ters-the Near East, East Asia, and the Americas-and he discusses the criteria that reveal domestication, including the introduction of non-indigenous species, morphological changes in indigenous forms, changes in relative species abundance, the age and sex composition of species samples, and finally contextual evidence such as animal burials. He suggests that, to begin with, domestication was for products like meat and skin that could be obtained only from dead animals and that later the emphasis changed to products like milk, wool, and muscle power that require live animals. In support, he presents his own data for samples of domestic caprines from four village sites near Kermanshah, western Iran. Here, earlier samples are dominated by young animals, presumably killed for meat, whereas later samples contain many more old animals, presumably killed only after they no longer provided sufficient milk or wool.

Davis concludes with a history of humananimal relationships in his British homeland, beginning in the Pleistocene and ending in historic times. It is for this and other informative zooarcheological case studies that readers will value his book.

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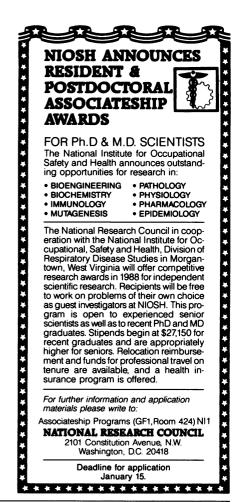
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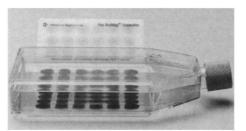
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Literature

Antigens is a product brochure with information on purified proteins, proteolytic fragments of immunoglobulins, and serum fractions from several animal species. Organon Teknika, Cappel. Circle 604.

Immunoscreening $\lambda gt11$ Expression Libraries describes a procedure for nonradioactive screening of $\lambda gt11$ recombinant-DNA-expression libraries with either an alkaline phosphatase or a peroxidase-based detection system. Vector Laboratories. Circle 605.

Essentials of Gas Chromatography is a 160page catalog of chromatography equipment, including capillary columns, autosampler vials, analytical standards, and valves. Chemical Research Supplies. Circle 606.

Stainless Steel Precision Weights is a brochure about polished stainless steel weights, hook weights, slotted weights, and weight accessories, such as cases and lifters. Troemner. Circle 607.

NIH Repository of Human DNA Probes and Libraries is a 79-page catalog of probes, cloned genes, human chromosome-specific genomic libraries, primate complementary DNA and genomic libraries, and bacterial hosts for transformation or plating libraries. American Type Culture Collection. Circle 608.

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Cell Biologist, Ph.D., with extensive research experience (cell cycle control, cytodifferentiation, cytoskeleton) seeks teaching/research or research position in/near New York City. Box 171, SCIENCE.

Ph.D. Cytogeneticist. Board-certified in clinical cytogenetics with good experience in cancer cytogenetics and molecular diagnosis of cancer. Seeking service oriented position in a hospital or medical school. Box 172, SCIENCE.

Physiology, Ph.D., with several years of teaching experience in general human physiology, research experience in exercise physiology, electrolyte balance studies, spirome-try, and body fat. Box 142, SCIENCE.

Protein Biochemist, Research associate, 1981: 17 years of experience in industrial and basic research. Enzyme glycoprotein, membrane protein, and antibody purifica-tion and characterization for structure and function, membrane recombination. Seeks research/academic/industrial position in Canada. Box 161, SCIENCE.

POSITIONS OPEN

ACADEMIC FACULTY POSITION IN BIOCHEMISTRY AND MOLECULAR BIOLOGY MAYO CLINIC, MAYO MEDICAL SCHOOL, AND MAYO GRADUATE SCHOOL OF MEDICINE

Department of Biochemistry and Molecular Biology seeks applications for a faculty appointment at the assistant, associate, or full professor level, depending on qualifications. Preference will be given to outstanding molecular or developmental biologists with demonstrated expertise in somatic cell and germline gene transfer tech-niques. Highly qualified individuals with other molecularly oriented research interests are also encouraged to apply. The Mayo Clinic offers an outstanding research environment in a medical and academic setting. Send curriculum vitae, statement of research interests, and names of three references by 15 February 1988 to: Dr. Michael J. Getz, Chairman, Search Committee, Department of Biochemistry and Molecu-lar Biology, Mayo Clinic/Foundation, Roch-ester, MN 555905. An Equal Opportunity/Affirmative Action Institution.

ANALYST IN INFORMATION SCIENCE ANALYSI IN INFORMATION SCIENCE AND TECHNOLOGY GS-9/11 \$22,458 to \$36,688 THE LIBRARY OF CONGRESS CONGRESSIONAL RESEARCH SERVICE SCIENCE POLICY RESEARCH DIVISION

Duties: Prepares reports and memoranda on policy issues of legislative concern within the field of computer, information, or telecommunications technology policy.

Qualifications: For the GS-9 level 2 years and for the GS-11 level 3 years of specialized experience demonstrat-ing a good knowledge of computer, information, or telecommunications technology policy. Minimum educa-tional requirement is a bachelor's degree in a social science, engineering, or a physical science. Application Procedures: Applicants must call the Li-brary of Congress Employment Office at 202.387-5627

brary of Congress Employment Office at 202-287-5627 and request a copy of Vacancy Announcement Number 70755 and an application for Federal Employment (SF-171). A writing sample and course listing must be submitted with the application. Applicants are encouraged to respond to the Quality Ranking Factors listed on the Vacancy Announcement. Applications must be re-ceived no later than 30 November 1987 by: The Library of Congress Employment Office, LM-107, 101 Inde pendence Avenue, SE, Washington, D.C. 20340.

U.S. Citizenship Required Civil Service Status Not Required Equal Opportunity Employer J50134

UNIVERSITY OF COLORADO AT BOULDER

The Institute of Cognitive Science invites applications for a tenure-track position in the artificial intelligence group in the Department of Computer Science. Preference will be given to candidates at the ASSISTANT PROFESSOR level, but candidates at all levels will be considered. Candidates should have demonstrated interests in Cognitive Science, with particular emphasis on knowledge-based systems, machine learning, or natural language processing. Applicants with interests in connec-tionist models will also be considered. The University of Colorado provides a superb computational environment, including Symbolics, Hewlett-Packard, and Xerox AI workstations, and multiple Suns and VAXes, as part of a major commitment to AI research. Applicants should send résumés and three leters of reference to **Dr. Martha** Schot resumes and three leters of reference to Dr. Martna Polson, Assistant Director, Institute of Cognitive Science, Campus Box 345, Boulder, Colorado 80309-0345. Applications should be received by 1 December 1987, to ensure consideration. The University of Colorado at Boulder has a strong institutional commitment to the principle of diversity in all grant in that chief, we are particularly interstity in all

areas. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people, including women, members of ethnic minorities and disabled individuals

POSITIONS OPEN

ANIMAL PHYSIOLOGIST

Applications are invited for a full-time, tenure-track August 1988, include general biology and human physi-ology. Preference will be given to candidates involved in systemic physiology studies. Summer stipends and limit-ed start-up funding are available for research. The College is a small, state supported, liberal arts, coeducational, primarily residential institution located 50 miles south of Washington, D.C. Candidates should have a Ph.D. or of washington, D.C. Candidates should have a Ph.D. of equivalent research experience and a strong commitment to undergraduate teaching. *Equal Employment Opportuni-ty/Affirmative Action Employee*. Closing date: 15 Decem-ber 1987. Please send curriculum vitae, three letters of reference, and transcripts to:

Dr. Stephen W. Fuller, Chairman Department of Biological Sciences Mary Washington College Fredericksburg, VA 22401–5358

ASSISTANT PROFESSOR. The Department of Physiology in the School of Medicine at Southern Illinois University at Carbondale is seeking to fill a tenure-track, state-funded position, available 1 July 1988, at the assistant professor level. The applicant should have an earned doctorate, a vigorous research program, a sound publication record, and should be capable of attracting external funding. The candidate would be expected to contribute to the Department's teaching commitments in the Medical School and College of Science curricula. The Department of Physiology is on the main campus of Department of Physiology is on the main campus of Southern Illinois University at Carbondale, a large and diverse state institution of approximately 24,000 stu-dents located in a scenic, rural setting. The Department has a full-time faculty of 18 with a variety of research interests and facilities. Processing of applications will begin on 1 December 1987 and will continue till the position is filled. Applicants should forward their curric-ulum vitae, an outline of their research interests, and the names of three references to: Chair of the Search names of three references to: Chair of the Search Committee, c/o Dr. Andrzej Bartke, Department of Physiology, School of Medicine, Carbondale, IL 62901-6512. Southern Illinois University at Carbondale is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR, nontenure-track position in biopsychology/neuroscience. University of Roch-ester, Rochester, New York. The Department of Psychology has half-time research/half-time teaching posi-tion available for a 4-year period that can be filled immediately. Applicants should have a Ph.D. in neuroscience, or in psychology with specialization in experimental psychology or biopsychology. The teaching load consists of two courses per academic year; one course is a behavioral neurochemistry course that is part of the undergraduate neuroscience curriculum. Persons with a specialization that can enhance and who are willing to specialization that can enhance and who are winning to collaborate with a research group assessing neurotrans-mitter development (particularly of catecholamines) and the effect thereon of developmental perturbations (as relates to the organization of stress responses) is especially desirable. Priority will be given to candidates with a demonstrable interest in research. Applicants should include a statement of research interests, indicate previous teaching experience, and send three letters of recom-mendation to: Dr. C. Kellogg, Department of Psy-chology, University of Rochester, Rochester, NY 14627. Deadline for receipt of application materials is 1 December 1987. The University of Rochester is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR ANATOMY AND NEUROBIOLOGY

Applications are invited for a tenure-track position commencing 1 July 1988. Applicants must have a doc-toral degree and extensive postdoctoral experience. A funded research program in cellular or molecular neuro-science is desirable and preference will be given to candidates with experience in those fields. Teaching duties open but experience in bistology or gross anatomy duties open but experience in histology or gross anatomy an advantage. Send curriculum vitae, list of publications, summary of research goals and at least three letters of recommendation to: Edward G. Jones, Chairman, Department of Anatomy and Neurobiology, University of California, Irvine, CA 92717. All applications should be received by 1 December 1987. The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

WASHINGTON UNIVERSITY DEPARTMENT OF PHARMACOLOGY

Seeking an outstanding scientist for a tenure-track ASSISTANT PROFESSOR position. The individual must be capable of developing a strong, independent research program which will complement existing programs in cellular, molecular and neurobiology. Send curriculum vitae and a summary of research interests and plans to: E. M. Johnson, Jr., Department of Pharmacology, Washington University Medical School, 660 South Euclid Avenue, St. Louis, MO 63110. Washington University is an Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOCHEMIS-TRY. Applications are invited for a 12-month tenuretrack position in the area of molecular or cellular biology. Responsibilities include participation in our undergraduate and graduate teaching program, and the development of a vigorous, independent research program in some area of eukaryotic molecular or cellular biology which would be compatible with a joint appointment in the College of Agriculture and The Mississippi Agricultural and Forestry Experiment Station. A Ph.D. in biochemistry or closely related discipline, with postdoctoral experience is required. Please send résumé, graduate transcripts, summary of research interests, and names of three references to:

R. P. Wilson, Head Department of Biochemistry Post Office Drawer BB Mississippi State, MS 39762

Mississippi State University is an Equal Opportunity Affirmative Action Employer.

ASSISTANT PROFESSOR OF BIOLOGICAL CHEMISTRY AND MOLECULAR PHARMACOLOGY HARVARD MEDICAL SCHOOL

The Departments of Biological Chemistry and Pharmacology at Harvard Medical School have recently been fused to create a new and expanding department with research interests in biochemistry and molecular pharmacology, and molecular and cellular biology. Applicants are now being sought for two tenure-track assistant professor positions in any of these areas. The candidates should also expect to participate in the education of graduate and/or medical students. Candidates should send curriculum vitae and a one-page statement of anticipated research directions, and arrange to have at least three letters of recommendation submitted to: Chairperson, Search Committee, Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, 250 Longwood Avenue, Boston, MA 02115. Harvard Medical School is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF BIOLOGY

Oxford College of Emory University, located 35 miles east of Atlanta, seeks to fill a full-time, tenure-track position in the Department of Biology beginning fall semester 1988. Candidates must have a Ph.D. or equivalent and a strong commitment to teaching in a small, residential, liberal arts college. Preference will be given to individuals who have excellent teaching experience beyond graduate school. Applicants must be prepared to teach both major and non-major courses. Send letter of application, résumé, and the names, addresses, and telephone numbers of three references by 15 January 1988 to: Dr. William E. Baird, Chairman, Division of Natural Science and Mathematics, Oxford College of Emory University, Oxford, GA 30267. Emory University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSORS—PHARMACOLO-GY. Eastern Virginia Medical School has two tenuretrack positions in molecular/cellular pharmacology. Candidates should have an earned Ph.D. in pharmacology or related discipline, at least 2 years of postdoctoral experience, and be capable of developing a vigorous, externally funded research program. Applicants should submit curriculum vitae, a description of research interests and goals, and the names of three references to: Faculty Search Committee, Department of Pharmacology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR OF CHEMISTRY UNIVERSITY OF MASSACHUSETTS

A new tenure-track position open in fall 1988 as part of a continuing effort to expand activity in chemical research on important biological problems including molecular biology. Proposals are especially welcome for the establishment of a research program that will make major use of a planned new 500-MHz facility in research at the biological-chemical interface. Applicants may have a doctoral degree in any area of chemistry, but must have had considerable experience, including 1 year of postdoctoral research, in the chemical-biological area. Salary appropriate to qualifications. Submit résumé, doctoral transcript, statement of research plans, and three letters of recommendation to: Professor L. D. Quin, Department of Chemistry, LGRT A, University of Massachusetts, Amherst, MA 01003. Closing date for receipt of all materials 30 November 1987. An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR IMAGING SCIENTIST

The Department of Physiology, in conjunction with the University of Maryland Medical Biotechnology Center, seeks an investigator with a strong background in physics, optical, and electrical problems related to image acquisition and analysis. Applicants for this tenure-track position must have a Ph.D. and/or M.D., and the ability to obtain independent research funding as well as interest in participating in an interdisciplinary program involving the application of imaging methods to biological problems. Applicants should send curriculum vitae, a detailed statement of past experience and future research plans, and names of three professional references to: Dr. James B. Wade, Faculty Search Committee, Department of Physiology, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201. The University of Maryland is an Equal Opportunity Employer.

ASSISTANT PROFESSOR IMMUNOLOGY/MICROBIOLOGY

The Department of Medical Microbiology and Immunology, College of Medicine, Texas A&M University invites applications for a tenure-track faculty position at the assistant professor level. This faculty member will be expected to participate in departmental medical and graduate student teaching programs and to establish a vigorous and independent research program. Postdoctoral experience relevant to a molecular aspect of immunology or microbial pathogenesis is desirable. The position is a 12-month appointment; excellent modern facilities and initial funding to support research and equipment purchases are available. Since the department is located within the campus of Texas A&M University, opportunities for interaction with the expanding University faculty and for participation in campus-wide graduate programs in molecular biology and genetics also exist. Interested applicants should send a detailed curriculum vitae, reprints and a list of three references to: Dr. Karin Ippen-Ihler, Department of Medical Microbiology and Immunology, Texas A&M University, College Station, TX 77843. An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF PHARMACOLOGY

University of Medicine and Dentistry of New Jersey-New Jersey Medical School (UMDNJ-NJMS)-Department of Pharmacology has an opening for an assistant professor of pharmacology. Candidates must have a doctoral degree, with predoctoral training in pharmacology and a strong capacity for independent research which has a high probability of attracting external financial support. Some teaching experience is desirable since the position requires participation in all teaching programs of the Department, including programs for medical, dental and graduate students. The Newark campus of the University is located on a modern, 50-acre new campus and is in close proximity to a wide variety of desirable living styles. Many opportunities are available in the geographic area for academic and scientific interactions.

and is in close proximity to a wide variety of desirable living styles. Many opportunities are available in the geographic area for academic and scientific interactions. Send curriculum vitae including the names of three references to: Dr. George A. Condouris, Professor and Chairman, Department of Pharmacology, UMDNJ– New Jersey Medical School, 185 South Orange Avenue, Newark, NJ 07103–2757. An Equal Opportunity Employer M/F/H/V.

POSITIONS OPEN

ASSISTANT PROFESSOR OF MEDICINE AND PHARMACOLOGY

M.D. or M.D./Ph.D. Cardiovascular physiologist/ pharmacologist to hold tenure-track joint appointment and establish program of collaborative research between Cardiology and Pharmacology. Primary appointment would be in Department of Medicine. Special consideration will be given to applicants working on problems of myocyte injury due to hypoxia/ischemia/reoxygenation, with emphasis on altered function of membranes/organelles and importance of changes in ion concentration, especially calcium. Position available 1 July 1988. Send curriculum vitae, statement of interests, reprints, three letters of reference to: Dr. William B. Hood, Jr., Box 679, University of Rochester Medical Center, Rochester, NY 14642. An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR PHYSIOLOGY

The Department of Zoology invites applications for a full-time, tenure-track position in teaching and research involving graduate and undergraduate students. Applicants must have a Ph.D., postdoctoral experience preferred, and potential to develop an independent extramurally funded research program in areas of comparative, cellular, or endocrine physiology. Outstanding candidates in other areas of physiology will be considered. Application deadline: 25 November 1987, or until position is filled. Submit curriculum vitae with transcripts, statement of research and teaching interests, and letters from three refernces direct to: Dr. C. F. Bailey, Chairman Search Committee, Zoology Department, SE 632, University of Arkansas, Fayetteville, AR 72701. Affirmative ActionlEqual Opportunity Employer.

ASSISTANT PROFESSOR: The Biology Department of the University of Texas at Arlington (UTA) seeks a PHYSIOLOGICAL ECOLOGIST working with aquatic lower vertebrates or invertebrates for a tenure-track position starting fall 1988. UTA (23,000 enrollment) is located between Dallas and Fort Worth. The Department of 22 faculty and 40 graduate students occupies an 80,000-square-foor research/teaching facility. Applicants should send curriculum vitae, recent publications, statement of research interests, and four letters of recommendation to: Chairman, Search Committee, Department of Biology, The University of Texas at Arlington, Arlington, TX 76019. Search will open 5 January 1988. UTA is an Equal Opportunity/Affirmative Action Employer.

DEPARTMENT OF PSYCHOLOGY McGILL UNIVERSITY

Applications are invited for a tenure-track position at the ASSISTANT PROFESSOR level in behavioral neuroscience/physiological psychology. Send curriculum vitae, publications, statement of research interests, and three confidential letters of recommendation to: J. O. Ramsay, Department of Psychology, McGill University, 1205 Dr. Penfield Avenue, Montreal, Quebec, Canada H3A 1B1.

