year train-eeship, with a starting date between 1 November 1979 and 30 June 1980. Curriculum vitae, statement of research interests, and three letters of recommen-dation should be sent to: Dr. Barry Jacobs, Program in Neuroscience, Department of Psychology, Prince-ton University, Princeton, N.J. 08544. An Equal Op-portunity/Affirmative Action Employer.

POSITIONS OPEN

GEOPHYSICIST UNIVERSITY OF SOUTH CAROLINA

The Department of Geology has a tenure-track faculty position for a solid earth geophysicist begin-ning fall 1980. Salary and rank are open. We are par-ticularly interested in someone who has or will develop an aggressive research program. Current areas of research within the Department of Geology per-tinent to geophysics include: earthquake prediction, induced seismicity, tectonics of southwestern United States and North Africa, rock mechanics, and paleomagnetism. The university houses the South Carolina seismograph network. Send appli-cations or inquiries to: Dr. Willard S. Moore, De-partment of Geology, University of South Carolina, Columbia, S.C. 29208, before 20 December 1979. The University of South Carolina is an Equal Opportu-nity/Affirmative Action Employer.

Applications are invited for the position of **HEAD**, **LABORATORY OF LARGE ANIMAL PATHOLO-GY**, School of Veterinary Medicine, University of Paracelucation Pennsylvania.

Requirements: D.V.M. degree, advanced training in pathology and/or certification by the American College of Veterinary Pathologists, and several years of experience in diagnostic pathology.

Faculty rank and salary negotiable.

Applications, including curriculum vitae and the Applications, including curriculum vitae and the names of at least three referees, should be sent to: Dr. W. T. Weber, Department of Pathobiology, School of Veterinary Medicine, 3800 Spruce Street, Philadelphia, Pa. 19104.

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

DIVISION OF SCIENCES UNIVERSITY OF NEW BRUNSWICK SAINT JOHN CAMPUS

A unique opportunity for teaching and research in the **MARINE SCIENCES** has been provided in the form of a faculty position. The appointment, at the assistant professor level, is effective 1 January 1980, assistant professor level, is effective 1 January 1980, or earlier if possible. Applicants should have a doc-torate in an appropriate field and research experi-ence in population or quantitative genetics of fishes, and should have a sufficiently broad background to participate in the teaching of upper-year courses within the marine biology programme of the Division of Sciences. of Sciences.

of Sciences. The research associated with the position will be carried out in association with the North American Salmon Research Center at St. Andrews, New Brunswick, where a salmon genetics research pro-gramme, ongoing since 1974, is focusing on heritabil-ity and other genetics parameters of Atlantic salmon stocks from Eastern Canada. The position is in sup-port of a programme under the auspices of Fisheries and Oceans, Canada, and the International Atlantic Salmon Foundation with implementation of the sci-entific programme by the Huntsman Marine Labora-tory. The excellent technical facilities of the center will be available to support the incumbent's re-search. search.

The appointment is initially for a 2-year term, with the possibility of extension for a further year. Some funds will be available for travel and other research expenses. The salary will depend on qualifications and experience, but will be negotiable within the as-sistant professor range. Applications, with curricu-lum vitae and names of three referees, should be event as come as moscible to: **Dr. A.** Loren Acting sent as soon as possible to: Dr. A. Logan, Acting Chairman, Division of Sciences, University of New Brunswick, Saint John, New Brunswick, Canada E2L 41.5

MATERIALS ENGINEERING FACULTY POSI-MATERIALS ENGINEERING FACULTY POSI-TION—Rensselaer Polytechnic Institute. Appli-cations are invited for a tenure-track position in the Materials Engineering Department at the assistant or associate professor levels. Candidates must have a doctorate in materials engineering/science or in a re-lated sub-disciplinary field such as metallurgy, weld-ing, ceramics/glass, or polymer engineering. The po-sition offered requires a commitment to teaching in both the undergraduate and graduate curricula, and the ability to develop a program of sponsored re-search in the incumbent's area of expertise. A ré-sumé and the names of four persons who will pro-vide references should be sent to: **Professor M. E. Glicksman, Materials Engineering Department, Rens**-Glicksman, Materials Engineering Department, Rens-selaer Polytechnic Institute, Troy, N, Y. 12181. Rens-selaer is an Equal Opportunity/Affirmative Action Employer and hires without regard to sex, age, race, color, creed, religion, national or ethnic origin, or handicap

UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

Applicants are solicited for faculty positions in the following departments: MEDICINE: (number 202) Assistant Professor of Research (cardiology section), research in cardiac electrophysiology techniques. Will be required to apply computer technology in the various phases of the program. Ph.D. in electrical engineering and training in cardiac electrophysiology including experience with microelectrode tissues. MICROBIOLOGY: (number 199) Associate Professor (clinical microbiologist), Ph.D. clinical laboratory experience in medical microbiology. Instruction of graduate and professional students. Success in research program development and grants management. PHYSIOLOGY: (number 182) Research Associate, position available immediately for the studies related to phosphorylation of myocardial muscle proteins, in a well-equipped laboratory. Experience in the field of isolation and purification of muscle proteins and well acquainted with chromatographics techniques. (number 197) Research Associate, research on cardiac afferent inputs to central ascending pathways and will be responsible for studying ascending pathways using electrophysiological techniques to examine the mechanisms of the nervous system that control pain.

Applicants should send curriculum vitae, identifying vacancy number for which they are applying, to: Dr. Thomas N. Lynn, Dean, College of Medicine, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, Oklahoma 73190. We are an Equal Opportunity Employer.

NEUROPHYSIOLOGIST DEPARTMENT OF PHYSIOLOGY UNIVERSITY OF ALABAMA MEDICAL CENTER

A tenure or tenure-track position at the assistant or associate professor level is available to applicants in any area of neurophysiology. Liberal start-up money and salary are available. The successful applicant will be expected to participate in the teaching of medical and dental students, to train graduate students, and to develop an independent research program. The position requires a doctoral degree and postdoctoral training. Send curriculum vitae, a summary of future research plans, and names of three references by 1 December 1979 to:

Professor J. D. Neill Department of Physiology and Biophysics University of Alabama Medical Center Birmingham, Alabama 35294

The University of Alabama in Birmingham is an Equal Opportunity/Affirmative Action Employer.

