Personnel Placement

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

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

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

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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

SCIENCE 1515 Massachusetts Ave., NW Washington, D.C. 20005

POSITIONS WANTED

Computer Science Consultant. B.S. in mathematics and 6 years of data processing software/hardware experience. Must relocate to Dallas, Texas, in early 1979. Box 285, SCIENCE. X

Consulting/Literature Searching: recent Ph.D. from Harvard. Successful synthetic natural products chemist now at leading university seeks part-time consulting and/or on-line literature searching situation. Send for curriculum vitae and information. Box 287. SCIENCE. X

Crystallographer: Ph.D. 1974, with postdoctoral experience; seeks permanent position working independently in x-ray crystallography. Box 278, SCI-ENCE. X

Immunologist. Ph.D. microbiology. Extensive experience in tumor immunology, tissue culture, cancer research. Strong background in biochemistry and laboratory techniques. Publications. Box 288, SCI-ENCE. 9/8, 15, 22

Entry-level position wanted immediately. Ph.D. Pharmacologist/Organic Chemist. Box 271, SCI-ENCE. X

Virologist. Ph.D. 1972. Major experiences in viruses (animal and plant), purification, characterization, tissue cultures, virus-cell interaction, macromolecular biosynthesis, nucleic-acid hybridization, and DNA-electron microscopy work. Seeks academic, government, industrial, or hospital position. Box 289, SCIENCE. X

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR in the Boston University Marine Program at the Marine Biological Laboratory, Woods Hole, to teach a graduate level course in physiology of marine animals and to coordinate a one-semester undergraduate program in marine science. Experience in research and teaching involving marine aspects desirable. Two years of postdoctoral experience preferred. Send curriculum vitae and three letters of reference by 6 October to: Dr. Arthur G. Humes, Director, Boston University Marine Program, Marine Biological Laboratory, Woods Hole, Massachusetts 02543.

Boston University is an Equal Opportunity/Affirmative Action Employer.

8 SEPTEMBER 1978

POSITIONS OPEN

ACADEMIC PATHOLOGISTS WHO REALLY LIKE TO TEACH, AND ARE GOOD AT IT!

Several positions now open in new pathology department, at all levels. VA Hospital service affiliation, scholarly work encouraged. Very pleasant university city of 75,000; enthusiastic faculty, attractive benefits, competitive salaries, low taxes. Reply with curriculum vitae to:

Chairman, Department of Pathology Marshall University School of Medicine Huntington, West Virginia 25701

The University of California, San Francisco, is seeking an individual with demonstrated competence in academic metabolism and endocrinology to be employed at the ASSISTANT PROFESSOR level at the San Francisco VA Hospital. Position requires research expertise and productivity in any of the areas of metabolism: diabetes, carbohydrate or lipid metabolism, and/or mechanism or regulation of insulin or glucagon secretion. Qualified candidates will have demonstrated clinical excellence in diabetology and ability to teach this area both at bedside and in a didactic setting. Inquiries and curriculum vitae to: Marvin D. Siperstein, M.D., Metabolism Section (111-F), San Francisco VA Hospital, 4150 Clement Street, San Francisco, Calif. 94121. The University of California is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSORS OF BIOCHEMISTRY (TWO). Excellence in graduate and professional teaching and ability to establish independent research program are essential. Preference for (1) physical biochemist with research experience in enzymology and (2) person with research experience in membranes or macromolecules other than nucleic acids. Please send curriculum vitae and references as soon as possible but not later than 1 November 1978 to: W. H. Horner, Chairman, Department of Biochemistry, Georgetown University Schools of Medicine and Dentistry, Washington, D.C. 20007. Georgetown University is an Affirmative Action/ Equal Opportunity Institution.

ASSISTANT PROFESSOR, BOTANY

The Department of Biology, University of Virginia, is seeking candidates in the areas of molecular, cellular, or developmental botany for an assistant professorship for September 1979. Postdoctoral experience is highly desirable. By 1 November 1978, candidates should send curriculum vitae and summary of research plans and have three letters of recommendation sent to: L. I. Rebhun, Faculty Search Committee, Department of Biology, Gilmer Hall, University of Virginia, Charlottesville, Va. 22901. An Affirmative Action/Equal Opportunity Employer.

The Department of Psychology at Cornell University will have an opening for a new faculty member in the area of perceptual and/or cognitive development, beginning in fall 1979. The appointment will be at the level of ASSISTANT PROFESSOR. The department welcomes applications from per-

The department welcomes applications from persons with active research interests in any aspect of perceptual or cognitive development. Applicants working in the area of perception in infancy are particularly welcome. A background sufficient to teach courses in perception would be desirable. Interested applicants should submit a complete curriculum vitae, reprints or preprints of completed research, and letters of recommendation sent directly from three referees to:

Perceptual/Cognitive Development Search Committee Department of Psychology

Uris Hall Cornell University

Ithaca, New York 14853

Cornell University is an Equal Opportunity/Affirmative Action Employer.

BIOCHEMIST—Senior postdoctoral position. Requires experience in enzyme purification and characterization. Position is for 1 year, although it may be renewable. Candidates should send curriculum vitae, including summary of pertinent experience, and names of three individuals who may be contacted for references, to: Dr. W. E. Barnett, Director, University of Tennessee-Oak Ridge Graduate School of Biomedical Sciences, Biology Division, Oak Ridge National Laboratory, P.O. Box Y, Oak Ridge, Tenn. 37830. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR, IN-RESIDENCE, CLINICAL CHEMISTRY

University of California, Irvine, Department of Pathology, is recruiting for faculty position at assistant professor level. Required: M.D., clinical Board-eligible/qualified, service experience in clinical chemistry, demonstrated interest in independent research. Duties: teach medical students and house staff, limited administrative responsibility in area of clinical chemistry. All qualified candidates welcome; minorities and women encouraged to apply. Send curriculum vitae and references to: H. Simpkins, M.D., Ph.D., Department of Pathology, University of California, Irvine, California 92717 by 23 October 1978.

ASSOCIATE DEAN FOR ADMINISTRATION— The Tufts University School of Veterinary Medicine invites applications for the position of associate dean for administration. This newly established school is conceived as an integral part of the Tufts University Schools of Medicine and Dental Medicine, the New England Medical Center Hospital, and a major nutrition research center at the Tufts Boston campus. It will also have its own large animal clinical facility in Grafton, Mass. The school plans to admit its first entering class in September 1979. The associate dean for administration will be responsible for the administrative development of the school. Position requirements include administrative experience at a veterinary school or other institution of higher education and the ability to develop new and innovative programs. The associate dean for administration will be expected to participate in research and teaching and will report directly to the dean. Send applications before 1 November to: Linda J. Lerner, Direstor of Personnel, TUFTS UNIVERSITY, 193 Harrison Avenue, Boston, Mass. 02111. An Affirmative Action/Equal Opportunity Employer.

ASSOCIATE DEAN FOR ACADEMIC AFFAIRS— The Tufts University School of Veterinary Medicine invites applications for the position of associate dean for academic affairs. This newly established school is conceived as an integral part of the Tufts University Schools of Medicine and Dental Medicine, the New England Medical Center Hospital, and a major nutrition research center at the Tufts Boston campus. It will also have its own large animal clinical facility in Grafton, Mass. The school plans to admit its first entering class in September 1979. The associate dean for academic affairs will be responsible for curriculum development and implementation and will aid in the development of research programs. The position requires academic experience in veterinary education or in other institutions of higher education. The associate dean for academic affairs will be expected to participate in research and teaching and will report directly to the dean. Send applications before 1 November to: Linda J. Lerner, Director of Personnel, TUFTS UNIVERSITY, 193 Harrison Avenue, Boston, Mass. 02111. An Affirmative Action/Equal Opportunity Employer.