ASSISTANT PROFESSOR OR ASSOCIATE PROFESSOR OF MICROBIOLOGY AND IMMUNOLOGY UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

The Department of Microbiology and Immunology, as part of a process of growth, is seeking to fill a position at the level of assistant professor (tenure-track; associate professor candidates will also be considered) in eukaryotic molecular virology. The candidate is expected to develop a strong independent research program. Generous space and start-up funds will be provided to the successful candidate.

Applicants should provide the search committee with curriculum vitae, at least three letters of recommendation, and a brief statement of future research interests and plans. The first series of candidates will be acceptafter 25 November 1987 and applications will be accepted until the position is filled. Starting date is perotiable

ed until the position is filled. Starting date is negotiable. Send applications to: Dr. K. N. Subramanian, Chairman, Molecular Virology Search Committee, Department of Microbiology and Immunology, University of Illinois College of Medicine at Chicago, P.O. Box 6998, Chicago, IL 60680.

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

ASSISTANT/ASSOCIATE PROFESSORSHIPS IN MICROBIOLOGY

The Department of Bacteriology and Biochemistry at the University of Idaho is inviting qualified scientists to apply for 3 tenure track positions. These are fiscal year (12 month) appointments at the rank of Assistant or Associate Professor and the starting date is Spring to Summer 1988. Salary is competitive and, along with rank, is dependent upon experience. Applicants should have post-doctoral experience and documented research capability. For all 3 positions, special consideration will be given to individuals who have experience in applying contemporary molecular techniques to research problems in the designated areas. To apply, send a letter of application that includes a statement of current and proposed research and teaching experience and interests, a curriculum vitae, transcripts and letters from three references to the appropriate search committee chairperson (indicated below) at: Department of Bacteriology and Biochemistry, University of Idaho, Moscow, Idaho 83843. Review of applications will begin December 15, 1987.

PATHOGENIC MICROBIOLOGY (SEARCH EXTENDED): Scientists with a Ph.D. in microbiology, immunology, or molecular biology and research interests that relate to infectious diseases of production animals/livestock are encouraged to apply for this position. The successful candidate is expected to develop a research program with application to animal disease (65%), participate in the instruction of medical microbiology (35%), and train graduate students. Search Committee Chair: Dr. David J. Oliver.

FOOD MICROBIOLOGY: Scientists with a Ph.D. in microbiology or related discipline and teaching and research interests in Food Microbiology are encouraged to apply for this position. The successful candidate is expected to develop a research program in Food Microbiology (50%), teach food microbiology once per academic year (50%), and train graduate students. **Search Committee Chair: Dr. Richard C. Heimsch.**

MICROBIOLOGY: Scientists with a Ph.D. in microbiology or related discipline and teaching and research interests in microbial ecology, mycology, modern microbial taxonomy, or anaerobic microbiology are encouraged to apply for this position. The successful candidate is expected to develop an active research program (50%), teach general microbiology and an upper division/graduate course related to his/her area of expertise once per academic year (50%), and train graduate students. **Search Committee Chair: Dr. Richard C. Heimsch.**

The University of Idaho is an equal opportunity/affirmative action employer and educational institution.

Protein Biochemistry

The Protein Biochemistry Department of Smith Kline & French Laboratories, located in Upper Merion, PA, is seeking scientists to conduct experiments in protein isolation, characterization, fragmentation and modification.

Candidates are required to have:

- B.S./B.A. in Biochemistry, Chemistry or Biology, at least three years relevant experience in protein purification. M.S./M.A. with two years experience preferred. Good knowledge of extraction and solubilization methods, column chromatography including HPLC and electrophoresis required.
- Experience in operation and maintenance of automated HPLC equipment required.
 Knowledge of basic techniques for protein assay including SDS
- Knowledge of basic techniques for protein assay including SDS-PAGE, Western blots, HPLC and EIA.
- Excellent written and oral communication skills required.
- Ability to work independently required.

We offer an excellent compensation and benefits program. For confidential consideration, please send your C.V. and the names of three references to Robert F. Obst, Manager, Personnel Relations, R101, Smith Kline & French Laboratories, Research and Development Division, P. O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



BEHAVIORAL NEUROSCIENTIST

The Neurosciences Research Branch of the National Institute of Mental Health has an immediate opening for a senior behavioral neuroscientist to serve as the Chief, Biobehavioral Research Program, a major grant support program in the Branch. The major focus of the Biobehavioral Research Program is to support research examining the neural mechanisms of behavior with a view toward understanding how that behavior comes into existence and how it is regulated. Specific areas of interest include: perception, attention, learning and memory, cognitive processes; homeostatic mechanisms; and complex behaviors such as reproductive, nurturant and social behaviors. Approaches include, but are not limited to, anatomical, physiological, chemical and genetic, with a focus on either the effect of behavioral changes on central nervous system function or on the effects of changes in the nervous system on behavior.

The Chief of the Biobehavioral Program is responsible for planning, developing, administering, and making funding recommendations on grants assigned to the program. The ideal candidate will have a Ph.D. in a biological science and/or an M.D. with post-doctoral research training and a strong background in independent research on brain structure and function related to behavior. This position is a competitive Civil Service GS-13 with a salary range from \$38,727 to \$50,346 per annum or GS-14 with a salary range from \$45,763 to \$59,488 per annum, located in Rockville, MD. U.S. citizenship is required.

Send applications (curriculum vita and SF 171) to J. Harris, Personnel Specialist, Room 15C-18, 5600 Fishers Lane, Rockville, MD 20857, (301) 443-4046.

NATIONAL INSTITUTE OF MENTAL HEALTH Alcohol, Drug Abuse and Mental Health Administration U.S. Public Health Service

AN EQUAL OPPORTUNITY EMPLOYER



RESEARCH SCIENTIST TOXICOLOGY

Colgate-Palmolive's Research & Development Division is currently searching for a talented Ph.D to join its Toxicology Group.

Major responsibilities include the development and evaluation of in vitro testing procedures, general toxicology data interpretation of reviews on ingredients and product formulations, and key interactions with R&D consumer product areas on a variety of safety evaluation projects.

To qualify for this challenging bench opportunity, the successful candidate will possess a Ph.D in: Pharmacology, Toxicology, Microbiology, or Cell Biology; have up to 2 years experience, and demonstrated technical expertise in Cell Culture Techniques.

Colgate-Palmolive is an international leader in household and personal care products. Some well-known brands include Colgate Toothpaste, Palmolive Automatic, Palmolive Dishwashing Liquid, Fresh Start Laundry Detergent, Fab with Fabric Softener, Irish Spring Soap, and the international line of Ajax products.

The Corporate Research Center is located on an 80-acre campus in suburban Central New Jersey, near Rutgers and Princeton universities, and one hour from Manhattan.

We offer competitive compensation and attractive benefits.

For immediate consideration please forward resume with salary history in confidence to: Mr. Ron Thomas, Human Resources Department MS-23, 909 River Road, Piscataway, NJ 08854.



WOODS HOLE OCEANOGRAPHIC INSTITUTION POSTDOCTORAL FELLOWSHIPS

Ocean Science and Engineering

Applications are invited from new or recent doctorates in science or engineering with interests in physical oceanography, marine chemistry, marine geology and geophysics, biological oceanography, or oceanographic engineering. Recipients of awards are selected on a competitive basis, with primary emphasis placed on research promise.

Marine Policy and Ocean Management Research fellowships are offered to individuals in the so-

cial sciences, law, the humanities, or natural sciences to apply their training to problems or issues that involve the use of the oceans. Presently research follows thematic areas such as Marine Science and Public Policy; Ocean Jurisdictions, Law of the Sea, and International Relations; Development and Management of Ocean Resources; and Areawide Planning and Management. Emphasis is placed on the economics of ocean space and on the role of science in governmental and industrial decision making. Topics of special current interest include marine biological diversity, the quality of marine habitats and marine reserves, and the impacts of sea-level change. Other research interests are also appropriate.

Fellowships are awarded for one year with a stipend of \$26,000 plus group health insurance and a modest research budget. Recipients are encouraged to pursue their own research interests independently or in association with resident staff. Completed applications must be received by January 15, 1988 for 1988-89 awards. Awards will be announced in March. Write for application forms to: Dean of Graduate Studies, P.O. Box S, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543

Equal Opportunity/Affirmative Action Institution

Associate Senior Investigator Molecular Genetics/ Biology

The Department of Cell Biology at Smith Kline & French Laboratories, located in suburban Philadelphia, Pennsylvania, in a new state-of-the-art research complex, has an immediate opening for an Associate Senior Investigator to join a research team investigating the role of polypeptide growth factors and other therapeutic agents in the treatment of colon cancer and other proliferative diseases.

Responsibilities will include directing and performing mutagenesis studies of transforming growth factors to elucidate the structure-activity relationships, cloning and expressing novel epithelial transforming growth factors and developing strategies for exploring therapeutic potential of growth factor agonists/antagonists in various proliferative diseases.

Candidates are required to have a Ph.D. in Molecular Genetics/Biology with a minimum of two years relevant experience in random and site directed mutagenesis, cloning and expression of biologically active proteins in various expression systems and excellent communication skills, including a good publication record. Experience in polypeptide growth factors is preferred.

We offer an excellent compensation and benefits package and an attractive relocation policy as well as opportunities for personal and professional growth. Publication of research data is encouraged and supported.

For confidential consideration, send your curriculum vitae and the names of three references to Robert F. Obst, Manager, Personnel Relations, Smith Kline & French Laboratories, Research and Development Division, P. O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



Postdoctoral Fellow Protein Engineering

A challenging opportunity to become part of a major, high-profile protein design effort. We are seeking a highly motivated scientist interested in protein structure/function to work on a project involving thrombolytic agents. Background in chemistry or protein chemistry as well as some training in molecular biology required. Some background in the area of cardiovascular biology would also be desirable but not necessary.

Duration of appointments will be two years, with the possibility of extension. Excellent benefits are also provided. Please send curriculum vitae, names of three references and a short summary of research interests to: Sherrie Wilkins, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.

> Genentech, Inc. Genentech, Inc. Genentech, Inc. Genentech, Inc. Genentech, Inc.

SENIOR RESEARCH BIOCHEMIST

The Merrell Dow Research Institute, located in suburban Cincinnati, has an immediate opening for a Senior Research Biochemist. Candidates should have a Ph.D. in biochemical pharmacology, biochemistry or related areas with 1-3 years of postdoctoral experience. Our laboratory is currently involved in the search for new chemotherapeutic strategies for the treatment of malaria with emphasis on the inhibition of polyamine biosynthesis and function. Experience with enzymology, HPLC and cell culture is desirable. The successful candidate will be involved in identifying potential enzyme (or other) targets for the development of new chemotherapeutic agents for the treatment of malaria and other parasitic diseases.

We offer a good starting salary along with a liberal benefits package and relocation assistance. Please send resume including salary history and names of three references in confidence to:

Merrell Dow

Personnel Services Manager

Job Code AJB

MERRELL DOW RESEARCH INSTITUTE 2110 East Galbraith Road Cincinnati, OH 45215

> U.S. Citizenship or Permanent Visa Required Equal Opportunity Employer M/F/H/V

PRESIDENT

The Board of Trustees of the Oregon Graduate Center for Study and Research invites applications and nominations for the position of President.

The Oregon Graduate Center is a rapidly expanding independent graduate school in science and engineering located in Beaverton, Oregon. The academic program offers M.S. and Ph.D. degrees and is accredited by the Northwest Association of Schools and Colleges. The faculty conducts basic and applied scientific research for federal agencies and national regional companies. Annual budget exceeds \$10 million

The Position: The President is responsible for all aspects of the Center and reports to the Board of Trustee

Qualifications: A Ph.D in sciences or engineering is required. Experience should include five years in a senior level administrative position in an academic or industrial environment. The successful candidate will also evidence training and experience in management, have complete familiarity with research in the physical sciences and academic processes, and be a person who has attained a professonal reputation within his/her area of specialization

Salary: Commensurate with qualifications and experience.

Application: Nominations should include addresses and telephone numbers of nominees. Applications should include letter of interest, complete resume, appropriate supporting materials and names, addresses and tele-phone numbers of three references. Closing date for receipt of applications is November 30, 1987

Please send applications and nominations to

Marianne Crayne, Secretary **Presidential Search Committee Oregon Graduate Center for Study and Research** 19600 N.W. Von Neumann Drive Beaverton, OR 97006-1999

An Equal Opportunity/Affirmative Action Employer

RESEARCH SCIENTIST

The Research Triangle Institute is seeking qualified individuals with exper-ience in one or more of the following areas

Dosage formulation/testing/analysis

- Clinical chemistry
- Measurement of xenobiotics in biological matrices

Applicants should have a Ph.D. in Chemistry/Biochemistry/Pharmaceutical Chemistry with appropriate research accomplishments. Additional training/experience is desirable.

Successful candidates will participate both in existing programs and in the development of new or expanded research areas

RTI is located in the Raleigh/Durham/ Chapel Hill area of North Carolina, which offers an excellent standard of living, and is a center of pharmaceutical, environmental and other scientific research. We offer a competitive salary and a comprehensive employee benefits package.

Interested applicants should send their curriculum vitae and letter of interest

Research Triangle Institute Office of Personnel (CLS-J) ⁄RT P.O. Box 12194 Research Triangle Park, NC 27709 An Equal Opportunity/

Affirmative Action Employer

Division Of Therapeutics—Innovative drug discovery for cancer therapy

Senior Project Managers Molecular Biology Protein Chemistry

The continued expansion of our cancer therapeutics programs in collaboration with a major pharmaceutical company has resulted in the creation of two senior positions

Each position involves the management of 8-10 Ph.D's and research associates whose work is focused in the area of oncogene and growth factor technology. Applicants should have 5+ years of relevant post-doctoral experience with a proven track record in academia, the pharmaceutical industry or biotechnology. Applicants with less experience but with outstanding credentials are also encouraged to apply.

Successful candidates, who will report directly to the Divisional Director, will be responsible for the day-to-day management of individual project teams and would be expected to play a major role in defining the detailed objectives and priorities of the overall program

Our new 40,000 sq. ft. research facilities are attractively located on the North Shore of Long Island, only a 20 minute drive from downtown Manhattan

Interested applicants should send their curriculum vitae and the names and telephone numbers of at least three references to Dr. J. Gordon Foulkes, Director of Therapeutics, Oncogene Science Inc., 350 Community Drive, Manhassett, New York, 11030.

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PROJECT MANAGEMENT PHARMACEUTICAL

The Parke-Davis Pharmaceutical Research Division has a position open for a self-motivated individual looking for a challenging career advancement opportunity in R&D project management. We are looking for candidates with solid scientific credentials and experience in new product development or project management activities within the pharmaceutical industry

The position, a Senior Project Supervisor, is a member of new product development teams and must utilize effective project management techniques in order to support the development of potential new products emanating from our highly productive research staff. Principal responsibilities will be to:

- participate in overall project development strategy design necessary to achieve worldwide objectives.
- · conduct analysis of project schedules and strategies on possible problem areas
- and contingency planning. address key resource issues to senior R&D Management's attention.
- integrate the project operating plans with the worldwide strategic planning of the R&D Division

The successful candidate will have proven excellent interpersonal skills, problem solv-ing techniques, written and oral communication abilities. Experience in business/sales activities, planning, general management techniques, and/or formal coursework in an MBA program will be considered a significant advantage.

Our research facility is located in Ann Arbor, adjacent to the University of Michigan. The successful candidate will enjoy excellent salary, benefits, and working and living environ-ment. Qualified candidates who would like to join our outstanding team of scientists should send resume, salary requirements, and references, in confidence to: Ms. M. Wolin, Parke-Davis Pharmaceutical Research Division, 2800 Plymouth Rd., Ann Arbor, MI 48105.



"Equal Opportunity In Action

ASSISTANT OR ASSOCIATE PROFESSOR OF BIOLOGY

A tenure-track faculty position is available starting in the fall semester of 1988. We seek a broadly trained invertebrate zoologist to teach 12 contact hours per semester in a variety of undergraduate courses including invertebrate zoology, evolutionary biology, and intro-ductory biology. Preference will be given to candidates who have demonstrated postdoctoral teaching expertise at the college or university level, as well as evidence of a successful and active research program involving inverte-brates. The salary range is from \$22,000 to \$28,000 depending upon qualifications of the candidate. Appli-cants should submit a letter of application describing teaching philosophy and goals, curriculum vitae, representative reprints and three letters of recommendation to: Dr. Richard Robinson-Chair, Biology Search Committee, Department of Sciences and Mathemat-ics, 39 High Street—Preble Hall, University of Maine at Farmington, Farmington, ME 04938. The closing date for completed applications is 1 December 1987. The University of Maine is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

STANFORD UNIVERSITY DEPARTMENT OF GENETICS ASSISTANT PROFESSOR OR ASSOCIATE PROFESSOR

Having scientific interests in areas of human genetics and/or medical genetics. Full-time, tenure-track position that involves teaching and independent research. Send curriculum vitae, bibliography, summary of research interests and names of three referees to: Dr. Luigi L. Cavalli-Sforza, Chairman, Department of Genetics, Stanford University Medical Center, Stanford, CA 94305.

Applications should preferably be submitted by 31 January 1988. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

ASSISTANT SPECIALIST I position available beginning 1 January 1988 in the Division of Molecular Plant Biology, University of California at Berkeley. Applicant must have a Ph.D in biochemistry, and a miniplicant must have a Ph.D in blochemistry, and a mini-mum of 2 years of postdoctoral experience in the bio-chemistry of plant cell development, preferably in abscis-sion. Experience in enzyme purification and protein characterization, gel electrophoresis, immunochemistry, antibody conjugations, immunoblotting, membrane iso-lation and characterization required. Experience in cell culture and protorplast isolation is highly desirable. Beculture and protoplast isolation is highly desirable. Responsibilities will entail conducting fundamental research in the biochemistry of abscission with particular empha-sis on biosynthesis and secretion of cell wall hydrolases and assisting in set up and organization of laboratory. Send curriculum vitae and names and addresses of three references by 15 December 1987 to: Dr. Lowell N. Lewis, 2120 University Avenue, 7th floor, Berkeley, CA 92720. The University of California Berkeley is an Equal Opportunity/Affirmative Action Employer.