NEUROPHYSIOLOGIST. Tenure-track faculty position in neurophysiology, Department of Physiology, University of Arizona Medical College, available I July 1980. Minimum qualifications for applicants include a doctorate and 2 years of postdoctoral or equivalent experience. The successful applicant will be expected to develop an independent research program broadly complementary to ongoing studies on segmental motor control and on neuromuscular mechanisms, contribute to the CNS teaching of medical and graduate students, and supervise Ph.D. candidates in physiology. Professorial rank, start-up funds, and salary negotiable. Applications, including complete curriculum vitae and names of at least three references, should be forwarded to: Dr. Paul C. Johnson, Professor and Chairman, Department of Physiology, College of Medicine, University of Arizona Health Sciences Center, Tueson, Ariz. 85724. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN PHARMACOLO-GY to study the effects of prostaglandin analogs on blood platelet and vascular function. Background in platelet research, or prostaglandin research or receptor pharmacology recommended. Starting salary: \$12,000 plus benefits. Send résumé and three letters of recommendation to: Dr. G. C. Le Breton, Department of Pharmacology, University of Illinois Medical Center, P.O. Box 6998, Chicago, Illinois 60680.

POSTDOCTORAL POSITIONS—Studies on mechanisms of enzymatic catalysis, including physical organic studies on model reactions, isotope effects, cryoenzymology, transient kinetics, and thermodynamic measurements. Adjunct assistant professorships in the Department of Biochemistry are available for qualified senior scientists. Write: Professor Harvey F. Fisher, University of Kansas Medical School at VA Hospital, 4801 Linwood Boulevard, Kansas City, Mo. 64128. An Equal Opportunity Employer.

POSITIONS OPEN

PEDIATRICIAN. Faculty position, Department of Pediatrics, University of Louisville School of Medicine. Pediatrician with subspecialty training in pediatric endocrinology. Applicant must have pediatric Board-eligibility or certification in pediatrics and pediatric endocrinology. Demonstrated teaching, research, and clinical competence and desire for an academic future are necessary. The individual will be responsible for teaching, service, and research programs in pediatric endocrinology in a Children's Hospital and as a consultant to area practitioners. Please submit curriculum vitae to: Duncan R. Mac-Millan, M.D., Professor and Vice Chairman, Director, Division of Endocrinology, University of Louisville, School of Medicine, Health Sciences Center, P.O. Box 35260, Louisville, Ky. 40232. The University of Louisville is an Affirmative Action/Equal Opportunity Employer.

POPULATION BIOLOGIST, assistant professor, tenure-track, fall 1980, to teach population genetics and half of population biology, maintain an active research program, secure outside funding, and direct graduate students. Ph.D. required with postdoctoral experience preferred. Send résumé, representative publications, and at least three letters of recommendation to: Chairman, Population Search Committee, **Department of General Biology, Box 1812, Station B, Vanderbilt University, Nashville, Ten. 37235.** Deadline for receipt of applications: 1 February 1980. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWS

Positions available for Ph.D. or M.D. in cancer related research in: (i) cell kinetic effects of irradiation, drugs, and radiation-drug combinations on normal and malignant cell populations, (ii) human tumor biology, (iii) virus leukemias, and (iv) cancer immunobiology. Positions (up to 3 years) available immediately. Cancer Research Unit is closely associated with Divisions of Radiation Oncology and Medical Oncology. Send curriculum vitae, summary of past research, and names of references to: Dr. Samuel W. Lesher, Cancer Research Unit, Allegheny-Singer Research Corporation, 320 East North Avenue, Pittsburgh, Pa. 15212.

POSTDOCTORAL POSITION

The Moore School of Electrical Engineering, University of Pennsylvania, invites applicants for a postdoctoral fellowship in chemical sensing at elevated temperatures. The research will involve the investigation of semiconductor devices in high temperature operation. A background in one of the following areas is required: electrical engineering, physics, or chemistry. An interest in electronics and a working knowledge of computers is desirable. Send résumé and two letters of reference to: Professor J. N. Zemel, The Moore School of Electrical Engineering and Science, University of Pennsylvania, Philadelphia, Pa. 19104. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available for summer or fall 1980 for research on gene organization and expression in embryonic and adult cells using recombinant DNA techniques. Experience working with RNA and DNA preferred. Send curriculum vitae and names of references to: Dr. Charles P. Ordahl, Temple University School of Medicine, Philadelphia, Pa. 19140. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN ENZYMOL-OGY—Two positions available immediately for study of: (i) mechanism and regulation of P-enolpyruvate carboxykinase and, (ii) interaction of NAD analogs dehydrogenases. Starting salary will be commensurate with experience. Positions are funded for a 1- to 3-year period. Send curriculum vitae and three names of references to: Dr. V. L. Schramm or Dr. R. J. Suhadolnik, Department of Biochemistry, Temple University School of Medicine, Philadelphia, Pa. 19140. An Equal Opportunity Employer.

POSTDOCTORAL POSITION. Interdisciplinary research on the design, synthesis, characterization, and application of molecular probes of membrane phenomena. Experience with fluorescence spectroscopy or microscopy would be helpful. Available 1 January 1980; \$12,000 to \$14,000, depending on experience. Send curriculum vitae and three letters of reference to: Leslie M. Loew, Department of Chemistry, State University of New York at Binghamton, Binghamton, New York 13901.

POSITIONS OPEN

POSTDOCTORAL POSITION available for 2-year period for work on metastasis. Salary: \$13,000. Please send curriculum vitae and three letters of recommendation to: Dr. Leonard Weiss, Department of Experimental Pathology, Roswell Park Memorial Institute, Buffalo, New York 14263. An Equal Opportunity Employer, M/F.