BIOCHEMIST-INSECT VIROLOGIST. Postdoctoral position for Ph.D. in biochemistry with strong expertise in enzymology and protein chemistry and knowledge in insect virology. Employment from 1 October 1978 to 31 July 1979. Stipend: \$10,000 to \$14,000 per annum. Closing date for applications: 22 September 1978. The University of California is an Equal Opportunity Employer. Send curriculum vitae and names of three references to: Dr. Y. Tanada, Division of Entomology and Parasitology, 333 Hilgard Hall, University of California, Berkeley, Calif. 94720.

BIOCHEMIST—MOLECULAR BIOLOGY OF CONNECTIVE TISSUE. One-year appointment for research associate (adjunct instructor) beginning as soon as convenient. Challenging opportunity to work with energetic team of biochemists to do research on genes for collagen and related proteins with cDNA and other techniques, to manage some research laboratory, and to assist in teaching biochemistry to medical students.

Successful candidate must possess a Ph.D. in biochemistry; experience must include 1 or 2 years of work in appropriate areas of molecular biology.

Salary range: \$19,526 to \$22,088, depending on background and experience. Excellent benefits and working conditions.

Please submit résumé to: Department of Biochemistry, College of Medicine and Dentistry of New Jersey, Rutgers Medical School, P.O. Box 101, Piscataway, N.J. 08854. Equal Opportunity/Affirmative Action Employer, M/F.

BIOSAFETY OFFICER opening for an individual with training and experience in biological safety. Should have strong background in microbiology and biohazard containment. Will be responsible for es-tablishing and monitoring containment of microbial agents, chemical carcinogens and poisons, DNA re-combinants, and proper disposal. Radiological safety and physical plant safety are *not* included in this position. this position. Individual will be responsible to the administra-

tion and will work closely with the Biohazards Com-mittee and Office of Research.

Send curriculum vitae to: Dr. Chester A. Gleiser, Chairman, Search Committee, Room BFB-3, The University of Texas System Cancer Center, M. D. An-derson Hospital and Tumor Institute, Texas Medical Center, Houston, Texas 77030. An Equal Opportu-nity/Affirmative Action Employer.

CELL AND MOLECULAR BIOLOGISTS

Two tenure-track positions will be available in fall 1979 in the Division of Cell and Molecular Biology, Department of Biological Sciences, at the assistant professor level.

For one of the positions, we are seeking someone in the areas of DNA recombination or protein syn-thesis, and for the other position, someone in the area of cellular regulation or developmental biology. Preference for one of the positions will be given to

a person working with plants.

Applicants must have 2 to 3 years of postdoctoral experience in their area of expertise and the potential for setting up an independent research program.

To apply, submit curriculum vitae, including bibliography, statement of research interests, teaching background, and names of four referees from whom references may be obtained, to: Dr. Harold L. Segal, Chairman, Search Committee, 109 Cooke Hall, State University of New York at Buffalo, Buffalo, New York 14260.

Application deadline: 30 November 1978 State University of New York is an Equal Oppor-tunity/Affirmative Action Employer.

ECOLOGIST

A tenure-track position will be available in fall 1979 in the Division of Environmental and Organismal Biology, Department of Biological Sciences, at the assistant professor level.

We are seeking someone with a Ph.D. degree or equivalent in ecology, including physiological ecology.

Applicants must have 2 to 3 years of postdoctoral experience and the potential for setting up an independent research program.

To apply, submit curriculum vitae. including bibliography, statement of research interests, teaching background, and names of four referees from whom references may be obtained, to: Dr. Kenton Stewart, Chairman, Search Committee, 109 Cooke Hall, State University of New York at Buffalo, Buffalo, New York 14260.

Application deadline: 15 November 1978. State University of New York is an Equal Oppor-tunity/Affirmative Action Employer.

ENDOCRINOLOGIST

A tenured position will be available in fall 1979 in the Division of Environmental and Organismal Biology, Department of Biological Sciences, at the asso-ciate or full professor level.

We are seeking someone with an established repu-tation in the field of general endocrinology, neu-roendocrinology, reproductive endocrinology, or comparative endocrinology.

This position requires extensive teaching and re-search experience. Candidate is expected to have an ongoing, well-defined, successful research program.

To apply, submit curriculum vitae, including bibligraphy, statement of research plans, teaching back-ground, and names of four referees from whom ref-erences may be obtained, to: Dr. O. P. Bahl, Chair-man, Department of Biological Sciences, 109 Cooke Hall, State University of New York at Buffalo, Buf-falo, New York 14260.

Application deadline: 15 November 1978 State University of New York is an Equal Oppor-tunity/Affirmative Action Employer.

POSITIONS OPEN

UNIVERSITY OF CINCINNATI COLLEGE OF MEDICINE FACULTY APPOINTMENT I BIOLOGICAL CHEMISTRY

The department has recently moved into new, en-larged, and well-equipped facilities and is com-pleting its program of staff expansion. One position is open at the assistant professor rank but an appointment may be made as associate professor, deending on experience. All applicants should have at least 2 to 3 years of

All applicants should have at least 2 to 3 years of postdoctoral training, proven research ability, and experience and interest in teaching biochemistry. Applicants will be expected to develop independent research programs and supervise the training of Ph.D. candidates. In addition to fundamental re-search, excellent opportunities exist for collabora-tion with clinical colleagues on medically oriented architeme. The development exist and increase problems. The department seeks an outstanding per-son with research interests and experience in one of the following areas: membranes; origin of antibody diversity; somatic cell genetics; and construction of recombinant molecules. These areas may be broadly

recombinant molecules. These areas may be broadly interpreted; the qualifications and experience of the applicant will be given prime consideration. Applicants should send a résumé and a detailed outline of future research plans to: Dr. Harry Rud-ney, Director, Department of Biological Chemistry, College of Medicine, University of Clucinnati, Cincin-nati, Ohio 45267.

An Equal Opportunity Employer

BOTANIST (PLANT PHYSIOLOGY). Position for Ph.D. at State University College, Oneonta, N.Y., beginning September 1979. Duties include teaching introductory botany, plant physiology, and other areas of interest. Appointment will be for 1 year with opportunity for continuing appointment at the rank of instructor with a salary of \$10,500 to \$11,500. Po-sition dependent upon budgetary approval. Reply with undergraduate and graduate transcripts, ré-sumé, and three letters of recommendation by 1 February 1979 to: Dr. John G. New, Chairman, Biol-ogy Department, State University College, Oneonta, N.Y. 13820. Telephone: 607-431-3344 or 3703. State University of New York is an Equal Opportunity/Af-firmative Action Employer. firmative Action Employer.