ASSOCIATE CHIEF DEPARTMENT OF GYNECOLOGIC ONCOLOGY DIRECTOR, GYNECOLOGIC RESEARCH

The Department of Gynecologic Oncology, at Roswell Park Memorial Institute, Buffalo, New York is recruiting a Director of Gynecologic Oncology Research. This is a full-time faculty position requiring Board certification or Board eligibility in Gynecologic Oncology with special basic science background. Responsibilities will be divid-ed between the administration and supervision of Gynecologic Oncology section of scientific faculty, postdoctoral fellows, gynecologic oncology fellows during their research year, and clinical gynecologic oncology. If interested, submit curriculum vitae to:

M. Steven Piver, M.D.

Chief, Department of Gynecologic Oncology Roswell Park Memorial Institute Buffalo, NY 14263

Roswell Park Memorial Institute is an Affirmative Action Equal Opportunity Employer.

POSITIONS OPEN

ASSOCIATE DIRECTOR/CLINICAL TRIALS: Will assume primary responsibility for management of clinical trials and related preclinical research involving domestic and international studies of contraceptive products. The successful candidate will possess scientific expertise and hold a Ph.D., M.D. or equivalent in reproductive biology, pharmacology, or related fields with a minimum of 2 years of postdoctoral experience, preferably in clinically related research. Specific activities include design, implementation, and management of research projects, preparation and review of scientific publications and regulatory documents, and participation in clinical research training programs. Salary depen-dent on qualifications. Send résumé to: Personnel, Family Health International, Post Office Box 13950, Research Triangle Park Branch, Durham, NC 27709. An Equal Opportunity/Affirmative Action Employer, M/F/H.

The Department of Chemistry, Yale University invites applications for a tenured faculty position at the level of either ASSOCIATE PROFESSOR OR PROFES-SOR, as appropriate, in the area of biophysical chemis-try. An outstanding, established teacher-scholar is sought whose research interests will complement those of the current staff. The position is to be occupied in the academic year 1988 to 1989.

Applicants should submit curriculum vitae, and a list of publications to: Professor Peter B. Moore, Chair-man, Senior Search Committee, Department of Chemistry, Yale University, 225 Prospect Street, P.O. Box 6666, New Haven, CT 06511-8118 before 15 December, 1987. Yale University is an Equal Opportunity/Affirmative Action Employer.

Tulane University School of Medicine—Seeking AS-SOCIATE PROFESSOR OR PROFESSOR of Medicine in the Endocrine Section of the Department of Medicine to fill the newly established Tullis–Tulane Alumni Chair of Diabetes. The individual selected must be Internal Medicine Board-certified and Endocrine/ Metabolic Board-certified. The position involves teaching, patient care, and research responsibilities. Apply to: C. Y. Bowers, M.D., Tulane University School of Medicine, 1430 Tulane Avenue, New Orleans, LA 70112. Include updated curriculum vitae. Tulane University is an Affirmative Action/Equal Employment Opportunity Employer

ASSOCIATE RESEARCH SCIENTIST

We have an opening for an associate research scientist to supervise the Thrombosis Research Laboratory for the performance of basic and applied research studies in areas related to hemostasis and thrombosis using cultured cell systems, animal models and human subjects and patients. A doctoral degree or an equivalent combination of education and experience is required. Several years of experience in vascular cell culture, platelet and coagulation assays is required. Contact: Darris Goerdt, Administrator, Department of Internal Medicine, College of Medicine, University of Iowa, Iowa City, IA 52242. Telephone: 319-356-2850. The University of Iowa is an Equal Opportunity/Affirmative Action Employer

BIOCHEMISTRY/MOLECULAR GENETICS TEXAS A&M UNIVERSITY

The Department of Biochemistry and Biophysics is seeking applications for FACULTY POSITIONS. These are 12-month, tenure-track positions to be filled September 1988. Academic rank is open and dependent upon experience and qualifications. Outstanding individuals having research interests dealing with the molecular aspects of regulation, structure, mechanism, or function in microbial, animal, or plant systems are sought. In addition to research, participation in the department undergraduate and graduate teaching programs will be required. A Ph.D. in either biochemistry or a related field, plus appropriate postdoctoral experience is requirec

Applicants should send curriculum vitae, list of publications, a brief description of current and future research directions, and have three letters of reference sent to:

Dr. James Wild Department of Biochemistry and Biophysics Texas A&M University College Station, TX 77840-2128

Applications will be accepted until 15 December 1987, or until a suitable candidate is found. The Texas A&M University System is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

BIOCHEMISTRY/MOLECULAR BIOLOGY FACULTY POSITIONS

The Department of Biochemical and Biophysical Sciences invites applications from individuals for several available faculty positions in biochemistry and molecular biology that include Assistant Professorships, an Endowed Professorship and a Chairperson for the De-partment. Clear evidence of research ability and scholarship are essential requirements. Send résumé, an outline of future research plans, and at least three letters of reference to: Dr. Joseph Eichberg, Department of Biochemical and Biophysical Sciences, University of Houston, TX 77004. An Affirmative Action/Equal Opportunity Employer.

BIOLOGICAL SCIENCES-ASSISTANT PRO-FESSOR. Teach seed plant anatomy and physiology, and survey course covering algae, fungi, and physiology, and survey course covering algae, fungi, and plants. Partici-pate in the departmental general biology sequence. Initi-ate a program of undergraduate research in botany and/ or plant biotechnology. Ph.D. in biology or botany with an interest in undergraduate teaching. Nine-month, tenure-track appointment. Summer teaching possible. Em-ployment date: 1 September 1988. Send letters of inter-est, résumé, and the names, addresses, and telephone numbers of three references to: Dr. Carl Hoagstrom, Chairman, Department of Biological Sciences, Ohio Northern University, Ada, OH 45810, by 15 January 1988. Affirmative Action/Equal Opportunity Employer.

BIOLOGIST: ASSISTANT PROFESSOR. Ph.D., tenure-track, fall 1988; to teach microbiology, cell biology, nonmajors course, and specialty course, with com-mitment to advising and working with students in a liberal arts college. Candidates should have an interest in research and teaching interdisciplinary courses. Send curriculum vitae, transcripts, and three recent letters of recommendation preferably by 15 December 1987 to: TX 75091. Equal Opportunity Employer.

BIOLOGIST: DEVELOPMENTAL BIOLOGY. Hampden-Sydney College, a selective liberal arts college for men now enrolling 850 students, is seeking an individual with Ph.D. and commitment to undergraduate instruction to teach introductory biology, developmental biology, vertebrate morphology, and related courses. Research in this area is expected, supported, and encouraged. This is a full-time, academic year, tenure-track position to be filled at the assistant professor level. Candidates should submit résumé, transcripts, and three letters of reference by 15 December 1987 to: Dr. S. R. Gemborys, Chairman, Department of Biology, Hampden-Sydney College, Hampden-Sydney, VA 23943. Hampden-Sydney College is an Equal Opportunity Employer.

BIOTECHNOLOGY PUBLISHING

Recently created small biotechnology publisher in partnership with major New York publishing firm has immediate opening for ASSISTANT EDITOR. Seek-ing individual with biology background and familiarity with computers to assist in editing, producing (via desktop publishing setup), and marketing biotechniques manuals. Excellent opportunity to learn publishing at the cutting edge of science. Salary \$20,000 plus depending on qualifications in congenial Park Slope, Brooklyn office. Telephone: Sarah Greene at 718-965-3626 or send résumé to: Greene Publishing Associates, 430 Fourth Street, Brooklyn, NY 11215.

BIOTECHNOLOGY RESEARCH ASSISTANT

A challenging position for a protein chemistry special-ist is open at the Rockefeller University Biopolymer Facility. Successful applicants will have a B.S. or M.S. and experience in peptide or DNA synthesis. The facility is presently equipped with two gas-phase sequencers, a peptide synthesizer, and a DNA synthesizer. Salary nego-tiable, based on qualifications and experience. Excellent hable, based on quantications and experience. Excelent benefits and beautiful working environment. Send résu-mé and letters of recommendation to: Personnel Office, Rockefeller University, 1230 York Avenue, New York, NY 10021. An Equal Opportunity Employer.

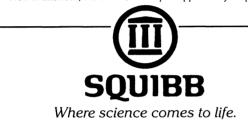
RESEARCH SCIENTIST Vascular Physiology

(PhD in Physiology/Pharmacology/Biochemistry)

SQUIBB CORPORATION, a Fortune 200 Company, is an internationally recognized leader in the research, marketing and manufacture of innovative pharmaceuticals. Currently, we are seeking an individual who can contribute to our commitment to design and develop radiopharmaceuticals that provide functional information on vital organs such as the heart and brain.

You must have an MS/PhD in Physiology, Pharmacology or Biochemistry with experience in the experimental techniques required to determine global and regional organ blood flow under normal and experimentally altered conditions. Your major responsibilities will be to correlate the results of organ perfusion measurements made with new radiopharmaceuticals to those obtained using traditional flow tracers such as microspheres. In addition, you will develop in vivo and in vitro models for examining the uptake and clearance mechanisms of radiopharmaceutical in specific organs and tissues.

We offer a very competitive compensation package and participation in our comprehensive benefits program. You are invited to submit your resume with salary history to Employment Manager, Department AK-E11287, E.R Squibb & Sons, P.O. Box 191, New Brunswick, NJ 08903. An equal opportunity employer.



SCIENCE, ENGINEERING AND DIPLOMACY FELLOWSHIPS

Applications Invited

The American Association for the Advancement of Science (AAAS), in cooperation with the Agency for International Development (AID) and the Department of State (STATE) is seeking applicants for two or more Science, Engineering and Diplomacy Fellowships. Fellows will spend one year, beginning 1 September 1988, working either in the Bureau of Oceans and International Environmental and Scientific Affairs of the Department of State or in one of several bureaus and offices of the Agency for International Development. Other assignments may also be possible.

Prospective Fellows must demonstrate exceptional competence in some area of science or engineering, be flexible, have some experience and/or a strong interest in applying knowledge toward the solution of problems in the area of foreign affairs, and have a Ph.D. or equivalent in years of experience. Awardees will work on scientific and technical subjects in international affairs: foreign policy for STATE and international development for AID. In general, individuals are urged to apply from any area of physical, biological, behavioral, and social science and engineering and whose experience and training is applicable to any one of the following areas: food and agriculture; health and population; nuclear nonproliferation; scientific exchange; forestry, natural resources, and ecology; oceans and fisheries; communications; national security; and human resources and education, among others.

The Fellows will serve a one-year appointment at a salary consistent with education level and experience, if possible, but not exceeding the GS-12 level (beginning at about \$33,000). A security clearance process will be initiated after selection. The clearance must be obtained before a selectee can begin work in the State Department or AID and the fellowship award is contingent upon the selectee obtaining this clearance. Prospective Fellows must be U.S. citizens.

Deadline for receipt of application materials is 15 January 1988. The awards will be announced by mid-April, 1988. For more information and application details write:

Science, Engineering and Diplomacy Fellows Program American Association for the Advancement of Science 1333 H Street, NW Washington, DC 20005

Postdoctoral Scientist Respiratory Pharmacology

The Pharmacology Department of Smith Kline & French Laboratories, located in suburban Philadelphia, PA, is seeking an outstanding individual to fill a challenging postdoctoral scientist position in its Respiratory Section.

The successful candidate will:

- conduct research on the regulation of airway smooth muscle tone.
 integrate biochemical and physiological methodologies to develop a better understanding of the fundamental mechanisms involved in airway
- smooth muscle contraction and relaxation.
 work collaboratively with intra- and extramural pharmacologists and
- biochemists interested in post-receptor transduction mechanisms of contractile and relaxant agents.
 publish results in scientific journals; present data at internal, local and
- publish results in scientific journals; present data at internal, local and national meetings.

Candidates are required to have:

 Ph.D. in Pharmacology, Physiology or Biochemistry with experience in biochemical mechanisms of post-receptor signal transduction.

- an understanding of the physiological and biochemical processes underlying smooth muscle contraction and relaxation.
- ability to assess smooth muscle contractility using <u>in vitro</u> systems is desirable.
- experience conducting biochemical assays relevant to smooth muscle function (e.g., cyclic nucleotides, cyclic nucleotide-dependent protein kinases, phosphatidylinositol metabolism, intracellular Ca²⁺, myosin light chain phosphorylation is desirable.
- a record of publication in major scientific journals.

Our postdoctoral appointments are normally for a two year duration.

We offer excellent compensation and benefits and an attractive relocation policy. For confidential consideration, send your CV and the names of three references to: Robert F. Obst, Manager, Personnel Relations, R0100, Smith Kline & French Laboratories, Research and Development Division, P. O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



BOTANIST—SYSTEMATIC AGROSTOLO-GIST. The Department of Botany, Smithsonian Institution, is recruiting for one staff curatorial position. Candi dates must be U.S. citizens and have an active research program in floristic and monographic agrostology, preferably with a demonstrated interest in the Neotropica. This background should be documented by publications and fieldwork. Salary will be at the GS-11/12/13 level (\$27,172 to \$38,727). Interested applicants should send a statement of general research goals, curriculum vitae, OPM Standard Form 171 (available on request), names of three references, and a set of reprints to: Smithsonian Institution, Employment Office, Announcement No. 87-590-F, 900 Jefferson Drive, SW, Washington, DC 20560. The Smithsonian Institution is an Equal Opportunity Employer.

Applications must be received by 31 December 1987. .9T8012530000.

CARDIOVASCULAR PHYSIOLOGIST to join active laboratory studying mechanisms of salt-sensitive hypertension. Candidate should have a Ph.D. and postdoctoral research experience. Candidate may have a joint appointment in medicine and physiology. Send curriculum vitae and description of research experience to: Theodore A. Kotchen, M.D., Professor and Chairman, Department of Medicine, West Virginia University Medical Center, Morgantown, WV 26506. West Virginia University is an Equal Opportunity Employer. Deadline for receipt of applications is 1 December 1987.

CELLULAR AND MOLECULAR BIOLOGISTS

The Department of Biological Science of Florida State University will recruit at least two new assistant professors for appointments in the 1988 to 1989 academic year. We are seeking individuals with postdoctoral experience who use cellular and molecular approaches to investigate fundamental physiological processes in animals. Areas of specialization include, but are not limited to, neuronal, sensory, effector, endocrine, and cellulartransport systems. Departmental facilities include extensive animal care facilities, analytical biochemistry and monoclonal antibody laboratories; a marine laboratory on the Gulf of Mexico; a microcomputer facility; TEM, SEM, and STEM facilities; and well-staffed electronics, machine, and woodworking shops. Approval has been given for construction of a new departmental research building to be completed in 1990. A competitive package of start-up funds for new faculty is available. By 1 December 1987, interested candidates should forward a statement of research plans, curriculum vitae, and names and addresses of three references to: Dr. Marc E. Freeman, Faculty Search Committee, Department of Biological Science, Florida State University, Tallahassee, FL 32306–3015.

Áffirmative Action/Equal Opportunity Employer.



CELLULAR IMMUNOLOGIST

Cellular Immunologist, Ph.D. and greater than 3 years of experience with human lymphocyte culture studies. NK/ADCC/CTL assay experience preferred. Will have flexible hours to fit assays performed and report to the Chief of Medical Oncology. Salary \$30,000 to \$40,000, plus excellent benefits package. For interview appointment, please contact or send résumé to: Human Resource Department, American International Hospital, 2629 Sheridan Road, Zion, IL 60099. Telephone: 312-746-4491, extension 495.

CYTOGENETIC TECHNOLOGISTS

Positions open immediately for senior and/or supervisory technologists. Experience in prenatal diagnosis and/ or cancer cytogenetics desired. Excellent salary and benefits. Please call 1-800-VIVIGEN or send résumé to: Kathy Richkind, Laboratory Director

c/o Vivigen 435 St. Michael's Drive Santa Fe, NM 87501

POSITIONS OPEN

CHAIR—Department of Entomology and Applied Ecology—Applications are invited for Professor and Chair, Department of Entomology and Applied Ecology, University of Delaware. We seek candidates who will continue superior achievement in research and who demonstrate commitment to quality undergraduate instruction and to cooperation in the development of an interdisciplinary Ph.D. program to augment a strong M.S. program. Research specialty is open, but should complement the goals of the department. Salary and fringe benefits are competitive. Committed to academic excellence, the University of Delaware is a midsized, comprehensive land grant institution with convenient access to major museum, USDA, and industrial research facilities. The position is available immediately; screening will begin 1 February 1988. The search will continue until the position is filled.

Send full curriculum vitae, including complete funding and publication record, and names, addresses, and telephone numbers of four references to: Dr. Milton H. Statson, Search Committee Chair, School of Life and Health Sciences, University of Delaware, Newark, DE 19716. The University of Delaware is an Equal Opportunity/Affirmative Action Employer. Women and minorities are urged to apply.

CHAIRPERSON, DEPARTMENT OF PHYSI-OLOGY: Quillen-Dishner College of Medicine, East Tennessee State University, Johnson City, Tennessee, is seeking applicants for the position of Professor and Chairman of the Department of Physiology. Applications are invited from individuals with outstanding achievement in research, demonstrated leadership ability, and appreciation for the continuing role of a department of physiology in educating both medical and graduate students. We are seeking candidates from a broad spectrum of disciplines related to physiology who hold the Ph.D. and/or M.D. degree. Review of applications will begin 1 November 1987. The University is an Equal Opportunity, Affirmative Action Employer and employs only United States: Interested applicants should send curriculum vitae, a summary of research goals, and the names of references to:

Robert Stout, Ph.D., Chair Physiology Search Committee Quillen-Dishner College of Medicine East Tennessee State University P.O. Box 19870A Johnson City, TN 37614 COGNITIVE SCIENCE UNIVERSITY OF CALIFORNIA, SAN DIEGO

The University of California, San Diego is considering the establishment of a Department of Cognitive Science and is seeking candidates for tenured or tenure-track positions at the ASSISTANT PROFESSOR, ASSO-CIATE PROFESSOR, AND PROFESSOR levels. The Department will take a broadly based approach to the study of cognition. It will be concerned with the neurological basis of cognition individual comition

The Department will take a broadly based approach to the study of cognition. It will be concerned with the neurological basis of cognition, individual cognition, cognition in social groups, and machine intelligence. It will incorporate methods and theories from a wide variety of disciplines including anthropology, computer science, linguistics, neuroscience, philosophy, psychology, and sociology.

science, inguistics, neuroscience, philosophiy, psychology, and sociology. We intend to develop a new curriculum for both undergraduate and graduate students and applicants should be interested in participating in the construction of new approaches to the study and teaching of cognition. We seek people whose interests cut across conventional disciplines. Interests in theory, computational modeling (especially PDP), application, and education are encouraged.

Candidates should send curriculum vitae, reprints, a short letter describing their background and interests, and names of at least three references to:

Search Committee Cognitive Science, C-015-i University of California, San Diego La Jolla, CA 92093

Applications received prior to 15 January 1988 will be given the fullest consideration; however, applications will be accepted until all positions are filled. Rank and salary will be commensurate with experience and qualifications, and will be based upon University of California pay schedules. Women and minorities are especially encouraged to apply. The University of California, San Diego is an Affirmative ActionlEqual Opportunity Employer.