POSTDOCTORAL POSITIONS available in Departments of Anatomy, Biochemistry, Microbiology, Pharmacology, and Physiology. Applicants must have a Ph.D. or M.D. degree. Positions available during 1979-1980. Send application to appropriate department head, Arizona Health Science Center, Tucson, Ariz. 85724. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION—PHARMACOLO-GY. Available immediately. Biochemical pharmacologist with interest in cardiovascular pharmacology. Role of Na⁺, K⁺-ATPase on digitalis action. Some NMR experience desirable but not required. Salary: \$14,000. Send curriculum vitae and letter of interest to: Dr. George T. Okita, Department of Pharmacology, Northwestern University Medical School, Chicago, Illinois 60611. Northwestern University is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available in January 1980 for electrophysiological studies of effects of drugs on neurons in culture. Experience in electrophysiology, cell culture, or pharmacology is desirable. Dr. Charles Edwards and Dr. Anne Messer will be supervising the work jointly. Send curriculum vitae and names of three references to: Dr. Anne Messer, Division of Laboratories and Research, New York State Department of Health, Empire State Plaza, Albany, N.Y. 12201.

POSTDOCTORAL POSITION IN IMMUNOLOGY

Available immediately. Research involves structure and biosynthesis of membrane immunoglobulins, and mechanisms of antigen presentation. Previous experience in immunology preferred. Submit curriculum vitae to: Howard M. Grey, M.D., National Jewish Hospital and Research Center, Denver, Colorado 80206.

POSTDOCTORAL POSITION available after 1 January 1980. Ph.D./M.D. interested in the study of drug transport in isolated renal plasma membranes and reconstituted systems. Salary range: \$10,000 to \$14,000. Please send curriculum vitae and three letters of recommendation to: Richard D. Mamelok, M.D., Division of Clinical Pharmacology, Room \$155, Stanford University Medical Center, Stanford, Calif. 94305.

POSTDOCTORAL POSITION

Available 1 December 1979 for projects related to adrenergic control of blood vessels in vitro. Preference given to individuals experienced in electrophysiological techniques or calcium flux studies. Stipend: \$13,000 to \$14,000, depending on postdoctoral experience. Send curriculum vitae and references to: Dr. Gordon Ross, Department of Physiology, University of California, Los Angeles, School of Medicine, Center for the Health Sciences, Los Angeles, Calif. 90024.

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

POSTDOCTORAL POSITION IN MOLEC-ULAR BIOLOGY and biochemistry of Epstein-Barr virus. Available immediately. Send curriculum vitae to: Dr. Wendy Clough, Molecular Biology, University of Southern California, Los Angeles, Calif. 90007. Telephone: 213-741-2605.

POSTDOCTORAL RESEARCH ASSOCIATE Conduct research in areas of gas/solid reactions (oxide reduction) and properties of ionically conducting solid electrolytes. The applicants should have a Ph.D. in material science, in ceramics, in solid state physics, or solid state chemistry. Familiarity with transmission electron microscopy, thermogravimetrical methods, or electrochemical methods is highly desirable.

Send two résumés, including salary history, to: Dr. L. C. DeJonghe, c/o Ronald D. Lowder, Employment Office, Lawrence Berkeley Laboratory, One Cyclotron Road, Berkeley, Calif. 94720.

POSTDOCTORAL POSITION in photochemistry and photobiology available for studies of direct and photosensitized ultraviolet light damage to cell mem-branes and DNA. Ph.D. in organic chemistry and/or biochemistry required. Send curriculum vitae and blochemistry required. Send curriculum Vitae and letters of reference to: Dr. L. C. Harber, Department of Dermatology, College of Physicians and Surgeons, Columbia University, 630 West 168 Street, New York, New York 10032. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION for winter or spring 1980 in gene expression in mammalian oocytes and 1980 in gene expression in mammalian oocytes and embryos. Experience in electron microscopy, auto-radiography, or especially techniques of analysis of nucleic acids and electrophoresis of proteins desir-able. Send curriculum vitae, publication list, and names of three references to: Dr. Rosemary Bachva-rova, Department of Anatomy, Cornell University Medical College, 1300 York Avenue, New York, New York 10021.

POSTDOCTORAL POSITION available immediately in the Joslin Research Laboratory of Harvard Medical School for biochemical studies on cell sur-face carbohydrates and their alterations in disease. Experience in membrane fractionation, chromato-graphic and electrophoretic separations and analytic techniques desired. Send résumé and names of three references to: Personnel Director, Joslin Diabetes Foundation, 1 Joslin Place, Boston, Mass. 02215. An Equal Opportunity Employer.

POSTDOCTORAL POSITION. A position is imme-diately available for work on the relationship be-tween abnormalities in purine metabolism and im-mune dysfunction. Background in biochemistry preferred. Laboratory is part of the Human Purine Research Center at the University of Michigan. Sal-ary will depend on qualifications. Contact:

Dr. Beverly Mitchell Simpson Memorial Research Institute University of Michigan Ann Arbor, Michigan 48109

A nondiscriminatory, Affirmative Action Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE

Research directed toward the isolation, identifica-tion, and synthesis of organic compounds in human physiological fluids. One-year appointment with a second year available. Send curriculum vitae to: Dr. P. V. Fennessey, Department of Pediatrics, University of Colorado Health Sciences Center, Denver, Colorado 80262.

An Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.

CORNELL UNIVERSITY POSTDOCTORAL RESEARCH ASSOCIATE VIROLOGIST—IMMUNOLOGIST

Position open for 2 years for studies of canine distemper viral persistence. Salary depends on experi-ence. Send curriculum vitae and three letters of reference to:

Dr. M. Appel James A. Baker Institute for Animal Health New York State College of Veterinary Medicine Cornell University Ithaca, New York 14853 An Equal Opportunity Employer

RESEARCH ASSOCIATE with some combination of RESEARCH ASSOCIATE with some combination of experience in biochemistry, electron microscopy and/or immunochemistry to study the molecular or-ganization of mammalian chromosomes. Position available immediately, with salary up to \$12,000 per year for 2 years. Ph.D. preferred, but M.S. accept-able. Please send curriculum vitae and two letters of reference to: Dr. John C. Hozier, Department of Bio-logical Sciences, Florida Institute of Technology, Mel-bourne, Florida 32901. An Equal Opportunity Em-plover. ployer

RESEARCH ASSOCIATE, molecular biologist, virol-RESEARCH ASSOCIATE, molecular biologist, virol-ogist. To study biochemical changes in the brains of scrapie-infected hamsters. Experience with elec-trophoresis and nucleic acid labeling essential, mem-brane separation and characterization desirable; 17-month appointment beginning 1 January 1980. Sal-ary: \$15,000 per annum. Send résumé and names/ telephone numbers of three references to: Dr. R. F. Marsh, Department of Veterinary Science, University of Wisconsin, Madison, Wisconsin 53706. The Uni-versity is an Equal Opportunity/Affirmative Action Employer. Employer.