University of California, Los Angeles (UCLA), School of Medicine, seeks appropriate candidates for the DELLA MARTIN CHAIR IN PSYCHIATRY, newly endowed professorship for distinguished aca-damic arguehictric (Randiak Gracking edicible Celli demic psychiatrist (English-speaking, eligible Cali-fornia licensure) committed to research especially on major mental illnesses of adolescents and young adults. *Equal Opportunity*/Affirmative Action Em-ployer. Send curriculum vitae, letter discussing career goals, and five references to:

Arnold B. Scheibel, M.D., Chairman Della Martin Search Committee 760 Westwood Plaza Los Angeles, California 90024

CHAIRMAN, Department of Natural Sciences, CHARMAN, Department of Natural Sciences, Florida State Museum. To administer research-ori-ented department of 12 curators in systematic biol-ogy. Research in any related field. Twelve-month position begins 1 July 1979. Application deadline: 1 November 1978. Name three references and send curriculum vitae to: Search Committee, Department of Natural Sciences, Florida State Museum, Universi-ty of Florida, Gainesville, Fla. 32611. An Equal Op-portunity/Affirmative Action Employer.

ACADEMIC POSITION OPEN CHEMISTRY DEPARTMENT CHAIRPERSON

Nominations and applications are invited for the position of Chemistry Department chairperson at Wichita State University starting August 1979. The department of 14 faculty members offers ACS certi-fied undergraduate degrees and master's degrees in all five major areas of chemistry. The successful canall five major areas of chemistry. The successful can-didate for this position must have an excellent rec-ord in teaching and chemical research, and have a clear potential for leadership. Administrative experi-ence is desirable. The chairperson will be expected to teach at the undergraduate and graduate levels, maintain an active research program, be effective in obtaining grant support, and guide the department into continued new program development. Submit qualifications, including curriculum vitae, and have at least three letters of recommendation sent by 20 October 1978 to: Dr. Melvin Zandler, Chairperson, Search Committee, Department of Chemistry, Wich-ita State University, Wichita, Kansas 67208. Wichita State University is an Affirmative Action Employer.

Employer.

POSITIONS OPEN

CELL BIOPHYSICS POSITIONS BLOOD CELL RESEARCH

Three immediate openings are available to qualifield Ph.D. scientists to work as research associates on the development and application of biophysical methods for the separation and characterization of human blood cells as related to transfusion prob-lems. Background and experience in blood cell bio-

lems. Background and experience in blood cell bio-physics and/or immunology and immunohematology is desirable. Fully equipped modern research facili-ties and instrumentation are available. Please send curriculum vitae to: C. R. Valeri, M.D., Naval Blood Research Laboratory, University Hospital at Boston University Medical Center, 615 Al-bany Street, Boston, Mass. 02118.

An Equal Opportunity Employer

CHAIRPERSON-BIOLOGY. Applications and nominations are invited for the position of chairper-son of the Department of Biological Sciences, Wichson of the Department of Biological Sciences, Wich-ita State University. The university is located in a metropolitan area of about 300,000 people and en-rolls more than 15,000 students. The department, with 16 full-time faculty, is housed in a new building and offers the B.A., B.S., and M.S. degrees. A Ph.D. program is not anticipated. There are approxi-mately 200 majors and 40 graduate students in the department. Candidates should have the Ph.D., ex-perience in university teaching, a strong record of scholarly achievement, and evidence of or potential for academic and administrative leadership. Rank and salary will be commensurate with qualifications. A letter of interest, a résumé, and the names of at A letter of interest, a résumé, and the names of at least three references should be sent by 30 Septemleast three references should be sent by 30 Septem-ber 1978 to: Chairperson Selection Committee, De-partment of Biological Sciences, Wichita State Univer-sity, Wichita, Kansas 67208. Wichita State Universi-ty is an Affirmative Action Employer and operates under Affirmative Action policy. Applications from minority persons and women are encouraged.

UNIVERSITY OF PENNSYLVANIA, SCHOOL OF DENTAL MEDICINE. Applications are being accepted for the position of CHAIRPERSON, De-partment of Oral Medicine. Responsibilities include predoctoral and postdoctoral programs and didactic and clinical teaching. Candidates should have expe-ience in teaching research and administration rience in teaching, research, and administration. Curriculum vitae and supporting data should be sent to: Dr. D. Isaacson, Chairperson, Search Committee, University of Pennsylvania, School of Dental Medi-cine, 4001 Spruce Street, Philadelphia, Pa. 19104. The University is an Equal Opportunity/Affirmative Action Employer.

INDUSTRIAL HEALTH AND SAFETY PROGRAM **DIRECTOR**—Immediate opportunity for individual seeking a faculty position in a unique baccalaureate seeking a faculty position in a unique baccalaureate program involving a new curricular approach to in-tegrating the activities of worker and student. Quali-fied applicants should possess a doctorate degree in an area related to industrial health and safety, for example, industrial hygiene, toxicology, public health epidemiology, occupational medicine, applied physics, environmental science, and so forth. Expe-rience in worker health problems, especially in an industrial employment setting and a familiarity with the objectives and trends of the labor union move-ment will be required, as well as an interest and comment will be required, as well as an interest and com-mitment to research. Faculty rank and salary com-mensurate with experience and qualifications. Cur-riculum vitae and two letters of reference should be directed to:

Dr. Moon J. Pak Associate Provost and Director Center for Health Sciences Oakland University Rochester, Michigan 48063 Telephone: 313-377-3562

An Affirmative Action/Equal Opportunity Employer

DIRECTOR, Research Institute of Pharmaceutical Sciences, School of Pharmacy, University of Missis-sippi. Requirements: doctorate in biomedical or physical sciences. Qualifications: experience in reearch administration with demonstrated record of search administration with demonstrated record of funded research and publications. Responsibility: to direct the further development and growth of a dy-namic multidisciplinary research institute presently supported by state, federal, and private funds. Sal-ary: commensurate with qualifications. Available af-ter 1 January 1979. Application deadline: 1 Novem-ber. Contact: Joe B. McCaskill, Associate Dean, Chairman, Search Committee, School of Pharmacy, University of Mississippi, University, Miss. 38677. Equal Opportunity Employer, M/F/H.

SCIENCE, VOL. 201

The University of California, Irvine, College of Medicine, is seeking a CHAIRMAN for the Depart-ment of Psychiatry and Human Behavior. Can-didates will have demonstrated excellence in redidates will have demonstrated excellence in re-search and teaching and will have administrative ex-perience. Candidates should be able to provide academic leadership for the department. Appli-cations from all qualified candidates are welcome; minorities and women are encouraged to apply. Send curriculum vitae, before 1 December 1978, to: Calvin S. McLaughlin, Chairman of the Search Com-mittee, Dean's Office, College of Medicine, University of California, Irvine, Calif. 92717.

DIRECTOR, SURGICAL PATHOLOGY, Bernalillo County Medical Center, and Department of Patholo-gy, University of New Mexico (UNM) School of Medicine. Doctorate in medicine; appropriate postsurgical pathology); certification by American Board surgical pathology); certification by American Board of Pathology in subspecialty of anatomic pathology; demonstrated interest/experience in teaching/re-search; significant background insofar as assuming responsibility for diagnostic function surgical pathol-ogy laboratory. Individuals with grant support, dem-onstrated special research interests and expertise in regard to ethnic/racial and other epidemiologic fac-tors influencing tumor incidence given preference. regard to ethnic/racial and other epidemiologic fac-tors influencing tumor incidence given preference. Academic rank and salary based on experience. Send curriculum vitae and three letters of recom-mendation by 1 November 1978 to: Charles R. Key, M.D., Search Committee Chairman, Pathology De-partment, UNM School of Medicine, Albuquerque, N.M. 87131. An Affirmative Action/Equal Opportu-vity Employer nity Employer.