POSITIONS OPEN

CHAIRMAN DEPARTMENT OF MICROBIOLOGY

Louisiana State University invites applications and nominations for the position of Chairman of the Department of Microbiology. The department currently consists of ten tenure-track faculty members, with plans for expansion. Approximately 230 undergraduates and 35 graduate students presently major in microbiology. Candidates for this position must hold a doctorate in microbiology, or a related discipline, must have demonstrated a distinguished record of scholarship and professional achievement as evidenced by publications and grant awards, and must have leadership and administrative ability consistent with building a nationally recognized department. The salary will be commensurate with qualifications. The appointment is available as of August 1988. Candidates should submit application materials, including curriculum vitae, references, and a statement of research interests, before 1 February 1988 to:

Chairman Search Committee Department of Microbiology Louisiana State University Baton Rouge, LA 70803–1715

LSU is an Equal Opportunity/Affirmative Action Employer.

CURATORSHIPS MOLECULAR SYSTEMATICS/ MOLECULAR PALEONTOLOGY AMERICAN MUSEUM OF NATURAL HISTORY

The Department of Invertebrates invites applications for tenure-track curatorial positions for new programs to be established in molecular systematics and paleontology. The Department intends to furnish suitable laboratory facilities for DNA sequencing and electrophoresis. Applicants may be in molecular systematics of living invertebrate Metazoa (excluding terrestrial Arthropoda), or in metazoan invertebrate paleontology, emphasizing the integration of molecular data derived from recent organisms with studies of related taxa from the fossil record.

Research in molecular systematics/paleontology of invertebrates will complement the Department's existing research program which seeks both to analyze phylogenetic relationships among fossil and recent taxa, and to elucidate aspects of the evolutionary process. Successful candidates will participate as well in all curatorial functions, including collections management, exhibition and museum administration. Positions are available beginning 1 July 1988. A Ph.D. or equivalent is required. Rank and salary shall be determined based upon qualifications and experience. Applicants should forward (i) a statement of research

Applicants should forward (i) a statement of research interests and goals, (ii) curriculum vitae, (iii) complete bibliography, and (iv) names, addresses, and telephone numbers of at least three references familiar with the applicant's qualifications and accomplishments. Applications must be submitted by 15 February 1988 to:

Mr. Lee Vilensky Personnel Department (S) American Museum of Natural History Central Park West at 79th Street New York, NY 10024 An Equal Opportunity Employer

DEPARTMENT HEAD POSITION: Department of Forestry and Natural Resources, Purdue University, West Lafavette, Indiana. The Department integrates teaching, research, and extension functions with 26 faculty, and 30 graduate and 200 undergraduate students. Programs include forest biology, forest management, wood science, forest recreation, urban forestry, fisheries and aquatic sciences, and wildlife science. Candidates must have a Ph.D. and professional experience in an area related to departmental programs, leadership and administrative a ability, and demonstrated scholarly achievement. The head will have administrative and fiscal responsibilities for departmental programs; provide academic leadership; maintain liaison with government agencies and industry groups; and develop new sources of funding. Submit curriculum vitae, list of publications and the names of five references to: **R. L. Thompson**, **Dean of Agriculture, Agricultural Administration Building, Purdue University, West Lafayette, IN 47907. Applications will be accepted until 31 December 1987. Purdue University is an Equal Opportunity/Affirmative Action Employer.**

DEVELOPMENTAL BIOLOGIST. The University of Chicago. The Department of Molecular Genetics and Cell Biology (MGCB) is seeking candidates for a tenure-track appointment in the area of mammalian developmental biology. Candidates should have sufficient research experience to demonstrate both significant accomplishment and outstanding promise. The selected candidate will be offered generous space in a modern facility and substantial equipment and start-up funding. Please send curriculum vitae, bibliography, a statement of past and future research interests, and the names of three references to: Dr. Elaine Fuchs, Department of MGCB, The University of Chicago, 920 East 58th Street, Chicago, IL 60637. Deadline 20 November 1987. The University of Chicago is an Affirmative Action/ Equal Opportunity Employer.

DEVELOPMENTAL GENETICS

A tenure-track vacancy at the ASSISTANT OR AS-SOCIATE PROFESSOR level in developmental genetics exists in the Department of Genetics at North Carolina State University. The research area is open, but we are particularly interested in individuals working with the genetic control of developmental processes in animals. Preference is given to individuals with postdoctoral experience. Interested individuals should submit a complete curriculum vitae, three letters of recommendation, reprints of relevant publications, and a cover letter outlining their research interests and teaching experience to: Dr. William R. Atchley, Head, Department of Genetics, North Carolina State University, Raleigh, NC 27695–7614. Telephone: 919-737-2292. The closing date for applications is 15 December 1987 or when a suitable candidate is found.

North Carolina State University is an Affirmative Action/ Equal Opportunity Employer.

SAN FRANCISCO STATE UNIVERSITY DIRECTOR ROMBERG TIBURON CENTER FOR ENVIRONMENTAL STUDIES

The Romberg TCES of San Francisco State University seeks an estuarine or marine scientist with experience in leading a multidisciplinary research team for the position of Director. The position responsibilities include:

Overall administration of a 30-acre estuarine research and instructional facility on San Francisco Bay in Marin County.

Coordination and development of extramural funding for research on San Francisco Bay and the central California coastal zone.

Planning and implementation of University instructional programs at the Center.

Development and management of facilities.

The Center is staffed by eight scientists and three support personnel in addition to particiption by University faculty and students.

Applicants should have a strong record of research in estuarine and/or coastal oceanographic systems, experience in the administration and management of field stations, and a proven ability to develop multidisciplinary proposals. Submit curriculum vitae and names of at least three references to: Dr. James C. Kelley, Dean, School of Science, San Francisco State University, 1600 Holloway Avenue, San Francisco State University is an Equal Opportunity Employer.

DIRECTOR OF SCIENTIFIC RESEARCH IN REPRODUCTIVE BIOLOGY

Humagen, Inc., a biotechnology company which focuses on reproductive biology, seeks an advanced senior scientist to direct research programs in molecular biology and monoclonal antibody-based immunodiagnostics. Preference will be given to candidates who demonstrate a strong record of research productivity in reproductive biology or related disciplines and leadership experience in academics or industry. Candidates will be expected to conduct an independent research program as well as direct group leaders at Humagen's research and development facility located in the shadow of the Blue Ridge Mountains near Charlottesville, Virginia. Applications should consist of curriculum vitae, copies of recent publications, a brief statement of future research goals, and names of three references. Direct inquiries to: Dr. John C. Herr, Founder, Humagen, Inc., 1500 Avon Street Extended, Charlottesville, VA 22901.

The UNIVERSITY OF MARYLAND AGRICULTURAL BIOTECHNOLOGY CENTER (ABC)

The center is located on the College Park campus and is in the newly initiated Maryland Biotechnology Institute. All appointees will hold tenure-track positions in the Center, joint appointments and laboratory facilities in appropriate departments within the University, and will participate in student training. ABC will bring together researchers with a primary focus on the molecular biology of plant and animal protection from the University, the U.S.D.A. Beltsville, and industry in the Washington/Baltimore Metropolitan area.

1. **Molecular Plant Virologist:** Successful candidate will have a joint appointment with the Botany Department. Candidate will be expected to develop a strong research program in molecular plant virology and to interact closely with a developing group in the Center whose research focuses on plant protection and an established group within the Botany Department exploring molecular plant-microorganism interactions.

2. Molecular Entomologist: Successful candidate will have a joint appointment with the Entomology Department. Candidate will be expected to develop strong research program in molecular biology of insects with emphasis on plant and animal protection. Appointee will interact with existing programs within the Entomology Department on insect physiology, biochemistry, molecular basis of insect-plant or insect-pathogen interactions.

3. Molecular Virologist/Immunologist: Successful candidate will have a joint appointment with the School of Veterinary Medicine. Candidates will be expected to develop strong research program preferably in the area of host resistance and diagnosis of infectious diseases. Appointee should have experience in recombinant DNA technology and will be expected to develop genetic or immunological procedures for prevention or interaction in diseases and to cooperate effectively with colleagues in ABC and faculty in the School of Veterinary Medicine.

4. Plant Biochemist: Successful candidate will have a joint appointment with the Department of Chemistry and Biochemistry. Candidates will be expected to develop strong program in plant biochemistry and to establish a vigorous, competitive program; will have ample opportunities to establish interactions with other members of ABC and with departmental biochemists in the Department of Chemistry and Biochemistry. A commitment to both undergraduate and graduate instruction is also essential.

Applicants must have Ph.D. and postdoctoral experience and all positions are at the junior level. Salary is commensurate with qualifications. Submit a letter stating career goals, proposed research, resume, and four letters of recommendation by December 1, 1987 to:

Chairmen of Search Committees (A. Teramura, Botany; M. Ma, Entomology; S. Mohanty, Vet. Medicine; J. Kozarich, Biochemistry)

Co. Agricultural Biotechnology Center, H.J. Patterson Hall University of Maryland, College Park, Maryland 20742

An Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGIST -NEUROBIOLOGY

The Upjohn Company has assembled an interdepartmental project team to study Alzheimer's disease. The project is highly collaborative in nature, interfacing the efforts of laboratories involved in basic research with those involved in drug development. We are currently seeking a post-doctoral scientist with experience in molecular biology to participate in our basic research efforts. This work will emphasize molecular biological approaches to understanding the pathogenesis of Alzheimer's disease and the development of appropriate animal models for the use of our therapeutic units. There will be ample opportunity and support for publishing and attending meetings. We encourage applications from highly motivated individuals committed to productive work in a rapidly progressing and socially significant area of research.

Kalamazoo is a medium-sized Southwestern Michigan community with immediate access to a mix of excellent cultural, educational and recreational pursuits, including numerous lakes. Upjohn offers a higher than industry standard starting salary for this type of position which will be commensurate with experience and an outstanding benefits program.

If you are interested in a basic research position within a corporate setting, please call toll free 1/800/253-8600, ext 3-6767, (inside Michigan call collect 616/323-6767) to request an employment application be sent to you. Please refer to Ad Number 21051-F when calling.

An Equal Employment Opportunity Employer M/F A Century of Caring

Upjohn

DEVELOPMENTAL NEUROBIOLOGIST. Iowa State University invites applications for a tenuretrack or tenured faculty position. We are especially interested in applicants who use state-of-the-art molecul Interested in applicants who use state-of-the-art molecu-lar or genetic approaches to study the developing ner-vous system. This position is part of a multimillion dollar, campus-wide effort to emphasize research in molecular biology and biotechnology. Modern nucleic acid, protein and cell-sorting facilities with the most advanced equipment available have been established. Salary will be negotiable and research start-up funds of up to \$150,000 are available. Teaching responsibilities will be modest. The applicant must have postdoctoral experience in his/her area of research interest. Send a description of research interests, curriculum vitae and arrange for three references to be sent to: Dr. P. Arrange for Infec references to be sent to: Dr. P. Haydon, Department of Zoology, Iowa State Univer-sity, Ames, IA 50011, by 15 January 1988. Women, minorities and members of other protected groups are strongly encouraged to apply. Iowa State University is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR, MOLECULAR BIOLOGY INSTRUMENTATION LABORATORY

An opening is available immediately for the position of Director of the Molecular Biology Instrumentation Lab-oratory for the Ohio State University Medical Center. The Molecular Biology Instrumentation Laboratory in cludes a DNA synthesizer and sequencer, a peptide synthesizer and peptide sequencer, and other ancillary pieces of equipment. The major responsibility of this person will be to provide expertise to laboratories in the Medical Center in the area of molecular biology. However, since this is a new facility, this person will also have the opportunity to have input into the organization of the laboratory and to develop his or her own research projects. The minimum requirements include an M.S. degree and experience with biotechnological instrumen-tation. A good background in organic and physical chemistry, as well as computer software development, is necessary. Salary is open, depending upon the advanced degree and experience. Send curriculum vitae and three letters of reference to: Dr. Ronald Glaser, Chairman of the Search Committee, Department of Medical Mi-crobiology and Immunology, The Ohio State Univer-sity, 333 West 10th Avenue, Columbus, OH 43210. The Ohio State University is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR OF SECTION OF CARDIOLOGY DEPARTMENT OF INTERNAL MEDICINE

The Department of Internal Medicine of Rush-Pres-byterian-St. Luke's Medical Center and Rush Medical College is seeking candidates for a full-time, tenured-track position as the Herrick Professor of Cardiology, the Director of the Section of Cardiology, and the Director of the new Rush Heart Institute.

Requirements: M.D. degree; Board-certification in internal medicine and cardiology; documented ability to conduct clinical or basic research, to direct and organize student, house officer and fellow training programs, and to establish new research programs in invasive and non-invasive cardiology. There should be proven ability to organize and direct clinical programs utilizing a large number of cardiology specialists, both salaried and non-salaried, and to integrate teaching and research programs with affliated institutions with affiliated institutions. Interested individuals should submit their curriculum

vitae to:

Stuart Levin, M.D. Chairman, Cardiology Search Committee Associate Chairman, Department of Internal Medicine Rush-Presbyterian-St. Luke's Medical Center 1653 West Congress Parkway Chicago, IL 60612 Rush is an Equal Opportunity/Affirmative Action Employer.

EDITOR

International scientific and technical publisher seeks acquisitions editor, preferably in the biomedical sciences, for a position in its New York City office. Broad scientific interests and advanced degree or relevant experience required. Please submit résumé, publications list, and cover letter with salary requirements to: Gordon and Breach, 50 West 23rd Street, New York, NY 10010.

POSITIONS OPEN

DIRECTOR. SOFTWARE ENGINEERING RESEARCH CENTER, GEORGIA INSTITUTE OF TECHNOLOGY. Applications and nominations are invited for the Directorship of Georgia Tech's Software Engineering Research Center. This unit is a focal point for Tech's growing software development activi-ties. It recently received a planning grant for an NSF-sponsored Industry-University Cooperative Research Center for Information Management. Qualifications for the position include an earned Doctorate or equivalent experience; national and international recognition; a experience; national and international recognition; a proven track record in developing, securing funding for, and successfully managing a broad and substantial pro-gram in Software Engineering Research and Develop-ment; and a proven ability to sustain an environment that encourages cross-disciplinary and cross-organizational research. The Director will hold a Professorship or equivalent research faculty rank in an appropriate unit. The salary is open and dependent on qualifications. The Georeir Institute of Technology offers competitive sala-Georgia Institute of Technology offers competitive sala-ries and an excellent benefits package. Please send appli-cations (with complete résumé and list of references) and nominations to: Dr. F. A. Rossini, Office of Interdisci-plinary Programs, CODE: AAS-1 Georgia Institute of Technology, Atlanta, GA 30332–0130. An Equal Education/Employment Opportunity Institution

ETHNOBOTANY

Connecticut College seeks applicants for a new posi-tion in ethnobotany beginning 1988 to 1989. The appointment will be made jointly by the departments of Anthropology and Botany for an initial term of 2 years. The successful applicant will add an anthropological The successful applicant will add an antiropological perspective to an existing broad program in human ecology. Research interests in tropical environments preferred but other specialties will be considered. A commitment to teaching and research in an undergradu-ate liberal arts environment is essential. Appointment is expected to be at the ASSISTANT PROFESSOR level. Send résumé and names of three references by 1 January 1988 to: Dr. John Burton, Department of Anthropol-ogy, Connecticut College, New London, CT 06320. An Equal Opportunity/Affirmative Action Employer.

EVOLUTIONARY BIOLOGIST. Tenured or tenure-track. This position is a part of an interdepartmental effort to strengthen research and graduate programs in ecology and evolutionary biology. The Zoology Depart-ment offers a strong commitment to research and the opportunity to interact with colleagues across the university who share interests in these areas. Teaching loads are modest. Biologists interested in answering populationlevel questions of fundamental importance in evolution-ary biology are encouraged to apply. The specific field of research is open. Applications from individuals with programs in such areas as population genetics, molecular evolution, modern approaches to systematic questions, life-history evolution, or evolution of behavior are partic-ularly encouraged. Those using molecular approaches to evolution would be supported by state-of-the-art nucleic acid and protein facilities. Send curriculum vitae, a statement of research interests and plans, and have at least three letters of reference sent to Dr. Richard J. Hoffmann, Department of Zoology, Jowa State University, Ames, IA 50011, by 15 January 1988. Iowa State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities and members of other protected groups are strongly encouraged to apply.

EVOLUTIONARY BIOLOGY-POPULATION ECOLOGY

This is a 9-month tenure-track position at the AS-SISTANT PROFESSOR level. We seek a Ph.D. with research interests in empirical or experimental approaches to understanding plant population structure from an ecological, evolutionary, genetic or molecular perspec-tive. Persons employing modern methods in the study of plant population biology and evolution are encouraged to apply. Persons with postdoctoral experience and/or research and teaching experience as a faculty member will be given preference. It is expected that the successful candidate develop a vigorous, externally funded research program, direct graduate students, and teach at both the introductory and advanced levels. Salary is negotiable. Send curriculum vitae, reprints of publications and the names, addresses, and telephone numbers of at least three references by 15 December 1987 to: Dr. Daniel J. Crawford, Chair, Department of Botany, The Ohio State University, 1735 Neil Avenue, Columbus, OH 43210-1293, The Ohio State University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION

The Department of Pharmacology and Toxicology of the Rutgers University College of Pharmacy has an opening for a junior or senior faculty member on a tenure-track line. The department is responsible for teaching pharmacology and pathophysiology to pharmacy students and graduate courses in toxicology and pharmacology to students in the Joint Graduate Program in Toxicology which is headquartered in the department. Candidates should have a doctorate in one of the basic medical sciences, a proven record of research productivi-ty with emphasis on mechanisms of toxicity, and evidence of accomplishment in graduate education. Prefer-ence will be given to candidates who have applied ence will be given to candidates who have applied techniques of molecular biology to solve toxicological problems. Interested parties should submit their curricu-lum vitae, three representative publications, and a list of colleagues whom we can approach for recommendations to: Robert Snyder, Ph.D., Professor and Chairman, Department of Pharmacology and Toxicology, Rutgers University College of Pharmacy, Post Office Box 789, Piscataway, NJ 08855. Applications will not be accepted after 15 December 1987. Rutgers, the State University of New Jersey is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION

The Department of Anatomy and Neurobiology, in-vites applications from individuals with experience in human and/or veterinary anatomy for a tenure-track position at the assistant/associate professor level. The uccessful candidate will have demonstrated abilities to:

1) develop a high-quality extramurally-funded research program; 2) participate in departmental graduate student train-

ing program; 3) develop expertise for eventual involvement in the Professional Veterinary Medical teaching program.