2 NOVEMBER 1979

Department **Head Position**

Nominations and applications are invited for the position of Head, **Electrical Engineering Depart**ment, Carnegie-Mellon University. Qualifications sought include earned doctorate, established reputation in Electrical Engineering, experience in teaching and education, leadership and administrative abilities. Candidates should qualify for the rank of Full Professor. Applications, including resume, list of publications and references should be received prior to November 15, 1979.

Contact:

Dr. M.H. Kryder Chairman, Search Committee **Electrical Engineering** Department Carnegie-Mellon University Pittsburgh, PA 15213

Carnegie-Mellon University is an Equal Opportunity Employer.

JEAN L. MARX and

GINA BARI KOLATA

UNIVERSITY OF **CALIFORNIA** LOS ANGELES

The Department of Biology invites application for appointment in the regular professorial series in the following areas:

VASCULAR PLANT SYSTEMATICS GENETICS ANIMAL PHYSIOLOGY POPULATION GENETICS ICHTHYOLOGY

While the specific area of research for each position is open, the candidates are expected to be committed to excellence in undergraduate and graduate education and to possess an outstanding research record. Appointment will be made at the professorial rank consistent with the individual's background and experience.

A curriculum vitae, including the names of three sources of recommendations, should be sent before 1 December 1979 to:

Chair

Department of Biology University of California Los Angeles, CA 90024 THE UNIVERSITY OF CALIFORNIA IS AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

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AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE



1515 Massachusetts Avenue, NW Washington, D.C. 20005

POSTDOCTORAL RESEARCH ASSOCIATES Postdoctoral positions in the Departments of Pa-thology and Biochemistry are available starting be-tween October 1979 and September 1980. Salary negotiable (from \$13,000). Research areas include: (i) mechanism of action of microsomal mixed function oxidases; (ii) role of microsomal enzymes in metabolic activation and detoxification of chemical car-cinogens; (iii) metabolism of nitrogen heterocycles, cinogens; (iii) metabolism of nitrogen heterocycles, nitrosamines, hypolipidemic agents, and other xeno-biotics; and (iv) purification and characterization of microsomal and peroxisomal enzymes. Experience in: enzymology, protein purification, xenobiotic me-tabolism, toxicology, or chemical carcinogenesis is desirable. Please send curriculum vitae and names of two references to: **Dr. Paul F. Hollenberg, Pathology Department**. Northwestern University Medical Department, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, Illinois 60611. An Equal Opportunity/Affirmative Action Employer

PSYCHIATRISTS

PSYCHIATRISTS Assistant professor faculty position in Department of Psychiatry, University of California, San Fran-cisco (UCSF), Langley Porter Neuropsychiatric In-stitute, Adult Out-Patient Department. Seeking psy-chiatrist with background in biological psychiatry with special expertise in clinical psychophar-macology as well as strong commitment to psycho-logical aspects of patient care. Position involves re-search, teaching, and clinical services activities of the Adult Out-Patient Department. Applicants should be able to provide evidence of scientific pro-ductivity and interest in academic medicine. UCSF is an Equal Opportunity/Affirmative Action Employ-er. Women and minorities are encouraged to apply. Application deadline: 15 March 1980. Direct in-quiries to: quiries to:

Enoch Callaway, M.D. Professor in Residence Langley Porter Neuropsychiatric Institute 401 Parnassus Avenue San Francisco, California 94143

RESEARCH ASSISTANT PROFESSOR to conduct studies on the role of arterial endothelium in atherostudies on the role of arterial endothelium in athero-sclerosis and to assist in projects involving inter-action of prosthetic surfaces with circulating cells. The person must have a background in pathology and considerable expertise in development of meth-odologies for high resolution TEM and SEM of blood vessels. Duties will involve development of morphometric procedures and training of personnel. horprometric procedures and training of personnet: Ph.D. or M.D. with relevant postdoctoral experi-ence required. Applications to: Dr. Stephen M. Schwartz, Department of Pathology SM-30, Universi-ty of Washington, Seattle, Wash. 98195. The Univer-sity of Washington is an Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE in Division for Study and Research in Education, Massachusetts Institute of Technology (MIT), to take charge of daily manage-ment of research project investigating the potential of a computer-based LOGO system in the education of physically handicapped and other special needs children, covering a wide range of activities includ-ing mathematics, physics, and creative writing using a sophisticated computing editing system. A further aim is to investigate the use of LOGO as a research tool exploring spatial and linguistic abilities of brain-damaged individuals, developing and using graphic screen tasks for performance assessment in individ-uals with cerebral palsy. Research also involves asuals with cerebral palsy. Research also involves as-sessment of several electronic communicators ap-propriate for brain-damaged individuals for use with the LOGO system. The post also includes the super-vision of graduate students in the fields of education and artificial intelligence.

M.D. or equivalent; experience teaching A.I. to un-dergraduates and graduates; experience with com-puter based learning systems for special needs chil-dren; several years of experience with LOGO; sev-eral years in medical practice, including experience with children. Salary: \$25,000 to \$35,000 per year. Please submit résumé to: MIT Personnel Office, 400 Main Street, Cambridge, Mass. 02139. Attention: Job number R79-228. An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE POSITIONS open immediately in the fields of molecular biology, cellular and molecular immunology. Please send résumé and a list of three references to: Search Committee, De-partment of Microbiology and Immunology, Universi-ty of Illinois at the Medical Center, 835 South Wolcott Street, Chicago, Ill. 60612.