DIRECTOR OF STANDARDS DEVELOPMENT

To oversee inception and administer the operation of an Ophthalmic Standards Development Program for the American Optometric Association. Research and administrative skills essential for this position. and administrative skills essential for this position. A Ph.D. or equivalent experience desirable. Salary commensurate with experience. Send résumé with salary history and expectations to: Commission On Ophthalmic Standards, American Optometric Associ-ation, 243 North Lindbergh Boulevard, St. Louis, Mo. 63141. Deadline for submission: 15 October. An Equal Opportunity Employer.

ELECTROPHYSIOLOGIST. Position available for ELECTROPHYSIOLOGIST. Position available for postdoctoral fellow or research associate in labora-tory studying experimental and clinical elec-trophysiology of retinal pigment epithelium. Appli-cants may have M.D. or Ph.D. Apply to: Michael F. Marmor, M.D., Division of Ophthalmology, Stanford University School of Medicine, Stanford, Calif. 94305. An Equal Opportunity Employer; applications from women or minorities welcome: women or minorities welcome.

ENDOCRINOLOGIST

Senior-level appointments are being considered at the Worcester Foundation for Experimental Biol-ogy. Candidates with an established reputation and the proven ability to obtain grant support in the field of endocrinology are encouraged to apply. Special consideration will be given to applicants in the following areas:

- 1) Hormone receptors and mode of hormone action, Neuroendocrinology, and

3) Endocrinology of pregnancy and parturition. Send two copies of curriculum vitae, together with the names of three referees, to: Endocrine-Repro-ductive Biology Search Committee, c/o Personnel Of-fice, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Massachusetts 01545 01545.

An Equal Opportunity/Affirmative Action Employer

Applications and nominations are invited for a TEN-URE-TRACK FACULTY POSITION in the Depart-ment of Chemistry at the State University of New York at Stony Brook. Preference will be given to senior candidates with an interest and experience in the state of the sta isotope chemistry, although junior and senior can-didates with outstanding qualifications in all areas will be considered. All applicants are expected to have unusually strong and active research programs and to make significant contributions to underand to make significant contributions to under-graduate and graduate education. Curriculum vitae and the names of at least three references should be sent to: **Professor Paul C. Lauterbur, Chairman, Search Committee, Department of Chemistry, State University of New York at Stony Brook, Stony Brook, New York 11794.** Equal Opportunity/Affirmative Ac-tion Employer tion Employer

8 SEPTEMBER 1978

POSITIONS OPEN

ENDOCRINOLOGY AND METABOLISM—The University of Massachusetts Medical School has po-University of Massachusetts Medical School has po-sitions for research and clinical training in endocri-nology and metabolism beginning 1 July 1979. Can-didates must have at least 2 years of post-M.D. train-ing in internal medicine or have a Ph.D. in basic science related to medicine. A 2 to 3 year com-mitment is required. Emphasis will be placed on pre-paring candidates for an academic career in endocri-rology and metabolism. For further information nology and metabolism. For further information, contact: Dr. L. E. Braverman, Division of Endocricontact: Dr. L. E. Braverman, Division of Endocti-nology and Metabolism, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, Mass. 01605; telephone: 617-856-3115. The Universi-ty of Massachusetts Medical School is an Equal Op-portunity/Affirmative Action Employer.

ENVIRONMENTAL STUDIES

The State University of New York at Albany (SUNYA) is seeking applications and nominations for a director and two other faculty for a B.S. degree program in environmental studies expected to begin in January 1979. Two faculty positions at assistant professor level require strong academic background, including Ph.D., and teaching and research experi-ence in environmentally related field. Director applience; position available at assistant or associate professor fessor level. Faculty will conduct courses and seminars, advise students including directing of stu and seminars, advise students including directing of stu-dent research, conduct own research, and work with advisory committee to develop M.S. program. A let-ter of application and résumé with names of three references should be received by 15 October 1978, to: Professor Harry Hamilton, c/o Leon Calhoun, Di-rector of Personnel, State University of New York at Albany, 1400 Washington Avenue, Albany, New York 12222. SUNYA is an Equal Opportunity/Affirmative Action Employer. Applications from minorities and women are especially welcome.

TENURE-TRACK FACULTY. Applications are in-vited for several faculty positions in the program in genetics and molecular biology, to contribute to graduate and undergraduate program development and maintain a vigorous research program. Appli-cants should have one or more years of postdoctoral training and submit a full résumé, including names of at least three references

INSTRUCTIONAL TECHNICIAN. Full time. Applicants are invited for a technician to work as laboratory preparator in molecular biology and genetics courses. Submit résumé demonstrating experience with genetics, molecular biology, biochemistry, and computer equipment and procedures.

LABORATORY ASSISTANTS. Applicants are in-vited to assist in the development of a new laborato-ry instructional program in genetics and molecular biology and in laboratories in population biology. Must qualify for admission to graduate program, maintain full-time graduate student status and satis-factory progress to advanced degree. Submit applications to:

David L. Jameson Program in Genetics and Molecular Biology University of Houston Houston, Texas 77004

An Equal Opportunity/Affirmative Action Employer

IMMUNOLOGIST—Position open for a Ph.D. or M.D. at the assistant professor level. Joint appoint-ment available in Department of Medicine for M.D. Candidate should be able to conduct active research Candidate should be able to conduct active research program contributing to departmental interests in cellular and molecular biology. Participation in grad-uate and medical teaching required. Send correspon-dence to: Dr. Morton M. Weber, Department of Mi-crobiology, St. Louis University School of Medicine, 1402 South Grand Boulevard, St. Louis, Missouri 63104. Equal Opportunity/Affirmative Action Em-ployer, M/F/Handicapped.

INSTRUCTOR, BIOCHEMISTRY, to team-teach INSTRUCTOR, BIOCHEMISTRY, to team-teach biochemistry and biochemistry laboratory and con-duct research on the biochemical mechanism of ex-citation-secretion coupling in the central nervous system. Starting salary \$14,000. Position available for 5 years. Send curriculum vitae and bibliography to: Dr. J. A. Babitch, Chemistry Department, Texas Christian University, Fort Worth, Texas 76129, by 30 September 1978. POSTDOCTORAL AND GRADU-ATE STUDENT STIPENDS for 1979 also available. Texas Christian University does not discriminate on the basis of sex, religion, handicap, race, or ethnic origin.

CONTRACTOR C FACULTY POSITION CHAIRMAN, DEPARTMENT OF METABOLISM

The College of Veterinary Medicine of the Univer-sity of Florida invites applications and nominations for the position of chairman, Department of Metabo-lism. The primary mission of this department in teaching and research is to provide a broad inter-disciplinary program to undergird and strengthen veterinary biological concepts prerequisite to quality clinical medicine. The Department of Metabolism will develop and maintain a close relationship with and compliment the programs of several basic sci-ence departments within the College of Medicine. Applicants should desire involvement in a growing

college, have a commitment in a growing medical and graduate students, and be dedicated to the implementation of an integrated, nontraditional curriculum. Candidates must possess the Ph.D. degree and

have training and expertise in some area related to metabolic functions. The D.V.M. (or equivalent) de-gree is desirable. Other qualifications include teachgree is desirable. Other qualifications include teach-ing experience on the undergraduate and graduate levels; demonstrated scholarship and research achievement; evidence of administrative and lead-ership qualities; evidence of the ability to function well with faculty from multiple disciplines (for ex-ample, physiology, biochemistry, anatomy, and so forth); and, familiarity with sources of funding and budgetary procedures.