Priority will be given to candidates with research interest in cellular neurobiology. Salary and rank will be commensurate with qualifications and experience. Candi-dates should have an advanced degree in anatomical science or neurobiology.

Applicants should send a letter stating professional bals, curriculum vitae and the names of three references to: Dr. Stephen D. Roper, Ph.D., Chairman, Depart-ment of Anatomy and Neurobiology, College of Vet-erinary Medicine and Biomedical Sciences, Colorado State University, Fozt Collins, CO 80523. The appli-cation deadline is 18 December 1987. Colorado State University is an Equal Opportunity Em-ployer and complies with Title IX requirements.

FACULTY POSITION BIOLOGY

The Biology Department of Seattle University is seek-The Biology Department of Seattle University is seek-ing applications for a full-time, tenure-track position at the assistant professor level beginning in September, 1988. Seattle University is a metropolitan, Jesuit, teach-ing university located in Seattle, Washington, serving approximately 3000 undergraduate and 1300 graduate students. Our department consists of five full-time faculty washes and have a transport program for full-time faculty members, and has a strong general biology focus. We are looking for an individual with a Ph.D. in a biological science with emphasis in comparative animal physiology science with emphasis in comparative animal physiology and biological structure, with proven teaching ability or potential, and a strong commitment to undergraduate education. The teaching focus will include undergradu-ate courses in animal physiology, comparative embryolo-gy, comparative anatomy, and histology. The other courses to be included in the teaching responsibilities, and such as general biology, biology of human sexuality, and endocrinology will be determined according to depart-mental needs and individual expertise.

Application, including résumé, transcripts, and list of references should be sent to:

Dr. David C. Brubaker, Chairperson Department of Biology Seattle University Seattle, WA 98122 Telephone: 206-296-5485

by 31 January 1988. Seattle University is an Equal Opportunity/Affirmative Action Employer.



DREXEL UNIVERSITY DEAN, COLLEGE OF SCIENCE

Search Re-Opened

Drexel University invites nominations and applications for the position of Professor and Dean of Science. The University is a private, nonsectarian institution that emphasizes programs in science and technology, and is a national leader in cooperative education. Drexel has an attractive, modern campus in the University City section of Philadelphia. It enrolls 12,500 graduate and undergraduate students in seven colleges.

The College of Science includes the departments of Bioscience and Biotechnology, Chemistry, Mathematics and Computer Science, Nutrition and Food Sciences, and Physics and Armospheric Science, as well as associated multidisciplinary programs in Biomedical Science and Environmental Science. With a faculty of 91, an enrollment of over 850, and external research funding of 53 million per year, this growing college seeks a dynamic and innovative Dean.

The Dean is the College's academic leader, chief administrator, and prime advocate within the University. The Dean reports directly to the Vice President for Academic Affairs and is responsible for administering all aspects of the College, for evaluation of all academic programs and faculty, and for providing leadership and guidance in research, curriculum, and resource development.

The successful candidate must have an earned doctorate in an appropriate science discipline, should have demonstrated management experience with creative people, and a record of teaching, research, and scholarly achievement appropriate for tenure in one of the College's departments. Appointment is for 12 months, effective on or after July 1, 1988. Salary is highly competitive. A letter of application (including a resume) or a letter of nomination should be postmarked by December 31, 1987, and sent to:

Chairperson, Dean of Science Search Committee c/o Office of the Dean, College of Science Drexel University, Philadelphia, Pa. 19104-9984

Drexel University is an equal opportunity, affirmative action institution that invites applications from minorities and women

Postdoctoral Scientist Molecular Pharmacology

The Molecular Pharmacology Department, directed by Dr. Stanley T. Crooke, at Smith Kline & French Laboratories, located in suburban Philadelphia, Pennsylvania, is seeking a Postdoctoral Scientist to participate in isolation and characterization of receptors involved phospholipid metabolism and characterization of pharmacological and/or biochemical agents in signal transduction.

We consider postdoctoral studies to be of major importance in an individual's career and encourage publication of findings in leading journals and full interaction with the scientific community. Our postdoctoral appointments are normally for two years duration.

The successful candidate is required to have:

- Ph.D. with 0-2 years of postdoctoral experience required.
- training in protein chemistry, receptor biology, biochemical pharmacology or equivalent molecular biological experience.
- experience and/or practical knowledge in phospholipid/Ca2+ metabolism and signal transduction mechanisms.

We offer excellent compensation and benefits and an attractive relocation policy. For confidential consideration, send your C.V. and the names of three references to Robert F. Obst, R&D Senior Employment Consultant, SmithKline Beckman Corporation, 1554 Spring Garden Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/H/V.



Research Assistants/Associates Molecular Biology

Genentech, Inc., a leader in the field of biotechnology, has several openings in molecular biology.

Biochemistry/Protein Purification — Successful candidate will be responsible for the development of RIA's and ELISA's in support of ongoing research products. Candidate will also have extensive experience in radioiodination, gel chromatography, affinity chromatography, enzyme conjugation and antibody production and characterization. A BS or MS in Biochemistry or related field with 3-5 years' direct experience in developing, maintaining, and troubleshooting immunoassays is required. Comfortable with using computer interface equipment an added plus.

Molecular Biology — Creative and productive individual to work as part of a protein design team on projects relating to cardiovascular disease. Primary tasks would involve sitedirected mutagenesis, random mutagenesis, and vector construction. Prior molecular biology experience a necessity. Familiarity with and interest in protein chemistry and structure highly desirable.

Molecular Biology — Responsibilities include performing various experiments related to DNA sequence determination and technology improvement. Successful candidate will possess a BS (6-8 years' experience) or MS (4 years' experience) in Biochemistry, Molecular Biology or equivalent. Basic skills in nucleic acid isolation, gel electrophoresis, are required and direct experience in nucleic acid sequencing is preferred.

Molecular Biology — You will be involved in research and development studies related to atherosclerosis. Responsibilities include molecular biology and tissue culture expression of gene products involved with cardiovascular disease. Experience in molecular biology required.

Molecular Biology — Responsibilities will be in the areas of molecular biology of growth factors, growth factor receptors, and related oncogene products, and will include site directed and random mutagenesis of receptor and oncogene cDNA's, construction of expression vectors and expression of cDNA's in mammalian and procaryotic cells. BS/MS in Molecular Biology or related field with 3-5 years' related experience required.

Genentech, Inc. offers an excellent salary and benefits packet coupled with the opportunity to make a significant contribution to our organization. Please send your resume to Sherrie Wilkins, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.

> Genentech, Inc. Genentech, Inc. Genentech, Inc. Genentech, Inc.

FACULTY POSITION IN CELL AND MOLECULAR BIOLOGY

The Biology Department of the University of South Florida (USF) invites applications for three tenure-track faculty positions at the assistant or associate professor level to begin August 1988. The Biology Department has 34 faculty and offers B.S., M.S., and Ph.D. degrees The University is making a surging an emisment to grees. The University is making a major commitment to devel-op molecular biology, including the construction of new research facilities. The specific research area is open, but preference will be given to candidates with expertise in the mechanisms of growth factor action and viral oncogenesis. One position will have the responsibility of teaching an undergraduate course in Virology. Candi-dates must have at least 2 years of postdoctoral experience. Applicants for appointment as associate professor must have an established externally funded research program. Applicants should submit curriculum vitae, a summary of past and future research, and three letters of recommendation to: Search Committee, Biology De-partment, University of South Florida, Tampa, FL 33620. Applications will be accepted through 1 March, 1988. USF is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN CELL/DEVELOPMENTAL BIOLOGY

Applications are invited for a tenure-track position in the Department of Biological Sciences at Carnegie Mel-lon University. Applicants must be strongly motivated toward carrying our research in cell and/or developmental biology. Candidates who are just completing their postdoctoral research training will be considered for a position of starting assistant professor; exceptionally well-qualified individuals may be considered for appoint-ment at a higher level. To apply, send curriculum vitae and a concise description of research interests (no more than there paren) and in addition have there here a parent than three pages) and, in addition, have three letters of recommendation sent to: Dr. Susan Henry, Head, Department of Biological Sciences, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213. Carnegie Mellon University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION—HUMAN TUMOR IM-MUNOLOGY—MOLECULAR MECHANISMS. University of Wisconsin Department of Human Oncology is seeking applicants for a tenure-track appointment at the assistant/associate professor level. A highly qualified individual, M.D. or Ph.D., is sought in the general area of Tumor Immunology with an interest in mechanisms of immune effector cell function and/or tumor cell de-struction. Applicants are expected to be knowledgeable in immunological, biochemical, and molecular methods. Opportunity exists to interact with laboratories in the University of Wisconsin Clinical Cancer Center along with other laboratories on campus. The successful appli with other laboratories on campus. The successful appli-cant will be expected to develop a strong, independent research program and to participate in the departmental Ph.D. training program. Send résumé and statement of research interest to: E. C. Borden, M.D., Chairman, Search Committee, Department of Human Oncolo-gy, University of Wisconsin Clinical Cancer Center, K4/410, CSC, 600 Highland Avenue, Madison, WI 53792. The University of Wisconsin is an Equal Opportuni-ty/Affirmative Action Employer.

FACULTY POSITION MOLECULAR BIOLOGIST

The Department of Physiology and Biophysics of the University of Miami School of Medicine invites applica-tions for a tenure-track faculty position at the assistant professor level. We are seeking an outstanding individual with a solid molecular genetics background with a proven record of research accomplishments, preferably with an interest in membrane proteins. The candidate will be expected to conduct a strong, independent re-search program and to participate in the departmental teaching program. He/she will have ample opportunities to interact with seasoned groups in membrane channels, cellular communication and neurobiology in a research-

oriented department with modern facilities. Applicants should send curriculum vitae, an outline of present and proposed research, representative reprints, and three to four references to: Professor Werner R. Loewenstein, Department of Physiology and Bio-physics, University of Miami School of Medicine, P.O. Box 016430, Miami, FL 33101. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION IN DEVELOPMENTAL BIOLOGY AT THE UNIVERSITY OF CALIFORNIA, BERKELEY

The Department of Zoology invites applications for a faculty position at any level of the Professoriate beginning with the 1988 to 1989 academic year, pending budgetary approval. The research and teaching interests of the candidate should be in any area of Developmental biology. Candidate should be in any area of Developmental Biology. Candidates with research interests that would strengthen the over all program in developmental biolo-gy are especially encouraged to apply. The candidate will teach an undergraduate course in developmental biology, and appropriate graduate level teaching. Applicants should send curriculum vitae, bibliography with copies of publications, a summary of research and teaching objectives, and the names of three references to: Chair-man, Developmental Biology Search Committee, De-partment of Zoology, University of California, Berkeley, CA 94720. As part of the reorganization of the Biological Sciences at Berkeley, it is anticipated that the biological Sciences at Berkeley, it is anticipated that this position will soon be incorporated infto the Division of Developmental and Cellular Biology of the new Department of Cell and Molecular Biology. Closing date for receipt of applications: 15 December

1987

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

FACULTY POSITION IN THE GASTROEN-**TEROLOGY DIVISION**, Beth Israel Hospital and Harvard Medical School. The position requires an M.D., or M.D., Ph.D. degree. The candidate should be a wellestablished independent investigator in the area of gastrointestinal or liver physiology, morphology, cellular biology, or molecular biology. The candidate is expected to participate in the educational programs of the Depart-ment of Medicine. The level of appointment will be commensurate with the applicant's experience. Please send curriculum vitae to: Raj K. Goyal, M.D., Gastro-enterology Division, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215. We are an Equal Opportunity/Affirmative Action Employer

FACULTY POSITION IN INSECT PHYSIOLOGY

Tenure-track position (professorial level) for Ph.D. with broad experience in research and instruction in insect physiology and record of outstanding discoveryoriented publications and vigorous grantsmanship. In-struction responsibilities include insect physiology and an advanced course in a specialty area. Closing date 30 November 1987 or until position filled. Submit curriculum vitae, course outline, transcripts, statement of re-search objectives, teaching interests, and names of five references to:

Professor William S. Bowers, Chair Insect Physiology Search Committee The University of Arizona Department of Entomology Tucson, AZ 85721

The University of Arizona is an Affirmative Action/Equal **Opportunity** Employer

POSITION—UNIVERSITY FACULTY OF WISCONSIN–MADISON. The Institute for Enzyme Research and the Department of Chemistry of the University of Wisconsin–Madison invite applications for a joint faculty appointment at any level. The primary requirement is excellence in research and teaching. This requirement is excellence in research and teaching. This position is part of a broader recruiting effort in structural biochemistry on this campus, which also involves positions in the Department of Biochemistry and the Institute for Molecular Virology. The anticipated field or research is the application of x-ray crystallography and/or other physical methods to the analysis of biological macromolecules and their assemblies. Teaching responsitions in the previous department of the analysis of biological macromolecules and their assemblies. bilities in chemistry may include graduate or undergraduate courses. Interested persons should forward curriculum vitae, a summary of proposed research, and an outline of teaching interests, and arrange to have three letters of recommendation sent to: Professor Perry A. Frey, Institute for Enzyme Research, University of Wisconsin, Madison, WI 53705. To be assured of full consideration, candidates should have completed their applications by 14 December 1987. The University is an Equal Opportunity/Affirmative Action Employer; applications from qualified women and minority candidates are encouraged.

POSITIONS OPEN

FACULTY POSITIONS IN EUKARYOTIC MOLECULAR GENETICS

The Department of Genetics, University of California, Davis, intends to fill five tenure-track, 11-month posi-tions in molecular genetics within the next 3 years. This academic year we seek three eukaryotic molecular geneticists: two professors or associate professors with tenure, and one assistant professor. One of the tenured faculty appointments will serve as chair of the department. andidates must have demonstrated excellence in research. Faculty are expected to teach an advanced course in their specialty and contribute to introductory teaching, for a total of one or two one-quarter courses per year, and to advise undergraduate and graduate students. We will begin reviewing applications on 1 December 1987 and will continue until the positions are filled.

We encourage applications from women and minorities. Applications, including curriculum vitae, brief statements of research accomplishments, professional goals and teaching experience, pertinent reprints, and the names and addresses of three references, should be sent to: Molecular Search Committee, Department of Genetics, University of California, Davis, CA 95616. University of California is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS IN PLANT BIOLOGY

The Department of Biological Sciences, University of California, Santa Barbara, invites applications for two tenure-track positions. The assistant professor level is preferred, although in the case of an outstanding research preterred, although in the case of an outstanding research record, a senior appointment may be considered for one of the positions. The positions are effective 1 July 1988. A Ph.D. is normally required by time of appointment. We seek a **PLANT DEVELOPMENT BIOLOGIST** with research interests in the genetic control of vascular plant morphogenesis. We also seek a biochemically ori-ented **PLANT PHYSIOLOGIST** with research inter-ests emphasizing modern biochemical/molecular ap-proaches to problems in plant physiology. The Depart ment is revising its program in plant sciences and we ment is revising its program in plant sciences and we expect the scientists in these two positions to contribute to the design and development of integrated teaching offerings in the areas of plant structure, development, and physiology. Interested individuals should send a copy of their curritculum vitae, reprints, a brief summary of their research and academic goals, and arrange to have at least three letters of reference sent to: The Chairman, Department of Biological Sciences, University of Cal-ifornia, Santa Barbara, CA 93106, before 15 January 1988.

An Equal Opportunity/Affirmative Action Employer. Proof of U.S. citizenship or eligibility for U.S. employment will be required prior to employment (Immigration Reform and Control Act of 1986)

FACULTY POSITION IN STRUCTURAL BIOLOGY

The Department of Molecular Biology, Princeton University, invites applications for an Assistant Profes-sorship in structural biology. Areas of interest to the Department include problems in protein folding and structure, nucleic acid-protein interactions, and cellular architecture. Applicants should send a description of research interests, curriculum vitae, and the names of three referees before 30 November 1987 to: Structural Biology Search Committee, 104 Guyot Hall, Prince-ton University, Princeton, NJ 08544. Princeton University is an Equal Opportunity/Affirmative

Action Employer.

FIELD DIRECTOR MOUNTAIN RESEARCH STATION

The Institute of Arctic and Alpine Research seeks a Director for its Mountain Research Station, to be responsi-ble for its courses and research programs. Ph.D. or equiva-lent in a science field appropriate to mountain environ-ments is required, as is administrative and personnelrelations ability, and a record of obtaining support. Candi-date will also be expected to conduct research. Send letter, curriculum vitae, and names of three referees by 28 November 1987 to: M. F. Meier, INSTAAR, University of Colorado, Campus Box 450, Boulder, CO 80309. The University of Colorado is an Affirmative Action/Equal Employment Opportunity Employer

NATIONAL INSTITUTES **OF HEALTH**

Molecular Biologist

Postdoctoral Fellow to work on human immunoglobulin genes and autoimmunity with Dr. Paolo Casali. Experience in sequencing human or mouse immunoglobulin genes is desirable but not an absolute requirement. The position is available immedately. Salary \$22-30,000 per year. Send Curriculum Vitae to Dr. Lois Salzman. Assistant Scientific Director. National Institute of Dental Research, NIH, Building 30, Room 131, 9000 Rockville Pike, Bethesda, Maryland 20892. Telephone (301) 496-1483.

U.S. CITIZENSHIP REQUIRED

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

HYBRIDOMA and **IMMUNODIAGNOSTIC** TECHNOLOGY

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BioGenex Laboratories, a San Francisco Bay Area company and leader in the development of solid tumor diagnostics and infectious disease diagnostics, seeks qualified Project Leaders, Research Scientists, and Research Associates, with education (BS/MS/PhD) and several years of experience in the areas of:

- Hybridoma Technology
- Tumor Biology
- Microbiology
- Immunology
- Immunodiagnostics
- Biochemistry

Prior industrial experience is preferred but not essential

BioGenex offers competitive salaries, opportunity for advancement, excellent benefits, and equity participation.

Submit resume to:

BioGenex Laboratories, Dept. P-1 6549 Sierra Lane Dublin, CA 94568



RESEARCH IMMUNOCHEMIST/ **IMMUNOLOGIST**

A PhD level position is available within our Medical Products Department. This is an excellent opportunity for scientific and career development with a leader in diagnostic R&D. You will be a member of a group of scientists carrying out both research and product development in immunological areas related to clinical diagnostics. To qualify, you should hold a Ph.D., be well experienced in the preparation of monoclonal an-tibodies, and have expertise in immunochemical characterization techniques, such as affinity and crossreactivity determinations. One to two years of industrial or postdoctoral experience is a plus.