POSITIONS OPEN

DEPARTMENT OF ANESTHESIOLOGY WASHINGTON UNIVERSITY SCHOOL OF MEDICINE (BARNES HOSPITAL, ST. LOUIS)

Searching for PROFESSOR AND HEAD of Depart-ment of Anesthesiology at Washington University School of Medicine and ANESTHESIOLOGIST-IN-CHIEF at Barnes Hospital. Research accomplish-ments particularly important. Submit curriculum vitae with complete bibliography to:

M. K. King, Dean M. K. King, Dean Washington University School of Medicine Box 8106 660 South Euclid Avenue St. Louis, Missouri 63110

RESEARCH ASSOCIATE position available immediately for studies of the mechanisms of fertility loss in aging *Drosophila* males. Ph.D with training in protein purification and immunological techniques re-quired. Salary up to \$13,000 per year. Send curricu-lum vitae, reprints, and three references to: Dr. R. C. Richmond, Department of Biology, Indiana University, Bloomington, Ind. 47405. An Equal Opportu-nity/Affirmative Action Employer.

The Department of Molecular Biology, Roswell Park Memorial Institute, has a **RESEARCH POSITION** open for a person experienced in glycoprotein and glycolipid biochemistry and cell culture techniques to work in a group studying the biogenesis of mam-malian cell membranes. A doctoral degree and 3 years of relevant postdoctoral experience are re-ourised. Solver, is negativity donarding on qualificaquired. Salary is negotiable depending on qualifica-tions. Application deadline is 1 December 1979. Send curriculum vitae to: A. Eglowstein, Department of Molecular Biology, Roswell Park Memorial Insti-tute, Buffalo, N.Y. 14263.

AOSTRA RESEARCH PROFESSOR

The University of Lethbridge in conjunction with The Alberta Oil Sands Technology and Research Authority (AOSTRA) is seeking a research profes-Authority (AOSTRA) is seeking a research profes-sor to conduct oil sands research. Some related teaching duties. Three-year term with possible 2-year renewal to a maximum of 5 years. Rank and salary commensurate with qualifications and experi-ence. Applications, including outlines of proposed research programs, should be sent to: The Associate Dean, Division of Science, Faculty of Arts and Sci-ence, The University of Lethbridge, 4401 University Drive, Lethbridge, Alberta, Canada T1K 3M4. Clos-ing date for applications is 31 December 1979.

THE JOHNS HOPKINS UNIVERSITY SENIOR PHYSICIST, Ph.D.

Senior staff physics positions open in major radia-tion therapy facility. Primarily responsible for cali-bration and dosimetry of high energy x-rays and electrons produced by clinical linear accelerators. Applicants must be knowledgeable in theoretical and experimental techniques regarding the interaction of data processing techniques essential. Positions provide opportunity to develop research interests. All inquiries will be processed in confidence and should contain compensation requirements.

Please reply to: The Johns Hopkins Medical Institutions c/o J. T. Fisher Office of Professional Recruitment 624 North Broadway Baltimore, Maryland 21205 An Equal Opportunity Employer, M/F

SENIOR STATISTICIAN—SECTION LEADER

December 1979 or later. Will be responsible for the statistical data analysis of water quality and biologi-cal studies for funded projects, and will manage a small, established biometry section and oversee the data processing center. Research time and funds negotiable. Ph.D. (or equivalent) in applied statistics or biometry, 2 years of experience in applied statistics (preferably on problems in field and laboratory bio-ogy); preference given for experience with statistical packages and PDP-11 related software. Send curiculum vitae (including bibliography) and names of three references to:

Dr. John A. Hendrickson, Jr. Division of Limnology and Ecology Academy of Natural Sciences Philadelphia, Pa. 19103 An Equal Opportunity Employer

POSITIONS OPEN

RESEARCH SCIENTISTS **BIOLOGICAL SCIENCES**

The Life Sciences Division of IIT Re-search Institute, a not-for-profit Chicago-based research organization, has several staff positions for biologists. Requisite are Ph.D. in physiology, toxicology, nutrition, or experimental pathology. Preference will be given to candidates with postdoctoral re-search experience and interest in long-term toxicity, carcinogenicity bioassay, and car-cinogenesis studies in rodents. Opportunity is available to develop independent research projects in own field of expertise. Salary commensurate with experience and qualifi-cations. The Life Sciences Division of IIT Recations.

Please submit résumés, including salary history, to:

L. Amft Professional Staffing IIT RESEARCH INSTITUTE 10 West 35 Street Chicago, Ill. 60616

IIT Research Institute is an Equal Oppor-tunity/Affirmative Action Employer and en-courages applications from women and members of minority groups.

X-RAY OR NEUTRON DIFFRACTION

Position available for a scientist with Ph.D. trained in low angle x-ray or neutron diffraction to collaborate on a project involving neutron dif-fraction studies of interactions between small molecules and lipid bilayers. The appointment will be made at the postdoctoral or assistant research scientist level depending upon training and experience of candidate. Position must be filled by 1 July 1980, earlier if possible. *Minorities and women are encour-aged to apply*. Applications should include curricu-lum vitae, representative publications, and the names of three references. Reply to: **Professor Ste-phen H. White, Chairman, Department of Physiolo-gy, University of California, Irvine, Calif. 92717.**

COURSES

MOLECULAR ENDOCRINOLOGY AND TECHNIQUES FOR HORMONE ACTION 31 March to 4 April 1980

The course will consist of lectures in methodology with a comprehensive syllabus covering receptors, gene transcription, messenger RNA and protein syn-thesis, recombinant DNA, protein hormones and cyclic nucleotides

Co-directors: W. T. Schrader and B. W. O'Malley. Fee: \$195/\$145 (fellows). For further information contact: Barbara Gordin, Department of Cell Biol-ogy, BAYLOR COLLEGE OF MEDICINE, Houston, Texas 77030.