Salary and academic rank will be commensurate with training and experience of the successful appli-

Letters of application or nomination should in-clude curriculum vitae outlining citizenship, acaclude curriculum vitae outlining citizenship, aca-demic training, teaching and administrative experi-ence, and present professional activities. Also needed are a list of publications, a statement of pro-fessional goals, and the names of three persons who can provide letters of reference. The closing date for applications is 15 November 1978. Send application or nomination to: or nomination to:

Dr. E. L. Besch Chairman, Search Committee College of Veterinary Medicine J-125 JHMHC University of Florida Gainesville, Florida 32610

THE PROPERTY AND THE PR THE UNIVERSITY OF TEXAS AT AUSTIN MARINE SCIENCE INSTITUTE DIRECTOR

The University of Texas Marine Science Institute invites applications for the position of director

The Marine Science Institute is headquartered in Austin, Texas, and has the Galveston Geophysics Laboratory in Galveston, Texas, with extensive re-search programs in marine geology, marine geophysics, solid earth and planetary geophysics, and the Port Aransas Marine Laboratory in Port Aransas, Port Aransas Marine Laboratory in Port Aransas, Texas, with a basic and applied research program in the biological sciences, chemistry, sedimentation, physical oceanography, and engineering. The insti-tute also has a mariculture facility in Port Aransas, Texas, and a field station in St. Croix, U.S. Virgin Islands. The institute conducts research programs throughout the world, has a multidisciplinary gradu-ate teaching program in conjunction with the Depart-ment of Marine Studies at the University of Texas at Austin, operates three ships (165-foot, 130-foot, and 85-foot) as well as many smaller vessels, and has a thoroughly diversified marine research program as well as a solid earth and planetary geophysics prowell as a solid earth and planetary geophysics program

Candidates should possess recognized scientific credentials, must qualify for a tenure appointment in the Department of Marine Studies, and be capable of dealing with leadership and policy issues. Extensive experience in scientific research in the marine sciences is required. Administrative and teaching experience is important in the selection process. Respon-sibilities include providing administrative direction for academic and world-wide research programs, coordination of research directions, and intellectual and philosophical leadership in continuing the development of an outstanding marine science program.

Application, personal résumé, and the names of at least three referees should be sent to: **H. Eldon Sut-ton**, Vice **President for Research**, **The University of Texas at Austin**, **Austin**, **Texas 78712**. The deadline for receipt of materials is 1 October 1978. Do not include materials which must be returned.

The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN PHARMACOLOGY

Applications are invited for a position in the phar-macology or toxicology area. The level of the posi-tion is open and the appointment is on a 12-month basis. Applicants should have a Ph.D. in pharmacol-ogy or toxicology. Preference will be given to indi-viduals with a pharmaceutically related background and good records in teaching and research. Success-ful candidates will be expected to develop producand good records in teaching and research. Success-ful candidates will be expected to develop produc-tive research programs in the areas of their choice. Additional responsibilities include sharing instruc-tional activities with other faculty members in an un-dergraduate course sequence emphasizing pharma-cology and therapeutics, but also including patho-physiology and toxicology. Significant opportunities evict for participation in graduate education and for exist for participation in graduate education and for collaborative basic or clinical research within the college and the University Medical Center. Located on the University of Kentucky campus are special-ized interdisciplinary research centers in the areas of tobacco and health, cancer, gerontology, and toxicology.

Interested individuals should submit before 20 October curriculum vitae and the names of three indi-viduals who can be contacted for references to: Search Committee Chairman, University of Ken-tucky, College of Pharmacy, Lexington, Kentucky 40506

The University of Kentucky is an Equal Opportu nity Employer.

The Australian National University invites appli-cations for two positions of **FELLOW and RE-SEARCH FELLOW** in the Director's Unit (U.V. Physics and Astronomy Group), Research School of Physical Sciences, to work with the director, Profes-Physical Sciences, to work with the director, Profes-sor J. H. Carver, in establishing an ultraviolet re-search group to investigate laboratory problems of astrophysical and atmospheric significance, and which will seek guest investigator status on appro-priate observatory spacecraft. Members of the group will be encouraged to collaborate with other mem-bers of the Research School of Physical Sciences which includes the Mt. Stromlo and Siding Spring Observatories and the Plasma Physics Laboratory. Applicants should have research experience in one or more of the following fields: photoionization and Applicants should have research experience in one or more of the following fields: photoionization and photoabsorption in atmospheric gases, U.V. spec-troscopy, evolution of the atmosphere, satellite as-tronomy. Appointment of fellow is for 5 years in first instance with possibility, after review, of reappoint-ment to retiring age (65 years); appointment of re-search fellow is for 3 years in first instance with pos-sibility of extension to 5 years. Fellow: \$17,694 to \$23,704; research fellow: \$15,179 to \$19,813 per annum, Australian currency. Current exchange rates: A\$1 = U.S.\$1.15. Reasonable travel expenses, su-Agi = 0.3.3113. Reasonable traver expenses, superannuation benefits. Further information from: Academic Registrar, Australian National University, P.O. Box 4, Canberra, ACT 2600, Australia, with whom applications close 16 October 1978.

POSITION IN FISHERIES BIOLOGY Appalachian Environmental Laboratory University of Maryland Center for Environmental and Estuarine Studies

The University of Maryland is seeking a Ph.D.-level The University of Maryland is seeking a rn.D.-level person to fill a tenure-track assistant professor posi-tion in fisheries biology at the Appalachian Environ-mental Laboratory, Center for Environmental and Estuarine Studies, University of Maryland, Frost-burg, Maryland. Twelve-month appointment.

OUALIFICATIONS: The successful applicant is expected to teach graduate-level courses in fisheries management/aquaculture and advanced fisheries science. Résumé and transcript of course work must reflect strong fisheries background, with training in biometrics and computer programming. The pre-ferred applicant will have a good publication record a demonstrated ability to secure funding through contracts and grants, and an ability to independently establish a research program that will complement ongoing activities of the Appalachian Environmental Laboratory.

SCHEDULE: Closing date for applications is 15 October 1978, with starting date December 1978. CONTACT:

Dr. Dan M. Harman Chairman, Search Committee Appalachian Environmental Laboratory Center for Environmental and Estuarine Studies University of Maryland Frostburg State College Frostburg, Maryland 21532

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POSITIONS OPEN

HISTOLOGY TECHNICIAN

Rewarding career opportunity in the largest cancer research hospital in the United States. Join our progressive team, using modern equipment and techniques. Initiative is en-couraged. HT (ASCP) certified or eligibility is required. Salary commensurate with experience. Excellent benefits to include 3 weeks paid vacation. University of Texas System Cancer Center, M. D. Anderson Hospital and Tumor Institute, 6723 Bertner Avenue, Suite 112, Houston, Texas 77030. An Equal Opportunity/Affirmative Action Employer, M/F

INSTRUCTOR-PHARMACOLOGY

The University of South Carolina School of Medi-cine invites applications for an instructor position in its Department of Pharmacology. Candidates should have a Ph.D. and/or M.D. degree. Preference will be given to those applicants with a background in cyclic nucleotides or metabolic control although out-standing individuals in all areas will be considered. Interested individuals should send curriculum vitae, names of three references, and a statement of career goals to: goals to:

Dr. Donald O. Allen, Chairman Department of Pharmacology School of Medicine University of South Carolina Columbia, S.C. 29208

An Affirmative Action/Equal Opportunity Employer

LIPOPROTEIN BIOCHEMIST

Biochemist Ph.D. with experience in lipoprotein biochemistry and metabolism sought for senior position in RIH-sponsored research program. Experience in apoprotein purification and quantitation and design of metabolic studies highly desirable. Please respond by 1 November 1978. Send curriculum vitae, bibliognames of three references to: Seymour M. Sabesin, M.D., Department of Medicine, Universi-ty of Tennessee Center for the Health Sciences, 951 Court Avenue, Room 335M, Memphis, Tennessee 38163.