You'll find a highly stimulating scientific environment in a modern research facility located near Wilmington, DE. We provide excellent compensation and benefits including relocation. Wilmington's Mid-Atlantic loca-tion offers an attractive lifestyle with easy access to affordable housing and a wide range of academic, cultural and recreational activities. Interested candidates should send their resumes and references to: Professional Staffing, Employee Relations Department, Room X50935, Du Pont Company, Wilmington, DE 19898.



U.S. Citizenship or Permanent Visa Required An Equal Opportunity Employer M/F/H/V



NATIONAL UNIVERSITY OF SINGAPORE DEPARTMENT OF ZOOLOGY

Applications are invited for teaching appointments in the Department of Zoology.

Lecturer

Candidates should have a Ph.D. degree and who are able to teach in one or more of the following areas: Animal Behavior

Marine Microbiology/Marine Molecular Biology/Marine Immunology Biophysics, in particular, applications of computers to experimental biology

Gross annual emoluments range as follows

S\$27,660-57,350 Senior Lecturer Associate Professor \$\$51,950-91,070 \$\$79,780-109,880 (US\$1.00 = S\$2.08 approximately)

The commencing salary will depend on the candidate's qualifications, experience and the level of appointment offered.

Leave and medical benefits will be provided. Depending on the type of contract offered, other benefits may include: provident fund benefits or an end-of-contract gratuity, a settling-in allowance of S\$1,000 or S\$2,000, subsidised housing at nominal rentals ranging from S\$100 to S\$216 p.m., education allowance for up to three children subject to a maximum of S\$10,000 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore. Staff members may undertake consultation work, subject to the approval of the University, and retain consultation fees up to a maximum of 60% of their gross annual emoluments in a calendar year.

The Department of Zoology is a department in the Faculty of Science. There are 8 faculties in the National University of Singapore with a current student enrolment of some 14,000. All departments are well-equipped with a wide range of facilities to enhance the teaching and research activities of staff members. The University is linked to BITNET, an international network that interconnects almost 500 mainframe computers at 200 institutions of higher learning and research centres around the world.

Application forms and further information on terms and conditions of service may be obtained from:

The Director Personnel Department National University of Singapore 10 Kent Ridge Crescent Singapore 0511 The Director North America Office National University of Singapore 780 Third Avenue, Suite 2403 New York, N.Y. 10017, U.S.A. Tel: (212) 751-0331

Enquiries may also be sent through BITNET to: PERSDEPT @ NUSVM

FIVE OPHTHALMOLOGISTS—University of Michigan, full-time faculty positions, instructor, assistant, associate, or full professor. Training in ophthalmology. Opportunity for clinical and laboratory research, resident and student teaching, clinical practice. Contact: Paul R. Lichter, M.D., Chairman, Department of Ophthalmology, University of Michigan, W. K. Kellogg Eye Center, 1000 Wall Street, Ann Arbor, MI 48105. Affirmative Action Employer.

GENETIC EPIDEMIOLOGIST/STATISTICAL GENETICIST—The Psychiatric Genetics Program of the Department of Psychiatry, Medical College of Virginia (MCV)/Virginia Commonwealth University has available immediately a tenure-track or tenure-eligible position for a genetic epidemiologist/statistical geneticist with expertise in complex segregation and linkage analysis. Rank can be at assistant, associate, or full professor, commensurate with experience. Candidates will join an active research group in psychiatric genetics and genetic epidemiology, which will include a molecular genetics references to: Kenneth S. Kendler, M.D., Department of Psychiatry, MCV Box 710, Richmond, VA 23298. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

Postdoctoral for linkage mapping and genetics of pesticide resistance using allozyme and DNA rflp analysis. Experience in electrophoresis. Salary: \$20,000.

GENETICIST

Curriculum vitae and names, and telephone numbers of references to: Dr. Thomas Brown, Department of Entomology, Clemson University, Clemson, SC 29634. Telephone: 803-656-5038. An Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF CALIFORNIA—RIVERSIDE GENETICIST

The Department of Biology, University of California, Riverside, invites applications for a tenure-track position in genetics. The appointment will be effective 1 July 1988, with duties commencing in September, and will be made at the assistant, associate, or full professor level, commensurate with the qualifications of the appointee. Minimum qualifications include postdoctoral training, demonstrated excellence in research, and a commitment and demonstrated ability to teach both undergraduate and graduate students. A senior level appointment may be made to an established scholar committed to assuming a leadership role within the Department as well as the campus-wide genetics community. We are seeking an individual with interests and expertise in the molecular basis of genetic processes. Acceptable areas of research include, but are not limited to, mechanisms of genetic integration and transposition, developmental genetics and gene expression, and genomic evolution. To apply, send curriculum vitae, statement of research and teaching interests, copies of representative publications, and arrange to have sent three to five letters of recommendation by 15 January 1988, to: Genetics Search Committe, Department of Biology, University of California, Riverside, CA 92521. The University of California is an *Equal Opportunity*/Affirmative Action Employer and minority and female candidates are encouraged to apply.

FLORIDA INTERNATIONAL UNIVERSITY THE STATE UNIVERSITY OF FLORIDA AT MIAMI HYDROGEOLOGIST AQUEOUS GEOCHEMIST

The Department of Geology at Florida International University invites applications for a full-time tenureearning position at the assistant professor level in hydrogeology/aqueous geochemistry. The successful applicant will be expected to teach at the undergraduate and graduate levels, and must demonstrate an ability to conduct high quality teaching, and the potential to establish a vigorous research program. A completed Ph.D. is required. The department is well-equipped, and includes an ARL Microprobe, ICPS, x-ray diffraction, etc. Deadline for applications: 8 December 1987. Appointment will begin in January 1988. Send a brief résumé, brief description of teaching and research interests, transcripts, and three letters of recommendation to Dr. Florentin Maurrasse, Department of Geology, Florida International University, University Park, Miami, FL 33199. Florida International University is a member of the State University System of Florida, and is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

GENETICIST UNIVERSITY OF ILLINOIS

The School of Life Sciences, University of Illinois at Urbana-Champaign invites applications for a faculty position at the associate professor level. We are seeking a person who is an accomplished geneticist well versed in the modern approaches of molecular and cellular biology. The academic and research record should have a record of sustained significant and innovative research activity in genetic research. A major duty of the successful applicant will be the coordination of the campus-wide graduate genetics program. This administrative responsibility will be balanced by decreased teaching responsibiities. The departmental affiliation of the successful applicant within the School of Life Sciences will depend upon the specific interests of the applicant. Starting date is open. Salary is negotiable and commensurate with exprerience. Send résumé and names of three references to: **Professor J. Cronan, School of Life Sciences, University of Illinois, 393 Morrill Hall, 505 South Goodwin Avenue, Urbana, IL 61801; telephone: 217-333-3044. To receive full consideration, applications should be received by 15 January 1988.**

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

POSITION IN GEOLOGY AND PHYSICS

Eastern Oregon State College (EOSC) invites applications for a **TENURE-TRACK POSITION** starting 16 September 1988. Salary and academic rank are open and based on academic preparation and teaching experience. Must have a Ph.D. in geology with a very strong physics background or a Ph.D. in geophysics. Eastern seeks a dynamic individual who will continue our high quality teaching in geology and physics and has the capability to attract students to these courses. Must be able to teach undergraduate geology for non-majors and introductory physics course. Send a letter of application, résumé, copy of all college transcripts, and three recent (1985 to 1987) letters of reference to: Paul Stephas, Geology/Physics Search Committee, School of Arts and Sciences, Badgley Hall, Eastern Oregon State College, La Grande, OR 97850. Application deadline is 31 December 1987. EOSC is an Affirmative Action/Equal Opportunity Employer.

HISTOLOGIST: SEARCH REOPENED. Assistant/Associate Professor. A full-time tenure-track scientist is being sought to teach histology and embryology to freshman medical students. Relevant medical school teaching and electron microscopy experience are desirable. Postdoctoral training, an active research program, and potential graduate course development are expected. Applicants should send their curriculum vitae and the names, addresses, and telephone numbers of three references before 8 January 1988 to: B. H. Ragatz, Ph.D., Fort Wayne Center for Medical Education, Indiana University School of Medicine, 2101 Coliseum Boulevard East, Fort Wayne, IN 46805. Indiana University is an Equal Opportunity/Affirmative Action Educator, Employer and Contractor, M/F.

INORGANIC CHEMIST—The Chemistry Department of Wesleyan University invites applications for a tenure-track position in Inorganic Chemistry, effective September 1988. It is expected that the appointment will be made at the assistant professor level, but exceptional candidates of higher rank are encouraged to apply. The successful candidate will exhibit the potential for excellence in both teaching (undergraduate and graduate level) and research in a well-equipped department with an active Ph.D. program, and will be expected to attract outside funding. The desire to complement the current make-up of the department dictates that preference be given to the areas of bio-inorganic and solid state chemistry, but outstanding candidates in any area of inorganic chemistry are encouraged to apply. Salary, fringe benefits, and start-up funds will be highly compettive. Interested applicants should submit curriculum vitae, a brief decription of research plans, and the names and addresses of three references to: Chair of the Faculty Search Committee, Department of Chemis try, Wesleyan University is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from women and minority candidates.

POSITIONS OPEN

HEAD OF SCIENTIFIC SECTIONS ILLINOIS STATE MUSEUM

The ISM seeks a Ph.D. in a natural science or anthropology field with administrative experience to serve as its Head of Science Sections (Anthropology, Botany, Geology, and Zoology). Position will be at an assistant director level and administer a staff of 40 scientific curators, research associates, and technicians, including 14 Ph.D.'s. Candidates should have administrative experience in a science museum, university, or comparable scientific program. Preference given to candidates with solid publication record, experience with collections, and strong interdisciplinary and paleoecological background. Salary \$45,000 to \$55,000. Reply with curriculum vitae and names of references by 15 December 1987 to:

Salary \$45,000 to \$55,000. Reply with curriculum vitae and names of references by 15 December 1987 to: Dr. R. Bruce McMillan, Museum Director, Illinois State Museum, Springfield, IL 62706. Equal Opportunity Employer/Affirmative Action Employer.

IMMUNOLOGIST—The Department of Microbiology and Immunology invites applications for a tenuretrack faculty position at the rank of assistant or associate professor. Applications from individuals with interesting and vigorous studies of lymphocyte differentiation, activation, and/or effector functions are particularly encouraged. Applicants should have a Ph.D. or M.D. degree, at least 2 years of postdoctoral experience, and an interest in teaching within the medical and graduate student programs of the department. Applicants should submit curriculum vitae, a statement of research plans and names of references to: Dr. D. C. Bauer, Chairman, Department of Microbiology and Immunology, Indiana University School of Medicine, 635 Barnhill Drive, Indianapolis, IN 46223. Review of applications will begin 4 January 1988 and continue until the position is filled. An Equal Opportunity/Affirmative Action Employer.

IMMUNOLOGIST, Ph.D.: Seeking senior scientist with extensive experience in hybridoma/monoclonal antibody development for use in cancer therapy. Also will require someone with skills in vaccine preparation, lymphokine, and cell-mediated cytotoxicity. Two positions open in Miami, Florida with private medical organization that emphasizes immunotherapeutic approaches to cancer therapy. Please send résumé to:

Medical Director Cancer Biotherapy Associates 2153 Coral Way, Suite 404 Miami, FL 33145

LABORATORY MANAGER/ SPECIALIST

A Laboratory Instructor for team-taught medical and dental physiology courses. The responsibilities of the successful candidate will be: (i) assisting faculty in developing/setting up of, and participating in the instruction of laboratory exercises involving the circulatory and respiratory systems; (ii) assist in the instruction of small groups of students using computer simulations of physiological systems; (iii) assist in the development of practice problems for students; (iv) write laboratory syllabi; (v) assist in evaluation of student performance; (vi) conduct small group tutorials for students requiring remedial help; (vii) evaluate the success of teaching and instructional innovations. The candidate must possess a Ph.D. degree in physiology, be a dedicated teacher, and have an interest in the development of pedagogical skills. Interested persons should send their curriculum vitae and the names of three references to: Dr. Earl Homsher, Department of Physiology, UCLA School of Medicine, Los Angeles, CA 90024–1751. Salary commensurate with experience and background. The University of California is an Equal Opportunity/Affirmative Action Employer.

LAB TECHNICIAN HEMATOLOGY/ONCOLOGY

An excellent position is available for a lab technician who has a B.S. or M.S. degree in a science discipline and experience with biochemical techniques, radioisotopes and tissue cultures. Candidates should send their résumé to: Dennis Lee, Department of Human Resources, Michael Reese Hospital and Medical Center, Lake Shore Drive at 31st Street, Chicago, IL 60616. Equal Opportunity Employer M/F. At the Institute for Nuclear Solid State Physics of the Karlsruhe Nuclear Research Center, the C4-grade position of

HEAD OF INSTITUTE

will be filled again after the death of the former incumbent, Professor Dr. W. Schmatz.

The Institute is engaged in application-oriented fundamental research. Its main activities over the next few years will be concentrated upon work on the new superconductors. In addition, contributions are expected to basic problems of solid state physics studied within other areas of the Nuclear Research Center (e.g., microstructure engineering).

The candidate should have the required academic qualifications. His integrative and motivating faculties should enable him to represent the existing main areas of research of the Institute (superconductivity; structures and dynamics of surfaces and interfaces) and add to them in a meaningful way. In this respect, experimental work is determined by the facilities currently existing at the Institute (neutron and electron spectroscpy; ion and layer technologies; modern facilities for preparing materials; low-temperature physics). The cooperation with the Physics Faculty of the University of Karlsruhe initiated by the late Professor Schmatz will be continued.

Applications, together with the usual documents and a statement of the scientific objectives the candidate intends to pursue, should be sent to **Personalabteilung**, **Kernforschungszentrum Karlsruhe GmbH**, **Postfach 3640**, **D-7500 Karlsruhe 1**, **Federal Republic of Germany**, not later than by November 20th, 1987.

Kernforschungszentrum Karlsruhe

Postdoctoral Fellows Molecular Genetics

Smith Kline & French Laboratories, a leader in pharmaceutical research, is seeking additional postdoctoral fellows to expand its current research programs employing recombinant DNA technology.

Excellent opportunities exist for innovative interdisciplinary research in our new and superbly equipped Research and Development Center in suburban Philadelphia near Valley Forge, Pennsylvania.

The Department of Molecular Genetics is seeking outstanding Ph.D. scientists to pursue research on:

- Streptomyces proteases/role in foreign protein production
- Gene expression in <u>Streptomyces</u>
- Expression and functional analysis of retroviral/AIDS proteins
- T-lymphocyte receptors-structure/function studies
- Regulation of interleukin-1 gene expression
- Tumor Necrosis Factor action at the molecular and cellular level
- Transcriptional activation
- Cloning/expression of <u>Candida</u> genes in <u>S. cerevisiae</u>

We offer an excellent compensation, benefits and relocation package as well as opportunities for personal and professional growth. Publication of research results is encouraged and supported. For confidential review, please forward your C.V. and names of three references to: Robert F. Obst, R0097 Manager, Personnel Relations, Smith Kline & French Laboratories, Research and Development Division, P. O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



LIBRARIES STATE UNIVERSITY OF NEW YORK AT BINGHAMTON

We seek six LIBRARIANS and a PROFESSION-AL SYSTEMS LIBRARIAN. Two of these librarians are for our Science Library, with both collections devel-opment and reference responsibilities. The professional position is as Assistant Director for Systems Manage-ment minimizing on line average learner of anticely and ment, maintaining on-line systems, local networks and microcomputer facilities and implementing NOTIS. Please bring these opportunities to the attention of wellqualified persons, asking them to write us promptly for further information: our review begins on 15 December 1987. Dr. Albert A. Dekin, Jr., Acting Director of Libraries, SUNY Binghamton, Binghamton, NY 13901; telephone 607-777-2346. Affirmative Action/ Equal Opportunity Employer.

MAMMALOGIST. Tenure-track, assistant professor to begin August 1988 for Ph.D. to teach mammalogy, freshman biology, specialty course, direct master's theses, and seek funding to support strong research program in regional mammal populations. Statistical background desirabl

DEVELOPMENTAL BIOLOGIST. Tenure-track, assistant professor to begin August 1988 for Ph.D. to teach developmental biology/experimental embryology, freshman biology, supervise master's theses and develop strong research program in developmental biology of animals. Positions contingent upon funding. Send application letter specifying position, including teaching and research interests, curriculum vitae and three reference letters to: B. M. Stidd, Chairman, Department of Biological Sciences, Western Illinois University, Ma-comb, IL 61455 by 1 February 1988. Western Illinois University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.

NEURODIAGNOSTICS RESEARCH DIRECTOR

The University of Louisville is recruiting a Director of the Clinical Neuromonitoring and Spinal Research Lab-oratory. This individual will direct ongoing activity for a busy neurosurgery/orthopedic academic practice, be director of a basic science and clinical laboratory, and coordinate collaboration with otolaryngology, vascular surgery, etc. The candidate must have extensive clinical experience with somatosensory evoked potentials, brain stem auditory evoked potentials, and brain mapping. Experience with magnetic stimulation is important. The academic appointment will be at the assistant professor level. Prospective candidates should contact: Henry D. Garretson, M.D., Ph.D., Professor and Director, Division of Neurological Surgery, Department of Sur-gery, University of Louisville, Louisville, KY 40292. An Affirmative Action/Equal Opportunity Employer.

The Biology Department, California State University, Los Angeles, will fill two tenure-track faculty positions beginning fall, 1988. Successful candidates are expected to teach undergraduate and graduate courses, and to develop a productive, independently funded research program. Ph.D. required. Postdoctoral experience preferred.

MOLECULAR BIOLOGIST, ASSISTANT/AS-SOCIATE PROFESSOR. Research interest in molecular biology of plants or yeast preferred. He/she will participate in the Genetic Engineering Certificate Program and teach some of the following courses: Principles of Gene Manipulation, Cell Biology, and Plant Physiolo-gy. Private research space and access to well-equipped

core molecular biology facility are provided. **POPULATION GENETICIST, ASSISTANT PROFESSOR**. Field-oriented population geneticist; research emphasis in ecological or evolutionary mechanisms. Expertise in statistical computer applications. He/ she will teach some of the following courses: Biometrics, Evolution, Genetics, and course in area of specialty. He/ she will expand Department's computer use in teaching/ research.

Submit curriculum vitae, statement of research plans, and three letters of reference by 15 January 1988: Dr. David Soltz, Search Committee, California State Uni-versity, Los Angeles, Los Angeles, CA 90032. Equal Opportunity/Affirmative Action/Handicapped/Em-

ployer.