Deadline: 1 February 1980.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS MISSOURI INSTITUTE OF PSYCHIATRY

Postdoctoral research fellowships for M.D.'s and Ph.D's are immediately available at the Missouri In-stitute of Psychiatry (MIP), Saint Louis, Missouri, Special research emphases are available in mental health computer application, neurochemistry, social or urban studies, and some areas of clinical re-search. Although the program is conceptualized as a 2-year fellowship, consideration of 1-year appoint-ments is possible. MIP is a St. Louis segment of the University of Missouri-Columbia, School of Medi-cine, with faculty members holding academic ap-pointments in the Department of Psychiatry and Bio-chemistry. All fellows will receive academic ap-pointments in appropriate departments. For further information, applicants should send a résumé and a brief description of their objectives as a postdoctoral fellow to: Postdoctoral research fellowships for M.D.'s and fellow to:

Office of Graduate Education Missouri Institute of Psychiatry 5400 Arsenal Street St. Louis, Missouri 63139 The University of Missouri is an Equal Opportu-nity Employment Institution.

Fourth Franklin Conference

INNOVATION AND THE AMERICAN ECONOMY An Issue for Action

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Edwin Mansfield For registration write or call:

Jean Howe The Franklin Institute Philadelphia, PA 19103 (215) 448-1537

\$50 all-inclusive fee covers three panel sessions, banquet (Nov. 29), Iuncheon (Nov. 30) and conference publication.

Reservations limited

The Conference papers will be published in early 1980 by

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DIRECTOR Peabody Museum of Natural History

Yale University invites nominations and applications for the position of Director, Peabody Museum of Natural History. Applicants should be recognized scholars qualified to hold professorial rank in one of the three areas of museum activity, Anthropology, Biology and Geology. Demonstrated administrative ability and familiarity with the functions and problems of a research-oriented natural history museum serving both the university and the university and the public are desired.

The Peabody Museum, founded in 1863, serves as an interdisciplinary research and teaching laboratory, as a major repository of scientific collections, and as a university contribution to the life of the community, the latter function including public exhibits, pro-grams and school services and other community-oriented activities.

The Director presides over a board of curators, all of whom are full-time Yale faculty, and various administrative and operational support services. An Assistant to the Director and Business Manager aid the Director in museum administration. Museum support is derived both from the university budget and, to an increasing extent, outside funding. The development of new research programs, centered in the museum, will be important tasks for the Director.

Yale University is interested in increasing the number of qualified women and minority group members in its faculty and welcomes applications from women and minority group members.

Nominations, applications and supporting material should be sent, before November 23rd, 1979, to: Robert B. Gordon, Chairman, Directors Search Committee Department of Geology and Geophysics



Yale University is an Affirmative Action Employer. All interested persons are encouraged to apply.

BIOCHEMIST

Central Nervous System Research

McNeil Laboratories, one of the nation's leading manufacturers of ethical pharmaceutical products has an unusual career oppor-tunity immediately available for an outstanding Biochemist who enjoys working in a highly stimulating interdisciplinary research environment. To qualify, you must have a PhD degree with at least 5 years' post doctoral academic or industrial experience or equivalent. Additionally, you must possess a demonstrated ability to initiate and pursue independent creative research as evidenced by publication and verbal presentation. Background and ex-perience in receptor technology, as well as Neuroendocrine pep-tides are assets for this position which involves working on pro-blems relating to the discovery of unique therapeutic agents for the treatment of mental diseases.

McNeil is a Johnson & Johnson Company with a phenomenal growth record in research and manufacturing. Our ultra modern headquarters complex is situated in a beautiful rural setting in Fort Washington, Pa., but is still close enough to Philadelphia so that you can enjoy all of this famous city's historic and cultural ac-tivities. Our salary structure and benefits program are among the best in our industry. best in our industry.

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McNeil Laboratories Fort Washington, Pa. 19034 Equal Opportunity Employer, M/F/H

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FELLOWSHIPS

SMITHSONIAN FELLOWSHIPS

SMITHSONIAN FELLOWSHIPS Predoctoral/postdoctoral fellowships in anthropolo-gy, biology, and earth sciences. Tenable at Smithso-nian's museum, laboratory, field and research facili-ties for 6 to 12 months. Deadline: 15 January 1980. Contact: Office of Fellowships and Grants, Smithso-nian Institution, L'Enfant Plaza 3300, Washington, D.C. 20560. Awards are based upon merit, without regard to race, color, religion, sex, national origin, or age of any applicant.

POSTDOCTORAL POSITIONS

The Graduate Program in Craniofacial Biology of the University of Southern California announces the availability of five **POSTDOCTORAL FELLOW**-Surveys of bounderin Canton Control Canton Control and lowship is awarded.

Application materials should be sent to: Dr. Harold C. Slavkin, Program Director, Graduate Program in Craniofacial Biology, Gerontology Center Room 317, University of Southern California, Los Angeles, Cali-fornia 90007.

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL RESEARCH FELLOWSHIPS IN HUNTINGTON'S DISEASE

Applications are invited for a 1-year postdoctoral fellowship in clinical and/or basic research in studies relating to problems of Huntington's Disease. Appli-cants must have professional degree of M.D. or cants must have professional degree of M.D. or Ph.D. Candidates are welcomed whose field of inter-est is one of the following areas: basic sciences, in-cluding neuroscience, biochemistry, molecular biol-ogy, pathology, and pharmacology, or from such clinical specialties as neurology, psychiatry, and hu-man genetics. Fellowship stipend is \$13,000. The fel-lowship may be done at any institution with ade-quate facilities. Application deadline is 15 December 1979. Awards will be announced by 15 February 1980, for fellowship to begin 1 July 1980. Send four copies of the following: curriculum vitae and bibliog-raphy, at least two letters of recommendation, and a proposed research program to: National Huntineproposed research program to: National Hunting-ton's Disease Association, Suite 501, 1441 Broadway, New York, N.Y. 10018.