An Equal Opportunity/Affirmative Action Employer

The Research Institute of Pharmaceutical Sciences, School of Pharmacy, University, Mississippi, is seeking a MASS SPECTROSCOPIST. Candidates with a B.S. in pharmacy and with a Ph.D. and sub-sequent experience in a life science field are pre-ferred. Salary commensurate with experience. Send biographical data, publications, and so forth to Dr. Carlton Turner, Associate Director, Research Insti-tute of Pharmaceutical Sciences, School of Pharmacy, University of Mississippi, University, Mississippi 38677. Application deadline, 30 September. Equal Opportunity Employer, M/F/H.

MYCOLOGIST. Assistant professor; Ph.D., research and teaching, 9-month appointment, tenure-track. Responsibilities include teaching under-graduate and graduate courses in mycology, in-troductory botany and biology, research empha-sizing any aspect of the biology of higher fungi. Send curriculum vitae and names of three references to:

Mycology Search Committee Department of Botany, AK-10 University of Washington Seattle, Wash. 98195

The University of Washington is an Equal Opportunity Employer.

PAEDIATRICS

Title: Research position, virology Qualifications: Ph.D. or M.D. with background in basic animal virology research sought for full-time research position with faculty appointment at the University of Toronto and appointment as an investigator at the Research Institute at The Hospital for Sick Children. Successful candidate should have a good record for research productivity and be able to compete successfully for peer review grants. Salary: To be negotiated. Applicants should contact:

Dr. David H. Carve The Hospital for Sick Children 555 University Avenue Toronto, Ontario, Canada M5G 1X8

POSITIONS OPEN

NEUROMORPHOLOGIST/NEUROBIOLOGIST

The Department of Cell Biology is seeking a faculty member at the level of assistant professor. Formal teaching duties include teaching in the medical neu-roscience course. The successful applicant will be expected to establish an independent research proexpected to establish an independent research pro-gram in the field of neurobiology and contribute to an active research environment. Applicants should submit curriculum vitae, including a list of pub-lications and names of references, to: Dr. D. J. Woodward Faculty Research Committee Department of Cell Biology The University of Texas Health Science Center at Dallas Southwestern Medical School 5323 Harry Hines Ronleyard

50211Western Medical School 5323 Harry Hines Boulevard Dallas, Texas 75235 The University of Texas is an Equal Opportunity/Af-firmative Action Employer, M/F/H.

NEUROPHARMACOLOGIST

Applications are invited from qualified individuals for a position in the Department of Pharmacology, for a position in the Department of Pharmacology, University of Iowa. Appointment will be at the as-sistant professor level. The appointee must be com-mitted to excellence in teaching and research and will participate in the department's professional and graduate teaching activities as well as establish an independent research program of high quality. The applicant must have one or more years of post-doctoral training; preference will be given to appli-cants with research experience in the general area of neurochemistry/neurotransmitters (for example, neutides as neurotransmitters immunocytochemis peptides as neurotransmitters (for example, peptides as neurotransmitters, immunocytochemis-try, receptor isolation/identification, and so forth). Interested applicants should send their curriculum vitae and the names of three references to. **Dr. J. P.** Long, Chairman, Department of Pharmacology, University of Iowa, Iowa City, Iowa 52242. The University of Iowa is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

Applications are solicited for a faculty position in: PHYSIOLOGY (#130)—associate professor or pro-fessor. Responsibilities include: teaching medical, dental, and graduate students, conducting cardio-work of a particular students. vascular, neural, or renal physiological research. Ph.D. or M.D. and 2 years of postdoctoral training required.

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

MIT POSTDOCTORAL ASSOCIATE. One position on studies of solid state structure of polymers is available starting between October 1978 and January 1979. Projects include: (i) study of packing order in 1979. Projects include: (i) study of packing order in collagen fibers by transmission electron microscopy, and electron diffraction; (ii) study of above by small angle x-ray diffraction. We are seeking a person with a background in polymer physics, biophysics, mate-rials science, or physical chemistry. Starting salary: \$15,000. Those interested should send their résumé to: Professor Ioannis V. Yannas, Fibers and Polymers Laboratory, Massachusetts Institute of Technology, Room 3-334, Cambridge, Mass. 02139, and should have three letters on their behalf sent to the above address.

POSTDOCTORAL POSITION available immediate-POSTDOCTORAL POSITION available immediate-ly in single crystal x-ray diffraction of natural prod-ucts, siderochromes, cyclic peptides and molecules of biological importance. Strong background in dif-fractometry, computing and structure determination required. Opportunity to become involved in the biochemistry of siderochromes. Send curriculum vitae and names of references by 30 September 1978 to: Dr. Dick Van Der Helm, Department of Chemis-try, University of Oklahoma, Norman, Oklahoma 73019. The University of Oklahoma is an Equal Op-portunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS involving the struc-POSTDOCTORAL POSTITIONS involving the struc-ture, sequence organization, and expression of the fetal and adult globin chains of goat using the cloned globin genes. One position available immediately and the others later this year. Send résumé to: Dr. Jerry B. Lingrel, Department of Biological Chemistry (522), University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, Ohio 45267. Equal Opportunity/Affirmative Action Employer.

NAVAL RESEARCH LABORATORY NRL is seeking highly-qualified **Research Physicists Mechanical** Engineers

The U.S. Naval Research Laboratory has positions available for computational fluid dynamicists. Individuals with a background in the development and application of finite difference or finite element codes for calculating non-linear transient flow problems are preferred. The principle long-term application areas are the prediction of large amplitude wave loadings and blast loadings on near-shore or off-shore structures.

Qualifications:

PhD in Physics or Mechanical Engineering or equivalent experience.

Salary: GS-12: \$21,883-\$28,444 per annum (salary

commensurate with qualifications and experience)

Fringe Benefits:

This is a career position in the competitive service and carries all of the normal fringe benefits.

Interested applicants should send Standard Form 171 or a detailed resume to:

Naval Research Laboratory Attn: Code 1811 EM 4555 Overlook Ave., S.W. Washington, D.C. 20375 An Equal Opportunity Employer

MICROBIAL

GENETICIST PhD SmithKline Corporation, a diversified pharmaceutical firm located in Philadelphia, Pennsylvania, is seeking a person to develop and apply modern genetic technology to the discovery of antibiotics and other biologically active agents.

This position is located at our suburban facility, 17 miles from Philadelphia. The successful candidate for this new position should be capable of directing a research program on molecular genetics and become a leader in the development of novel techniques for discovery of new classes of antibiotics. This person should have a PhD or equivalent in microbial genetics with experience in recombinant DNA technology, plasmids and phage genetics.

Preference will be given to persons with work experience in antibiotics producing actinomycetes. Smith-Kline offers an excellent compensation program and opportunity for professional growth. Please send resume with salary history to: Mr. William Groves, SmithKline Corporation, 1506 Spring Garden St., P.O. Box 7929, Philadelphia, Penn-

sylvania, 19101. Equal Opportu-SmithKline nity Employer, Male/Female/Handicapped/

Veteran.