POSITIONS OPEN

MOLECULAR BIOLOGISTS

Four tenure-track positions are immediately available in the Institute for Molecular Biology at the University of Houston. The rank of each position is open. An endowed Cullen Professorship in Molecular Biology is available for one of the positions. Applications from individuals or groups of individuals will be considered. The Institute focus is in the analysis of complex genomes. Candidates with interests in regulation of gene expression, structure/function studies of macromolecules. genome evolution, genomic mapping and theoretical molecular biology are particularly sought. Candidates will be expected to develop an independent research program, direct graduate research and participate in between the Institute and either the Department of Biology or the Department of Biology so the Department of Biology are the Department of Biology and Biophysical Sciences. The University of Houston is a state-supported comprehensive graduate institution with an enrollment of 30,000. Applicants should submit curriculum vitae, a brief summary of future research plans and names of four references to: Dr. Arnold Eskin, Chairman, Institute for Molecular Biology, University of Houston, Houston, TX 77004. The University of Houston is an Affirmative Action/Equal Opportunity Employer.

MICROBIOLOGY—The Biology Department of Millersville University has TWO TENURE-TRACK **POSITIONS** in microbiology: one requiring a microbiologist with a clear clinical orientation and the other requiring either microbial ecology or molecular biology. Positions will teach general microbiology, clinical micro-biology, immunology, and general biology. Candidates must possess earned doctorate as well as demonstrated depend on qualifications. The Department has 18 facul-ty, serves 500 majors, and offers a variety of baccalaureate programs and a master's program. Send curriculum vitae, official transcripts, three recent letters of recommenda-Microbiology Search SCI-11/6, Department of Biolo-gy, Millersville, Millersville, PA 17551. Reviews will begin 1 December 1987 and continue until positions are filled.

PALEOBOTANIST PLANT MORPHOLOGIST

The Department of Biological Sciences at the State University of New York (SUNY), University Center at Binghamton, invites applications for a tenure-track, assistant/associate professor, faculty position in paleobota-ny or plant morphology. Individuals with research interests in evolutionary processes within the paleoenvironanalytical methods is desired. The candidate will be expected to carry on an active, externally funded, research program in cooperation with the Center for Evolution and the Palecoenvironment, to teach an entry-level course in botany or general biology, to contribute to the graduate and undergraduate teaching programs, and to Applicants should send a letter of application, includ-

ing a statement of research and teaching interest, curriculum vitae, copies of recent publications, and the names, addresses and telephone numbers of three referees to:

Dr. Patricia Bonamo Search Committee Chair Department of Biological Sciences SUNY–Binghamton Binghamton, NY 13901

Applications accepted until the position is filled. State University of New York is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF KENTUCKY COLLEGE OF PHARMACY PHARMACOLOGY/TOXICOLOGY FACULTY

In anticipation of a RCDA, the University of Kentucky College of Pharmacy invites applications for a tenure-track faculty position. Postdoctoral experience and potential for development of an independent, extramurally funded research program are required. A phar-macy background is desirable. Opportunities exist for associations with University interdisciplinary Centers (e.g., toxicology, aging, cancer, etc.). Curriculum vitae and names of three references should be sent by 30 November 1987 to: Dr. William C. Lubawy, Interim Dean, University of Kentucky, College of Pharmacy, Lexington, KY 40536–0082. The University of Ken-tucky is an Equal Opportunity Employer.

POSITIONS OPEN

NEUROSCIENCE FACULTY POSITIONS AT HAHNEMANN UNIVERSIT PHILADELPHIA, PENNSYLVANIA

Faculty positions at all levels are available in the Department of Physiology and Biophysics at Hahnemann University.

These positions are being offered in conjunction with the continuing commitment of the University to a multidisciplinary program in the neurosciences. Re-quired are Ph.D. degree and an established record of research in the neurosciences, as evidenced by publications and extramural research support.

Successful candidates will be expected to interact on a campus-wide level with clinical and basic investigators in the neurosciences as well as participate in the education

of medical and graduate students through team-taught medical and advanced physiology courses. Applications must be submitted by 15 December 1987. Interested applicants should send curriculum vitae, bibliographies, and names of three references to: G. C. Salmoiraghi, M.D., Ph.D., Chairman, Department of Physiology and Biophysics, Hahnemann University, Mail Stop 409, Broad and Vine Streets, Philadelphia, PA 19102.

PHARMACOLOGY MOLECULAR PHARMACOLOGY

Applications are invited for tenure-track posi-ons at the ASSISTANT OR ASSOCIATE **MEMBER** level in the Program of Develop-mental Therapy and Clinical Investigation of the Sloan-Kettering Institute. Candidates with a Ph.D. or M.D. degree that have demonstrated outstanding research capabilities in cancer-relat-ed pharmacology will be considered. We are especially interested in candidates with a strong interest in mechanisms of drug action at the molecular level, and with interests in clinical application. Additional areas of reasearch emphasized include mechanisms of drug resistance, protein structure and drug design, signal trans-duction, and DNA repair. Please send a detailed curriculum vitae and a statement of research interests by 15 November 1987 to: Dr. Joseph R. Bertino, Co-Head, Program of Develop-Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021.

Sloan-Kettering Institute is committed to Equal Opportunity through Affirmative Action and, there-fore, members of minority groups are encouraged to apply.

PHYSIOLOGIST: The Cerebrovascular Research Center Department of Neurology, is seeking applications for a full-time research position at the level of assistant or associate research professor. The applicant must have had extensive laboratory experience in research on the cerebral circulation with a proven record of research accomplishments. Candidates should have a strong interest in cerebrovascular disease. Applicants should have a strong interest in lum vitae, a description of research interests, and three letters of reference to: Dr. Martin Reivich, Cerebrovas-cular Research Center, 429 Johnson Pavilion, Uni-versity of Pennsylvania, Philadelphia, PA 19104– 6063

POSTDOCTORAL FELLOW IN TOXICOLO-GY. Position available to be filled anytime in next 9 months to examine the role of metallothionein in Cd toxicity or the hepatobiliary disposition of chemicals. Must be a U.S. citizen or admitted for permanent residency. Send curriculum vitae to: **Curtis D. Klaassen**, Ph.D., Department of Pharmacology and Toxicology, University of Kansas Medical Center, Kansas City, KS 66103

POSTDOCTORAL FELLOW OR RESEARCH ASSOCIATE to study the role of calmodulin and other functions. Candidates with Ph.D. background in enzymology, protein chemistry, or recombinant DNA are preferred. Salary starts at \$22,000 with yearly increases and excellent benefits. Send curriculum vitae and three letters of recommendation to: Dr. Wai Yiu Cheung, Department of Biochemistry, St. Jude Children's Research Hospital, Memphis, TN 38101.

PROTEIN BIOCHEMIST Biology Department Brookhaven National Laboratory

The Department is seeking a staff member to develop and lead an active, independent research program in the area of protein biochemistry, structure and function, and to direct a departmental protein microsequencing facility. Research interests complementary to existing programs in structural biology, molecular genetics, and plant molecular biology are desirable. Candidates must have postdoctoral experience. A complete curriculum vitae, statement of research interests and the names of three references should be sent by December 15, 1987 to: Dr. Carl W. Anderson, **Biology Department**, **Brookhaven National** Laboratory, Associated Universities, Inc., Upton, L.I., NY 11973. An Equal Opportunity Employer m/f.

BROOKHAVEN NATIONAL LABORATORY

1988 FELLOWSHIP OPPORTUNITIES

Radioactive Waste Management

Fellowships are offered by the U.S. Department of Energy for graduate study and research related to the management of spent nuclear fuel and high-level radioactive waste. The program seeks to encourage qualified undergraduates in earth sciences, engineering, materials science, and radiation science to pursue graduate study at participating university programs in radioactive waste management technologies. Fellowship benefits include a \$1,000 monthly stipend and full payment of tuition and fees.

The program includes a practicum at a participating research center. The practicum is designed to give on-site experience with DOE radioactive waste management research activities. Applications for fellowships beginning September 1, 1988, must be received in the Oak Ridge Associated Universities' University Programs Division office at the address below by February 1, 1988, 4:30 p.m.

Information and application forms may be requested from

RWM Fellowship Program University Programs Division Oak Ridge Associated Universities P.O. Box 117 Oak Ridge, Tennessee 37831-0117 Telephone (615) 576-3455

This is an equal opportunity program open to all qualified persons without regard to race, sex, creed, color, age, handicap, or national origin. An applicant must be a U.S. citizen or a permanent resident alien.

DO YOU THINK DNA SEQUENCING IS AN ART?

Do you appreciate the visual delight of a well resolved sequencing ladder and the power of the clear information obtained? We at **Amgen** do, and we appreciate even more the vital role our **Research Associates** in DNA Sequencing play in our pioneering work in Biotechnology. Without their support we would not be the industry leader in recombinant DNA technology we are today.

We're looking for more Research Associates to help us produce even more breakthroughs in the human pharmaceutical, human diagnostic, animal health care and specialty chemical areas. If you possess a B.S. or M.S. in Biochemistry, Molecular Biology or a related discipline, 1-2 years of experience in DNA sequencing, and want the kind of career opportunity, visibility and responsibility that only a rapidly growing company like Amgen can offer, we'd like to hear from you.

We offer an excellent compensation and benefits package, a spacious country setting in the scenic Conejo Valley (about an hour's drive northwest of Los Angeles), and a stimulating scientific environment. Submit your resume, in confidence, to:

Recruitment, Dept. #96 AMGEN 1900 Oak Terrace Lane Thousand Oaks CA 91320



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Senior Scientists

Explore A Position Today With The Industry Of The Future.

The Agricultural Division of CIBA–GEIGY Corporation, one of the world's foremost agricultural and specialty chemicals companies, is respected for both the quality of its research and the highly accomplished scientists it attracts. To maintain our leadership position in biotechnology, we currently seek two Senior Scientists to join us at our Biotechnology Research Unit located in Research Triangle Park, North Carolina.

These two positions are available in the microbiology group. Successful candidates will have a PhD in microbiology, molecular biology, plant pathology, or a related discipline, and at least 2 years of postdoctoral work experience. Relevant research experience should include studies on plant-bacterial interaction, biological disease suppression, or plant growth promoting bacteria.

Our state-of-the-art facilities in Research Triangle Park are conveniently located, with access to several outstanding universities. We offer an excellent salary and benefits package, and the opportunity to contribute to an innovative research program. For prompt and confidential consideration, forward a *curriculum vitae*, to: Dr. Mary-Dell Chilton, CIBA-GEIGY Biotechnology Research, P.O. Box 12257, Research Triangle Park, North Carolina 27709. An equal opportunity employer m/f/h/v.

Science Serving Mankind

3A-GF

Postdoctoral Scientist Immunologist/ Cell Biologist

The Department of Cell Biology at Smith Kline & French Laboratories, located near Valley Forge, Pennsylvania, is seeking an Immunologist/ Cell Biologist to join our hybridoma group investigating state-of-the-art applications of antibody technology to drug discovery. The successful candidate will use a combination of techniques related to immunology and immunochemistry.

Candidates must have:

• a Ph.D. in Immunology, Cellular Biology or related area.

• 0-3 years postdoctoral experience.

We consider postdoctoral studies to be of major importance in an individual's career and encourage publication of findings in leading journals and full interaction with the scientific community. Our postdoctoral appointments are normally of two years duration.

We offer excellent compensation and benefits as well as an attractive relocation policy. For confidential consideration, send your curriculum vitae along with a brief proposal for application of antibodies to analysis of receptor-ligand interactions to Robert F. Obst, Manager, Personnel Relations, R0103, Smith Kline & French Laboratories, Research and Development Division, P. O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



TOXICOLOGIST

Monsanto Agricultural Company is seeking a Toxicologist to join the staff of our Environmental Health Laboratory in St. Louis, Missouri. This modern facility has responsibility for safety assessment of all Monsanto products. Primary responsibilities will include protocol development, conduct and reporting of toxicology studies required for regulatory submissions. In addition, the successful candidate will be expected to develop programs to better understand toxicological mechanisms and perform risk assessments.

Qualified candidates should have a doctorate degree in a relevant field and experience in performing and reporting toxicology studies in a GLP setting.

Monsanto provides a generous compensation package relative to your responsibilities and qualifications. Interested candidates should forward their resume to: Vernon L. Bozarth; Mail Zone B3NA; MONSANTO COMPANY; 800 N. Lindbergh Blvd.; St. Louis, MO 63167. An Equal Opportunity/ Affirmative Action Employer M/F/H/V.

Monsanto



The Julia McFarlane Chair in Diabetes Research

Applications are invited from established clinical or basic science investigators for this endowed position. The person selected will be expected to provide leadership and promote collaborative research in the field of diabetes mellitus, develop an independent research program in this field, and promote educational and treatment programs for diabetes in children and adults. Applicants must have the administrative ability and interest to assist in the academic development of junior faculty.

Applicants are requested to submit their curriculum vitae, a brief statement of interest, and the names of three references by December 1, 1987.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Reply in confidence to:

Dr. E.R. Smith Chairman, Advisory Selection Committee Julia McFarlane Chair in Diabetes Research Department of Medicine Faculty of Medicine The University of Calgary 3330 Hospital Drive N.W. Calgary, Alberta T2N 4N1

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NATIONAL CANCER INSTITUTE National Institutes of Health, Public Health Service

CANCER PREVENTION FELLOWSHIP PROGRAM, CPFP

The DIVISION OF CANCER PREVENTION AND CONTROL is accepting applications for CPFP. The primary purpose of this program is to attract individuals from a multiplicity of health science disciplines into the field of cancer prevention and control research. The program provides for: participation in DCPC Cancer Control Academic Program (a formal fourmonth course in cancer prevention and control); 20 months at NCI working directly with individual preceptors on ongoing cancer prevention and control projects and the NCI Year 2000 Goals; one year at a DCPC-approved cancer control program or State Health Department (may be optional). Funding permitting, up to 10 Fellows will be accepted for up to three years of training, beginning on August 28, 1988.

APPLICANTS MUST (BY THE DEADLINE): (1) Possess an M.D. or D.O. degree from an accredited medical school in the U.S., Puerto Rico, or Canada. (Foreign medical graduates—American citizens or Resident Aliens who have received their medical degree from a medical school outside the U.S., Puerto Rico and Canada and that is listed in the World Health Organization's World Directory of Medical Schools-must be certified by the Educational Commission for Foreign Medical Graduates [ECFMG]. Current certification, ECFMG or Foreign Medical Graduate Examination in the Medical Sciences [FMGEMS], is required for all foreign medical graduates.) Must have satisfactorily completed an internship (PG1) approved by the Council on Medical Education. (However, application will be accepted when internship is an integral part of medical school curriculum or incorporated as part of residency training.) — OR—Possess other accredited U.S., Puerto Rican, or Canadian doctoral degree (Ph.D., Dr. P.H., D.D.S., etc.) in a discipline related to cancer prevention and control research; biomedical, medical, nutritional, public health or behavioral sciences. (Foreign doctoral graduates must provide documented evidence that the foreign education is comparable to doctoral education received in accredited institutions noted above.); (2) Possess U.S. citizenship or be a resident alien eligible for citizenship within four years; (3) Complete and return the application packet by the deadline (including arranging for official academic transcripts and four, current, original letters of reference to be sent directly by the academic institutions and referees to the CPFP Coordinator).

For questions concerning the program's scientific or administrative aspects, please call Dr. David Poskanzer or Ms. Nancy Garner, respectively. Application packets may be obtained by sending a *POSTCARD* with your name and home address to **CPFP Coordinator**, NIH/NCI/DCPC/CCAB, Blair Building, Room 4A05, 9000 Rockville Pike, Bethesda, MD 20892-4200, or call (301) 427-8788. Please do not send any material until after you have read the instructions in the application packet.

> DEADLINE FOR RECEIPT OF APPLICATIONS: JANUARY 15, 1988 (The NIH is an Equal Opportunity Employer)

Research Opportunities in Cardiovascular Research

Genentech, Inc., a leader in the field of biotechnology, has a major commitment to research of the cardiovascular system. The Department of Cardiovascular Research is about to enter into a rapid growth phase and is looking for scientists who would like to make contributions in the fields of hemostasis, thrombosis, atherosclerosis and vascular cell biology.

VASCULAR CELL BIOLOGY GROUP LEADER: A group investigating endothelial cell physiology will be established. An experienced individual capable of establishing a competitive group to investigate the various roles of endothelial cells in the physiology and pathophysiology of the vascular system is being sought. A successful candidate should have a proven record of innovative and productive research in this area. The position will involve establishment of such a group and interfacing it with the molecular biology, protein chemistry, and pharmacology groups that will be supporting these efforts.

PROTEIN CHEMISTS, MOLECULAR BIOLOGISTS, CELL PHYSIOLO-GISTS, AND PHARMACOLOGISTS: The growth of the Cardiovascular Research Department will require the addition of personnel at all levels. Research Assistants and Associates are being sought with experience in the above areas. In addition, positions for individuals with Ph.D's and M.D's at all levels will be available. Prior experience in the general fields of cardiovascular research is desired but not required. In addition, more senior level positions will be opening that will require a background in a related field. These individuals will be expected to establish and lead groups to support the efforts of the department to become a leading force in areas of study.

Genentech, Inc., offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. Please send your curriculum vitae, a summary of of your research interests and three letters of reference to: Sherrie V. Wilkins, Genentech, Inc., 460 Point Benefit and the send the send to be the send

San Bruno Blvd., South San Francisco, CA, 94080. An equal opportunity employer. Genentech, Inc. Genentech, Inc. **Genentech, Inc.** Genentech, Inc.



RESEARCH SCIENTIST

This position is available in the Department of Hypersensitivity Diseases Research. The Upjohn Company, Kalamazoo, Michigan. The applicant to be selected will join an interdisciplinary team of investigators. The long term focus of our research is the study of the chronic, or inflammation-dependent aspects of lung disease and especially of asthma. More specifically, we are interested in the roles of defined cell populations from lung in the inflammatory response, their response to inflammatory stimuli while in culture, their capacity to produce inflammatory stimuli themselves, and their possible interaction with inflammation-causing leukocytes added to the cultures.

This project will call upon the applicant's knowledge and experience in the isolation, culture, and biological characterization of purified cell populations from the lungs of laboratory animals or possibly from human lung (e.g. epithelial cells, Clara cells, fibroblasts, APUD cells) while introducing the applicant to biochemical and radioimmunologic methods for the isolation, characterization and quantitation of inflammatory mediators with special reference to the products derived from arachidonic acid. The appointment will be for one year with possible renewal for a second year. In addition to the opportunity to work in an exciting, rapidly developing area of fundamental research, this position offers the successful candidate the opportunity to gain first hand experience with research in an industrial setting. To be considered, applicants should have a Ph.D. or M.D. degree with specific experience in lung cell fractionation or culture.