FELLOWSHIPS

Postdoctoral fellowship in neural control of the car-Postdoctoral fellowship in neural control of the car-diovascular system. A limited number of fellowship positions are available, funded by an NIH training grant. Clinical and basic scientists participate in the program with major emphasis on neural pathways, hypertension, cardiovascular pharmacology, exer-cise, electrophysiology, cardiac biochemistry, and biofeedback. The positions are open to U.S. citizens and permanent residents who have Ph.D, M.D., or equivalent degrees in a basic biomedical discipline. Annicants should send curriculum vitae with threa Applicants should send curriculum vitae with three Applicants should send currential vitae with three references and specific area of interest to: Dr. H. Lowell Stone, Department of Physiology and Biophysics, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, Oklahoma 73190. We are an Equal Opportunity Employer.

Department of Neurology University of Iowa College of Medicine Iowa City

FELLOWSHIP IN BEHAVIOR NEUROLOGY

A fellowship position is available, for the academ-ic year 1980-1981, in the Division of Behavioral Neurology. The program offers unusual opportuni-ties for training and practice in clinical and basic re-cered. (where neuroscubeloscu and eventimetel search (human neuropsychology and experimental neuroanatomy) related to behavior. Candidates with an interest in the behavioral sciences and a com-pleted neurologic residency may apply. Preference will be given to candidates with previous research experience.

Send application to: A. R. Damasio, M.D., Direc-tor, Division of Behavioral Neurology, University Hospitals and Clinics, Iowa City, Iowa 52242.

FELLOWSHIPS

REPRODUCTIVE BIOLOGY PROGRAM NORTHWESTERN UNIVERSITY

Predoctoral and postdoctoral fellowships are avail-able for research training in reproductive biology. A diverse but cohesive program offers research in the biochemical, cellular, physiological, and behavioral aspects of reproduction. Support is available through an NIH training grant. Send curriculum vitae and names of three references to: **Dr. Neena** Schwartz, Department of Biological Sciences, North-western University, Evanston, Illinois 60201. An Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP in the area of human natural killing in normal and malignant states. The application is open to American and non-American citizens holding the Ph.D. or M.D. de-gree. Experience in related areas desirable. Salary: \$12,000 to \$13,000, depending on experience. Please send curriculum vitae and three letters of recommendation to:

Dr. Hillel S. Koren Division of Immunology Box 3010 Duke University Medical Center Durham, North Carolina 27710

An Equal Opportunity/Affirmative Action Employer

C. H. BEST FOUNDATION POSTDOCTORAL FELLOWSHIP

Awarded in molecular endocrinology, molecular bi-Awarded in block that endocrinology, indice that of ology, differentiation, immunology, structure and function of membranes, and lipid metabolism. Tena-ble for 2 years from 1 July 1980 with a stipend of \$15,000, plus travelling and dependents' allowance. Applicants with fewer than 2 years of postdoctoral Applicants with fewer than 2 years of postdoctorial experience should send curriculum vitae and three letters of reference before 15 January 1980 to: Chair-man, Search Committee (Dr. J. Dorrington), Banting and Best Department of Medical Research, University of Toronto, Toronto, Canada M5G 11.6.

CARDIOVASCULAR SURGERY FELLOWSHIP-Available starting July 1980 at the Miami Heart Insti-tute; opportunities for 1 or 2 years of clinical and research training. The experience includes Clinical vascular Laboratory, experimental and clinical re-search, and cardiovascular surgery. Send curricu-lum vitae and statement of career goals to: Dr. Jeff Raines, Miami Heart Institute, 4701 North Meridian Avenue, Miami Beach, Fla. 33140.

FELLOWSHIP PROGRAM

The Exploratorium, a science and perception muse-um, is offering a limited number of fellowships to study the design, construction, and pedagogy of in-teractive exhibitry. Sponsored by the Fund for Im-provement of Postsecondary Education, HEW, these fellowships are intended for faculty in the sciences who are interested in exploring the use of ex-hibitry for teaching students and the general public scientific topics on or off campus. The fellowships are for periods of 2 to 4 months in either the spring or summer of 1980. The deadline for the application is 1 January 1980. Interested persons are encouraged to contact us as soon as possible. For information please contact: Dr. Robert J. Semper, Explor-atorium, 3601 Lyon Street, San Francisco, California 94123.

Two American Chemical Society CONGRESSION-AL FELLOWSHIPS begin fall 1980. Fill a staff posi-tion on Capitol Hill. For further information write to:

Dr. Annette T. Rosenblum American Chemical Society 1155 16 Street, NW Washington, D.C. 20036 Telephone: 202-872-4383

Interdisciplinary POSTDOCTORAL RESEARCH FELLOWSHIPS in the Biomedical and Behavioral Sciences. A training program has been funded to promote interdisciplinary research in mental retar-dation, autism, and other developmental disabilities. Fellows collaborate with research scientists on hu-man and nonhuman research in neuroanatomy, neuman and nonhuman research in neuroanatomy, neu-rochemistry, neuroendocrinology, psychopharma-cology, neurology genetics, and behavioral psychol-ogy. Available January or 1 September 1980 for 1 to 3 years. Ph.D. or M.D. plus evidence of inter-disciplinary research potential required. Send cur-riculum vitae, representative reprints, and names of three references to: Dr. Stephen R. Schroeder, Bio-logical Sciences Research Center, 136 DDDL/BSRC 220H, University of North Carolina School of Medi-cine, Chapel Hill, North Carolina 27514.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP. NIH traineeship available in basic cancer chemotherapy dealing with the mechanism of action and metabolism of anti-cancer agents. Applicants must be either U.S. citi-zens or have a permanent visa. Send curriculum vitae and the names of two references to: Dr. H. George Mandel or Dr. Phillip Klubes, Department of Pharmacology, The George Washington University Medical Center, 2300 Eye Street, NW, Washington, D.C. 20037.