PROJECT LEADER Anti-Inflammatory

Riker Laboratory, Inc. seeks a person to lead an inter-disciplinary team of scientists in the search for improved therapeutic agents for the treatment of inflammatory diseases.

Candidates applying for this position should have a PhD in one of the biological sciences with proven experience in pharmacology. Immunological background relevant to this area. Minimum of 7 years Industrial or Industrial/ Academic experience.

If you are looking for an opportunity for creative thinking and challenges requiring innovative solutions, please send your resume in confidence to:

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Circle No. 90 on Readers' Service Card

POSTDOCTORAL POSITION available. Plant phys-POSIDOCIORAL POSITION available. Plant phys-iologist-biochemist to participate in investigations concerning the biochemistry and physiology of cyto-kinins in relation to nucleic acid metabolism in plant systems. Oregon State University subscribes to a policy of active recruitment of women and ethnic mi-nority persons and invites all interested and quali-fied persons to apply with résumé and references to: Donald J. Armstrong, Department of Botany and Plant Pathology, Oregon State University, Corvallis, Ore. 97331. Ore. 97331.

POSTDOCTORAL POSITION available to study metabolic regulation and/or enzyme turnover in cul-tured human cells. Experience in protein isolation techniques desirable. Salary to \$11,000. Send ré-sumé and names of references to:

Dr. Ifeanyi Arinze Department of Biochemistry Meharry Medical College Nashville, Tennessee 37208

POSTDOCTORAL POSITION

Postdoctoral position available for a protein bio-Postdoctoral position available for a protein bio-chemist to work on the humoral regulation and con-trol of coagulation factors. Better than average sal-ary available for 2 to 4 years. Send curriculum vitae with names of three references to: Dr. Simon Kar-patkin, Department of Medicine, New York Universi-ty Medical School, 550 First Avenue, New York, N.Y. 10016; telephone: 212-OR 9-3200, extension 2959.

POSTDOCTORAL POSITION—Control of gene expression in *B. subtilis*. Emphasis on biochemical and immunochemical analysis of spore protein and synthetic of their precursors in sporulation mutants. Preference will be given to candidates whose back-ground enhances their ability to fit into ongoing research programs. Send curriculum vitae and recom-mendations to: Dr. Donald Tipper, Department of Microbiology, UNIVERSITY OF MASSACHU-SETTS MEDICAL CENTER, 55 Lake Avenue North, Worcester, Mass. 01605. An Equal Opportunity/Af-firmative Action Employer.

POSTDOCTORAL POSITION available (2 years) in the area of molecular cloning of spore genes in *Bacillus subtilis*. Applicants should have extensive experience in microbiology, microbial genetics and/ or biochemistry. Salary commensurate with the po-sition and experience. Send curriculum vitae and the names and phone numbers of three individuals who will serve as references to:

> Dr. Paul S. Lovett Department of Biological Sciences University of Maryland Baltimore County Catonsville, Maryland 21228

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

POSTDOCTORAL POSITION available immediate-I y in an NIH training program in visual neurophysi-ology. The project involves the analysis of synapses associated with visual information processing in the CNS of the crayfish. The position is for a minimum of 18 months to 2 years. Stipend depends upon expeof 18 months to 2 years. Superiod depends upon expe-rience. Send résumé and three letters of recommen-dation to: Raymon M. Glantz, Department of Biol-ogy, Rice University, Houston, Texas 77001. Rice University is an Equal Opportunity/Affirmative Ac-tion Emel Game tion Employer.

POSTDOCTORAL POSITION available for individ-POSTDOCTORAL POSITION available for individ-ual with interests in cellular neurophysiology and inquiries with curriculum vitae and names of refer-ences to: Dr. Daniel Johnston Section of Neurophysiology Department of Neurology Baylor College of Medicine Houston, Texas 77030

POSTDOCTORAL RESEARCH ASSISTANT POSI-TION available immediately for electron microsco-TION available immediately for electron microsco-pist with experience in examination of mammalian tissues. Position involves being a member of a re-search team studying the pathogenesis of bacterial diseases. Salary approximately \$11,000 to \$12,000 per year. Send curriculum vitae and names of three references to: Dr. Arnold Kreger, Department of Mi-crobiology and Immunology, The Bowman Gray School of Medicine, Winston-Salem, N.C. 27103. The Bowman Gray School of Medicine is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS AVAILABLE IMMEDIATELY

- 1) Protein chemist/biochemist interested in cultivation of bacteria in heavy water and isolation of enzymes from these organisms for NMR studies. Experience in microbiology or NMR desirable but not essential.
- 2) Physical biochemist interested in biological and spectroscopic approaches to the study of gallium tumor scanning agents.
- NMR spectroscopist interested in determination of peptide conformations by NOE measurements and paramagnetic probes.

Bruker HX-90, CXP-270 and WH-400 available for NMR studies. Send résumé and names of three ref-erences to: Dr. Ted T. Sakai (1), or Dr. Robert Len-kinski (2, 3), Comprehensive Cancer Center, University of Alabama in Birmingham, Birmingham, Ala-bama 35294. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE reguired immediately for biochemical work in oceano-graphic research laboratory on the Maine coast. Applicants should be experienced in the continuous culture of marine phytoplankton and the assay of photosynthetic enzymes in such organisms. Addi-tional expertise in the measurement of pathways of photosynthetic carbon dioxide assimilation and experience in making such measurements on oceano-graphic research cruises are also required. Please apply, with appropriate curriculum vitae, to: Direc-tor of Research, Bigelow Laboratory for Ocean Sci-ences, McKown Point, West Boothbay, Maine 04575. We are an Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE-Be ginning July 1979 for studies of leukemia and melaand a statistic of the state of

POSTDOCTORAL RESEARCH POSITION available September 1978 for studies on the ultrastructure and evolution of algae. The hypothesis that the chloroplasts in some groups of algae arose from the progressive reduction of an endosymbiotic eu-karyotic alga will be tested. Experience in electron microscopy desirable. The position is for 2 years with a starting salary of \$11,880. Please send curriculum vitae and names of three referees to: Dr. Sa-rah P. Gibbs, Department of Biology, McGill Univer-sity, 1205 McGregor Avenue, Montreal, Quebec, Canada H3A 1B1.

POSTDOCTORAL RESEARCH POSITION available immediately to study the biochemical basis of altered hepatic microsomal drug metabolism in tumor-bearing animals. Experience in protein purifica-tion and/or cytochrome P-450 biochemistry pre-ferred. Send curriculum vitae and three references to: William T. Beck, Ph.D., St. Jude Children's Re-search Hospital, 332 North Lauderdale, Memphis, Tenn. 38101. Equal Opportunity Employer.

POSTDOCTORAL TRAINING ASSOCIATE

Available 1 September 1978 to study the indole trip-lets of proteins using flash photolysis for 2 years. Ré-sumé and reference letters to: Camillo A. Ghiron Department of Biochemistry University of Missouri-Columbia Columbia, Missouri 65211 An Equal Opportunity/Affirmative Action Employer

PROFESSOR OF PATHOLOGY

Applications are sought for the position of profes-sor of pathology in the Eastern Virginia Medical School. We seek a candidate with M.D. degree and school. We seek a cancical pathology both at the aca-demic- and hospital-practice level to participate in an active educational program for the teaching of medical students and residents. Excellent depart-ment research facilities available, including electron ment research tacinities available, including electron microscopy. Applications should include curriculum vitae, bibliography, and letters of recommendation. Please send to: Robert J. Faukoner, M.D., Chair-man, Department of Pathology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, Virginia 23501. An Equal Opportunity/Affirmative Action Employer. Employer

POSITIONS OPEN

VISITING PROFESSORSHIP IN ANALYTICAL CHEMISTRY at the University of Delaware for 1979–1980. Attractive position for experienced fac-ulty member to spend leave in a dynamic department ulty member to spend leave in a dynamic department with excellent research facilities. Candidate will be expected to participate in the teaching program. Qualified individuals are invited to write to: **Profes-sor G. A. Rechnitz, Department of Chemistry, Uni-versity of Delaware, Newark, Delaware 19711.** The University is an Affirmative Action/Equal Opportu-nity Employer.