TRAINING PROGRAM

The Massachusetts Eye and Ear Infirmary has im-mediate openings in its Training Grant Program for Ophthalmic Research and Teaching. Postdoctoral re-search opportunities exist in biochemistry (lens and optorect openeous divergence with recurs and retire) search opportunities exist in biochemistry (lens and cataract, cornea, glaucoma, vitreous, and retina); biophysics of light scattering (cornea, cataract); pa-thology and anatomy, immunology, embryology, electrophysiology, and genetics. A 2-year com-mitment and a "payback" agreement are required by NIH. Funds are available for salary, medical in-surance, supplies, and travel. Send curriculum vitae to: Leo T. Chylack, Jr., M.D., Director, Research Training, Massachusetts Eye and Ear Infirmary, 243 Charles Street, Boston, Mass. 02114.

GRADUATE STUDY

GRADUATE STUDIES. Department of Physiology and Biophysics, University of Kentucky Medical Center, seeks applicants for its Ph.D. program be-ginning fall semester 1980. Graduate assistantships ginning fall semester 1980. Graduate assistantships (\$4,200 per year) are available on a competitive basis. Current research projects of the faculty in-clude but are not limited to: circulatory dynamics, cardiovascular regulation, pulmonary function and regulation, neurobiology, and endocrine and renal physiology. Write: Director of Graduate Studies, De-partment of Physiology and Biophysics, University of Kentucky College of Medicine, Lexington, Ky. 40506.

TRAINEESHIP

POSTDOCTORAL TRAINEESHIPS NEUROBIOLOGY AND BEHAVIOR

The Section of Neurobiology and Behavior at Cor-nell University has received an NIMH institution award to foster integrative and interdisciplinary reaward to foster integrative and interdisciplinary re-search in neurobiology and behavior. Areas of pro-gram focus are: (i) development of neural systems and ontogeny of behavior, (ii) neural bases of behav-ior, and (iii) social, ecological, and evolutionary bases of behavior. Two postdoctoral traineeships are available for activation by 1 July 1980. Prospec-tive applicants should request further information from: Dr. Glenn Hausfater, Langmuir Laboratory, Cornell University, Ithaca, New York 14850.

Cornell is an Equal Opportunity/Affirmative Ac-tion Employer.

NIH PREDOCTORAL AND POSTDOCTORAL TRAINEESHIPS IN DEVELOPMENTAL BIOL-OGY are available for 1980. This is an inter-disciplinary program with faculty from the Depart-ments of Anatomy, Biochemistry, Botany, Obstet-rics and Gynecology, Oncology, Pediatrics, Psychology, and Zoology, emphasizing research that is basically developmental in nature. For further information write: Barbara Houser, Administrator, Developmental Biology Training Program, University of Wisconsin-Madison, Zoology Research Building, Madison, Wis. 53706; telephone: 608-262-3457. Af-firmative Action/Equal Opportunity Employer.

MARKET PLACE

FOR SALE

Siemens 1A Electron Microscope, excellent condition. Includes cold stage, tilting stage, photometer with automatic shutter. Service records available. Contact: Lynne Mercer, Department of Structural Biology, Fairchild Building, Stanford University, Stanford, Cal-if. 94305. Telephone: 415-497-5209.

RESPIRATORY PHYSIOLOGIST/ HEALTH SCIENTIST ADMINISTRATOR

Division of Lung Diseases

The National Heart, Lung, and Blood Institute, Na-tional Institutes of Health, Public Health Service, is seeking applicants for a career Civil Service position in the Structure and Function Branch of the Insti-tute's Division of Lung Diseases. The Structure and Function Branch is responsible for the planning, direction, and evaluation of basic and applied, clinical and nonclinical research on the lung and respiratory system. This includes programs on respiratory and nonrespiratory functions, and growth and develop-ment. The incumbent will assist in planning, conducting and evaluating extramural research on respiratory functions.

An applicant must have a doctoral degree or equivalent experience with significant training and research experience in respiratory physiology. Applicant's background should include familiarity with research approaches relative to control of breathing, gas exchange and pulmonary mechanics.

Salary range GS-12 to GS-13, \$23,087-\$27,453, dependent upon qualifications. Interested persons should submit Curriculum Vitae, Bibliography and a completed form SF-171 (Personal Qualifications Statement) by December 15, 1979 to Mr. Herbert Jones, NHLBI Personnel Office, NATIONAL INSTI-TUTES OF HEALTH, Public Health Service, 9000 Rockville Pike, Building 31, Room 5A-32, Bethesda, MD 20205. For additional information, please call (301) 496-6477. Equal Opportunity Employer.

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ASSOCIATE DIRECTOR FOR PHYSICS AND MATHEMATICS

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Requires demonstrated significant research achievements in physics or a closely related field; ability to direct and coordinate diverse basic and applied research activities to achieve established objectives; skill in effectively communicating complex information succinctly to diverse groups; a Ph.D. or equivalent in physics or allied field.

California Direct resume with salary requirements to:

- Mr. R. Lynn Wilson, Employment Manager
- DIV 80-B
- ð Los Alamos Scientific Laboratory
- **Jniversity** P. O. Box 1663
 - Los Alamos, New Mexico 87545

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Full-time faculty members of U.S. institutions of higher education are invited to apply. The following requirements must be met: a letter of endorsement from the University Dean and the Department Chairperson, an earned advanced degree in Engineering or other scientific discipline, and a publication record in the proposed area of research. All qualified applicants will receive consideration without regard to race, color, religion, sex or national origin.

may be appointed to research programs for one year with a limited number of extensions to a second year.

The following areas are of particular interest in Air Force research:

Life Sciences Mathematical and Information Sciences

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Laboratory locations include Arizona, California, Colorado, Florida, Massachusetts, New Mexico, New York, Ohio, Texas, and Washington, DC. Appointment starting date and salary are negotiable.

Applicants are requested to state interests and qualifications or obtain additional information through:

Major Richard W. Kopka, AFOSR/XOP, Bolling Air Force Base, Washington, DC 20332. Phone (202) 767-5016.

Air Force Office of Scientific Research

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AAAS SCIENCE REPORT SERIES

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Two other AAAS series, <u>Compendia</u> and <u>R&D Reports</u>, provide authoritative information on some of the principal issues that concern us all today. These publications can serve not only as valuable reference sources for scientists and researchers, but also as supplementary reading material in courses devoted to these issues.

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