The Ohio State University College of Medicine will be entertaining applications until 1 November 1978 for the position of **PROFESSOR AND CHAIRPER**-SON, Department of Medicine. Position to be filled by 1 July 1979. Communications should be sent to: Chairperson, Search Committee for the Department of Medicine, 4170 Grant Graves Hall, The Ohio State University, Columbus, Ohio 43210. An Equal Oppor-tunity/Affirmative Action Employer, M/F/H.

RECEPTOR BIOCHEMISTRY

Postdoctoral position for a recent graduate Postdoctoral position for a recent graduate with solid training in biochemistry. Unique interdisciplinary institute. Research on membrane taste receptor characterization. Send curriculum vitae and names of three references to: Dr. Robert H. Cagan, Monell Chemical Senses Center, University of Penn-sylvania, 3500 Market Street, Philadelphia, Pa. 19104. An Equal Opportunity Employer.

RESEARCH ASSISTANT. One or two entry level positions requiring B.S. in chemistry, biology, or equivalent experience. Duties include protein purification, enzyme assays and/or electron microscopy. Possibility of part-time graduate study. Send letter, curriculum vitae, and have three reference letters sent to: Professor N. M. Tooney, Department of Chemistry, Polytechnic Institute of New York, 333 Jay Street, Brooklyn, N.Y. 11201.

RESEARCH ASSOCIATE: Ph.D. preferred. Re-**RESEARCH ASSOCIATE:** Ph.D. preferred. Re-search on: (i) transcription specificity of bacterio-phage-modified RNA polymerase or, (ii) construc-tion of novel vectors for recombinant DNA experi-ments. Salary dependent on experience. Appoint-ment for 1 year with possibility of renewal. Avail-able immediately. Contact: Dr. David Shub, Depart-ment of Biological Sciences, State University of New York at Albany, 1400 Washington Avenue, Albany, N.Y. 12222. SUNYA is an Equal Opportunity/Af-firmative Action Employer. Applications from wom-en, minorities, and handicapped are especially wel-come. come.

The Institute for Cancer Research has formed a search committee to fill one or more positions for **RESEARCH SCIENTISTS** with experience in the following areas of cell biology: function and struc-ture, biochemistry, and biophysics of cell mem-branes, receptors, and cell organelles, cell-cell rec-ognition, intercellular communications; somatic cell genetics.

Applicants should have at least 1 or 2 years of postdoctoral experience.

Applicants should submit curriculum vitae, state-ments of experience and research plan(s), and names of four referees to:

Dr. A. Knudson, Director The Institute for Cancer Research 7701 Burholme Avenue Philadelphia, Pa. 19111

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RESEARCH TRAINING IN SALIVARY SECRETION

Positions are available for research training in sali-Positions are available for research training in sali-vary secretion and related areas. Applicants should have Ph.D. or a professional degree (M.D., D.D.S., D.V.M., or equivalent) and must be U.S. citizen or have permanent visa. Persons with backgrounds in nutrition, experimental pathology, or protein bio-chemistry are preferred. Graduate programs leading to Ph.D. or M.S. are available. Stipends: \$10,000 to \$14,000, depending on experience. Send curriculum vitae and statement of research interests to: Dr. Olav Alvares, Department of Oral Biology, University of Washington, School of Den-tistry, Seattle, Wash. 98195. University of Washington is an Equal Opportunity Employer.

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ENVIRONMENTAL SCIENTISTS

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8 SEPTEMBER 1978

SEEEEEEEEEEEEE

POSTDOCTORAL POSITION in insect neurobiology for 1 or 2 years. Available immediately. Experience in intracellular recording and staining techniques desirable. Inquiries to:

Dr. K. G. Pearson Department of Physiology University of Alberta Edmonton, Canada T6G 2H7

One-year appointment at **RESEARCH INSTRUC**-TOR level. M.D. or Ph.D. with background in mi-crobial genetics and mechanisms of bacterial viru-lence. To carry out studies on bacterial surface char-acteristics, their regulations, and their relationship to pathobiology of *Neisseria gonorrhoeae*. Contact: Dr. John Swanson, Department of Pathology, Univer-sity of Utah Medical Center, telephone: 801-581-7773. The University of Utah is an Equal Opportunity Em-ployer. ployer.

MACQUARIE UNIVERSITY SYDNEY, AUSTRALIA SENIOR LECTURER/LECTURER IN ENVIRONMENTAL STUDIES

in the CENTRE FOR ENVIRONMENTAL STUDIES

Applications are invited for appointment as SENIOR/LECTURER/LECTURER IN EN-VIRONMENTAL STUDIES in the CENTRE FOR ENVIRONMENTAL STUDIES, te-nable not before 1 January 1979.

The centre mainly teaches postgraduate stu-dents and courses cover the biological, phys-ical, and social aspects of the environment. Preference will be given to candidates with strengths in one of the latter two areas, and with postgraduate teaching experience in en-vironmental studies.

Salaries will be within the following ranges: Senior lecturer: A\$20,365 to A\$23,737 per annum.

Lecturer: A\$15,179 to A\$19,940 per annum.

Further information about the university and advice regarding the method of application should be obtained from: the Secretary-Genshould be obtained from: the secretary-Gen-eral, Association of Commonwealth Universi-ties, 36 Gordon Square, London WC1H OPF, England or from: the Registrar, Macquarie University, North Ryde, New South Wales 2113, Australia.

Applications close on 20 October 1978.

The University of Texas Health Science Center at San Antonio, Department of Family Practice, seeks a SOCIAL SCIENTIST: primarily to participate in the teaching of family medicine to senior medical students and other medical trainees in a medical students and other medical trainees in a medical school-directed Family Health Center; secondarily to engage in research in problems of cross-cultural health care delivery and in the training of primary health care providers. Applicants should be com-mitted to teaching social science concepts in a clini-cal medical setting. Requirements: Ph.D. in social science. Preferences: Background in medical social sci-ence. Background in Mexican-American culture. Bi-lingual (Sanish-English)

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Inquiries to:

Paul C. Friedman, M.D Assistant Professor and Research Coordinator Department of Family Practice The University of Texas Health Science Center San Antonio, Texas 78284

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Chief, Scientific Program Branch Extramural and Collaborative Programs National Eye Institute National Institutes of Health Bethesda, Maryland 20014

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for the following fellowships. Two postdoctoral fellowships, each awarded for a period of 1 year (extendable to 2 years in special in-stances) beginning in September 1979, with a stipend of \$16,500 per annum. Completed applications are to be returned by 15 January 1979. Application forms may be obtained by writing to: the Director, Lamont-Doherty Geological Observatory, Palisades, New York 10964.

Award announcements will be made 28 February 1979.

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FELLOWSHIPS

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