Kalamazoo is a medium-sized Southwestern Michigan community with immediate access to a mix of excellent cultural, educational and recreational pursuits, including numerous lakes and a four-season climate. Upjohn offers an excellent salary, commensurate with experience and an outstanding benefits program. For confidential consideration, please call toll free 1/800/253-8600, ext. 3-6767 (inside Michigan call collect 616-323-6767) to request an employment application be sent to you. Please refer to Ad Number 21859-F when calling.

An Equal Employment Opportunity Employer M/F Our commitment to scientific excellence continues...



The Department of Animal and Poultry Science at the University of Guelph is seeking applications from PHYSIOLOGISTS who wish to apply their expertise to study the response of poultry to their environment. Minimum requirements are a Ph.D. or equivalent in physiology. Successful applicants will be expected to develop an active research program integrating the prin-ciples of physiology and ethology and to apply these principles to the objective evaluation of poultry produc-tion systems. Evidence of ability to liaise with industry will be an asset. In addition the incumbent will be expected to develop a strong teaching programme at both undergraduate and graduate levels in his/her area of competence with application to livestock production.

The position is tenure-track at the assistant/associate professor rank in a department with expertise in the disciplines relating to the care and management of animal species of agricultural importance. The appointee should work closely with colleagues in both the agricultural and veterinary colleges. The University is internationally rec-ognized for its leadership in ethology. Complete résumé and names of three references should

be sent to:

Dr. R. J. Etches, Chairman Department of Animal and Poultry Science University of Guelph Guelph, Ontario, Canada N1G 2W1

The closing date for applications is 31 December 1987

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Position is subject to final budgetary approval. POSTDOCTORAL POSITIONS

ANGIOGENESIS: Areas currently under study include protein biochemistry and cell biology of endotheli-al and smooth muscle cells. Experience in HPLC and protein sequencing, or Northern blotting and in situ hybridization preferred. Individuals with U.S. citizenship should send curriculum vitae and three letters of reference to: Dr. Ward Casscells, Section on Experimental Physiology and Pharmacology, Cardiology Branch, National Heart, Lung, and Blood Institute, National Institute of Health, Public Health Service, DHHS, Building 10, Room 7815, 9000 Rockville Pike, Bethesda, MD 20892.

NIH is an Equal Opportunity Employer POSTDOCTORAL FELLOW IN CANCER RESEARCH

Positions (Ph.D., M.D., or equivalent) are available immediately for immunologist, biochemist, pharmacolo-gist or cell/molecular biologist with training or experience in in vitro and in vivo tumor system, tumor biology, or tumor immunology/immunochemistry. New gradu-ates with excellent academic record without above experience but interested in cancer research also are encouraged to apply. Work involves basic and applied aspects of passive or adoptive immunotherapy and immunoconjugate (antibody-drug, isotope, toxin)-directed therapy of animal and human tumors. Positions are located in a SUNY/Buffalo-affiliated and New York State operated comprehensive cancer center. Please send résumé to: Dr. T. Ming Chu, Roswell Park Memorial Institute, 666 Elm Street, Buffalo, NY 14263. Affirmative Action/ Equal Employment Opportunity Employer

POSTDOCTORAL POSITION available to study signal transduction and structure-function relations in the T-cell receptor. The applicant should be a recent Ph.D. with a strong background in membrane protein biochemistry or molecular biology and experienced in mammalian cell culture. A joint appointment will be held in an appropriate department of Harvard Medical School. Send curriculum vitae, summary of research experience and the names of three references to: **Dr**. Anjana Rao, Dana-Farber Cancer Institute, 44 Bin-ney Street, Boston, MA 02115. An Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL POSITION to study the DNA affinity binding of potential chemopreventive and anti-neoplastic drugs. A recent Ph.D. in chemistry or biochemistry is required, and previous experience in cova-lent and affinity DNA binding is preferred. Send curricu-lum vitae and three letters of reference to: Dr. Barry Gold, Eppley Institute for Research in Cancer, University of Nebraska Medical Center, Omaha, NE 68105. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION. The U.S. Department of Agriculture, Agricultural Research Service, Pullman, Washington, is seeking a molecular biologist or immunologist to develop improved immunoprophylaxis for *Anaplasma marginale* through the use of protein and nucleic acid biochemistry. The proposed studies include the molecular cloning and expression of *A. marginale* surface proteins. Salary is commensurate with experience (\$27,172 to \$32,567 per year). For further information, contact: **Dr. John Gorham, USDA, ARS, Animal Disease Research Unit, 337 Bustad Hall, Washington** State University, Pullman, WA 99164-7030; tele-phone: 509-335-6029. For information/application forms, contact: Patricia Roberts, Personnel Division, WISDA, ARS, Building 003, Room 403, Beltsville, MD 20705; telephone: 301-344-3138. Application will be accepted through 20 December 1987. An Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study excitation contraction coupling in cardiac muscle from animals and man. Project involves the use of muscle from animals and man. Project involves the use of calcium indicators in multicellular preparations and iso-lated myocytes. Experience with single-cell techniques, and an electrophysiology background would be useful. Send curriculum vitae and names of three references to: Dr. James P. Morgan, Harvard-Thorndike Labora-tory, Harvard Medical School, 330 Brookline Ave-nue, Boston, MA 02215.

POSTDOCTORAL POSITION—MOLECU-LAR NEUROBIOLOGY: Available immediately, to study regulation of skeletal muscle acetylcholine receptor expression, with emphasis initially on the identification of regulatory elements in the genes coding for the individual receptor subunits. Training and experience in molecular and cellular biology are required. Excellent working conditions, competitive salary. Applicants should send curriculum vitae and names of references to: Dr. J. Schmidt, Department of Biochemistry, State University of New York (SUNY) Stony Brook, Stony Brook, NY 11794. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer

POSTDOCTORAL POSITION: available immediately for biochemical studies of growth factors in human tumors and biological fluids. Project under way at primary pediatric teaching hospital of the University of Washington. Candidate should have experience in isola-tion, purification, and characterization of biologically molecules; cell culture techniques and bioassays. active Send curriculum vitae and references to: David Tapper, M.D., Surgeon-in-Chief, Children's Hospital and Medical Center; 4800 Sand Point Way N.E., Seattle, WA 98104. An Affirmative Action Employer.

POSTDOCTORAL POSITIONS in molecular biology to study the structure/function of eukaryotic genet-ic elements with partition (centromere) function. These studies may include analyses of DNA from yeast, mammalian, and parasitic protozoan systems. Experience in recombinant DNA desirable. Please submit résumé and reference letters to: Dr. C. Lo, Biology Department/ G5, University of Pennsylvania, Philadelphia, PA 19104

POSTDOCTORAL POSITIONS IN MOLECULAR NEUROBIOLOGY

Postdoctoral positions are available 1 February 1988 for the study of the regulation of neurotransmitter receptors and ion channels by protein phosphorylation. The three major projects involve: (i) the study of the regulation of the nicotinic acetylcholine receptor by protein phosphorylation in muscle cells and neurons in culture; (ii) the biochemistry of tyrosine phosphorylation of the nicotinic acetylcholine receptor in *Torpedo califor-*nica; and (iii) the molecular biology or biochemistry of tyrosine kinases in neuronal cell systems and their involvement in the regulation of neurotransmitter recep-tors and ion channels. Individuals are sought who have experience in biochemistry, molecular biology, or elec-trophysiology. Send curriculum vitae and three letters of reference to:

Dr. Richard L. Huganir Howard Hughes Medical Institute Department of Neuroscience Johns Hopkins University School of Medicine 725 North Wolfe Street, Room 900 PCTB Baltimore, MD 21205 An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

POSTDOCTORAL POSITION IN NEUROBI-OLOGY available immediately or within the year for a Ph.D. or M.D. Research will concern receptor-mediated ion currents, neurotransmission, and neural connectivity in the enteric nervous system. Experience with electrophysiological recording techniques is desirable, but onsite training will be done. Knowledge of the physiology and pharmacology of receptors will also be helpful. Salary will be appropriate to experience and the cost of living in the New York metropolitan area. Send curriculum vitae and the names of three references to:

> Dr. Michael D. Gershon Department of Anatomy and Cell Biology Columbia University College of Physicians and Surgeons 630 West 168th Street New York, NY 10032

POSTDOCTORAL POSITIONS available in early 1988 for recent Ph.D.'s to participate in an active research program on the regulation of DNA repair in human cells. Current research efforts focus on the expres-sion of DNA repair genes in the cell cycle and mutant DNA repair enzymes from cells from cancer-prone indi-table. viduals. Submit curriculum vitae and the names of two references to: Dr. Michael A. Sirover, Fels Research Institute, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, PA 19140. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS

Postdoctoral positions available immediately to study (i) eight-cell polarity induction or (ii) alkaline phospha-tase expression of preimplantation mouse embryos. Experience with immunofluorescence or molecular biol-ogy desirable. Send curriculum vitae and list of references to: **Dr. Carol Ziomek, c/o Personnel Office, Worces**ter Foundation for Experimental Biology, 222 Maple Avenue, Shrewsburg, MA 01545. An Equal Opportunity/Affirmative Action Employer M/F/H.

POSTDOCTORAL RESEARCH ASSOCIATE POSITION for the study of motile systems in muscles and cells. Projects include regulation of actomyosin ATPase, mechanism of kinesin-microtubule ATPase, functions of motile systems in cell division. Experience in protein biochemistry or cell and molecular biology preferred. Send curriculum vitae and names of references to: Dr. E. W. Taylor, Department of Molecular Genetics of and Cell Biology, The University of Chicago, 920 East 58th Street, Chicago, IL 60637. An Equal Oppor-tunity; Affirmative Action Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE position available to study the biochemical mechanisms and regulation of steroid hormone biosynthesis from cholesterol. Preference given to recent Ph.D. in biochemistry with expertise in one or more of the following areas: protein chemistry; enzymology; membranes; biochemis-try of steroidogenic tissues. Send curriculum vitae and three letters of reference to: Dr. J. David Lambeth, Department of Biochemistry, Emory University Medical School, Atlanta, GA 30322.

POSTDOCTORAL RESEARCH ASSOCIATE. Positions available immediately to study: (i) the biosyn-thesis and genetic regulation of polysialic acid; and (ii) the dynamics and topology of glycosyl carrier lipids in membranes by ²H-NMR. Experience in molecular biolo-gy, biochemistry, biophysics, or chemistry desirable. Please send curriculum vitae and the names of three references to: Dr. Frederic A. Troy, Department of Biological Chemistry, University of California, School of Medicine, Davis, CA 95616.

POSTDOCTORAL RESEARCH ASSOCIATE BIOCHEMIST/CELL BIOLOGIST

Immediate opening—Study of peptide hormone pro-cessing and secretion by normal and genetically trans-formed mammalian cells. Background should include techniques of cell culture, protein separatory procedures, and familiarity with molecular biologic techniques. **Dr.** David V. Cohn, Health Sciences Center, University of Louisville, Louisville, KY 40292. Equal Opportunity/ Affirmative Action Employer.

BS/MS Scientists

THE LILLY RESEARCH LABORATORIES, a Division of Eli Lilly and Company is seeking candidates for several research positions. Applicants must have a Bachelor or Master Degree; research experience is desired.

Cell Physiologists/Biochemists

The position involves the elucidation of transport mechanisms and membrane processes important in human disease and the discovery of new therapeutic agents. Working experience with transport techniques, enzymatic assays, enzyme/protein purification, and/or cell culture is desirable.

The position involves the development of automated assays to evaluate effects of chemical agents or trophic factors on cultured mammalian cells which regulate their growth and differentiation. Experience in biochemical methods, radioisotope assays, immunoassays, and cell culture with a background in cell kinetics, cellular pharmacology of anti-cancer drugs and cell physiology is desirable.

The position involves maintaining and improving cultures for existing assay procedures and to design and develop new *in vitro* models to test agents for their therapeutic potential. Experience in cell or organ culture of skeletal and connective tissues, primary and serum-free culture procedures, and cell cycle analysis is desirable.

Chemist

The position is in the biochemistry department and involves research in the field of protein engineering. Experience in synthesis, purification, or characterization of macromolecules, with strong quantitative and analytical skills is desired.

Biochemical Engineer

This position requires a biochemical or chemical engineer with cell culture reactor experience to work in a multi-disciplinary team involved in the scale-up of mammalian cell culture in a research environment.

Microbiologist

This position will include fermentation process development on a laboratory scale and direct interaction with the fermentation pilot plant. A strong background in microbial physiology with training in biochemical engineering and industrial fermentation technology are desired.

Molecular Biologists

This individual will work in the areas of gene expression in *E. coli* and mammalian cells, and retrovirus research. Experience in gene cloning, vector construction, and related techniques is strongly desired.

Immunologist

This individual will help develop a research program focusing on macrophage receptors and their role in differentiation in chronic and acute inflammation. Experience in cell biologic and biochemical techniques along with training in macrophage biology is desired.



Qualified applicants should send their resume to:

Mr. Warren Harper (ABR) Senior Personnel Representative Eli Lilly and Company Lilly Corporate Center Indianapolis, Indiana 46285 Equal Opportunity Employer

POSTDOCTORAL RESEARCH ASSOCIATE, instrumentation and programming for plant effects re-search. Position is available immediately. Studies include effects of application of carbon dioxide, ozone, and other pollutants to plants in open air settings. Individual selected will be responsible for analysis of atmospheric gases, database programming and analysis, and may contribute to a multi-institutional effort in systems mod-eling. Position requires a high degree of skill in BASIC and FORTRAN programming, and analytical instru-mentation. Development of new research proposals will be encouraged. Send curriculum vitae, that includes be encouraged. Send curriculum vitae, that includes publication list, and names of three references to: Dr. George R. Hendrey, Department of Applied Science, Terrestrial and Aquatic Ecology Division, Building 318, Brookhaven National Laboratory, Associated Universities, Inc., Upton, Long Island, NY 11973. Equal Opportunity Employer M/F.

The Basic Science Departments (Cell Biology and Neuroanatomy, Biochemistry, Microbiology, Pathology, Pharmacology, Physiology), Medical School, University of Minnesota, periodically have openings for POST-DOCTORAL TRAINING.

For information about possible openings in these programs, write, specifying department of interest, to:

University of Minnesota Medical School Box 293 UMHC

420 Delaware Street, S.E Minneapolis, MN 55455 Attention: James C. Nelson

The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encour-ages applications from women and minorities.

POSTDOCTORAL TRAINING IN CLINICAL CHEMISTRY. Position available 1 July 1988, for basic scientist or physician interested in a career as laboratory director in academic Laboratory Medicine. Our 2-year program provides practical experience in clinical chemis-try laboratories and extends relevant basic scientific knowledge. Deadline: 1 December 1987. Write to:

Margaret Kenny, Ph.D. Program Director Department of Laboratory Medicine University of Washington SB-10 Seattle, WA 98195

An Equal Opportunity/Affirmative Action Employer

PRESIDENT OREGON HEALTH SCIENCES UNIVERSITY

Nominations and applications are invited for the position of President of the Oregon Health Sciences Univer-sity located in Portland. The Oregon Health Sciences University is a free-standing university with schools of medicine, dentistry, and nursing; established research programs in the biomedical sciences; and a large teaching hospital. It is one of eight public colleges and universities that comprise the Oregon State System of Higher Educa-tion. The Oregon Health Sciences University is committed to enhancing the diversity of its students, faculty, and staff and to being a non-discriminatory, affirmative ac-tion employer. Nominations and applications must be submitted by 15 November 1987 to Presidential Search Committee, L-900, Oregon Health Sciences Univer-sity, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201. Further information may be obtained by culture 2023 270 5230 calling 503-279-5939.

PRODUCT DEVELOPMENT MANAGER

Responsibilities include guiding promising products from research to clinical trials and managing aggressive product development schedules through close interaction

product development schedules through close interaction with project leaders, management, and subcontractors. Requires an M.S., and a minimum of 3 years of experience managing projects with a biotechnology or pharmaceutical company. Must have strong interperson-al skills, attention to detail and follow-up. We are a rapidly growing company developing new pharmaceutical products for the treatment of ophthalmic and neurological disorders. We offer a competitive com-pensation and benefits package including equity partici-pation.

Houston Biotechnology Incorporated, 3606 Re-search Forest Drive, The Woodlands, TX 77381, Human Resources-SCI.

POSITIONS OPEN

PRESIDENT MEDICAL COLLEGE OF GEORGIA

The Board of Regents of the University System of Georgia announces its search for the President of the Georgia announces its search for the President of the Medical College of Georgia to take office 1 July 1988. Located in Augusta, the Medical College of Georgia is the health sciences university of the University System of Georgia and consists of Schools of Allied Health Sciences, Denistry, Graduate Studies, Medicine and Nurs-ing. There are approximately 640 full-time faculty, 350 clinical affiliations throughout the state and nation, and more than 2300 students including 440 house officers. The Medical College of Georgia Hospital and Clinics include a 550-bed tertiary care teaching hospital, more than 20 clinics and approximately 90 subspecialty clinical services. More than 5000 employees complement the academic and student personnel in implementing the institution's goals in the areas of instruction, research, and service.

The Medical College of Georgia occupies an 83-acre campus, with a physical plant of more than 3.25 million sq. ft. The University's current annual operating budget (1987 to 1988) is \$225 million, which includes more

than \$11 million in grants and contracts. The President is the Chief Executive Officer of the health sciences university and reports to and maintains liaison with the Chancellor of the University System of Georgia. The President maintains effective relationships with both public and private local, state, and national organizations that are concerned with health care, education, and research.

Criteria for the position include a terminal health professional degree plus significant experience in the areas of university-level teaching, research, service, and administration.

Nominations should include the nominee's current address. Applications should include a letter of interest, curriculum vitae, and the names and addresses of five persons who can serve as references.

The deadline for applications and nominations is 15 December 1987. Address all nominations and applica-System of Georgia, 244 Washington Street, S.W., Atlanta, GA 30334. The Medical College of Georgia is an Equal Opportunity/Affirmative Action Employer.

PROFESSOR-IN-CHARGE, LEOPOLD CEN-TER FOR SUSTAINABLE AGRICULTURE-Iowa State University seeks outstanding scientist and administrator for newly created research center. Responsibilities: administer interdisciplinary research; secure program support; conduct personal research. Qualifica-tions: Ph.D. or equivalent in related discipline; administrative experience; superior research record; success in obtaining grants. Salary and academic rank commensu-rate with qualifications. Nominations welcome. Submit résumé of education, research accomplishments, publica-tions, and three references to: Dr. James L. Baker, 109 Davidson Hall, Iowa State University, Ames, IA 50011. Deadline 15 December 1987 or until position filled. Equal Opportunity Employment Employer.

PROTEIN BIOCHEMIST

Somatogenetics International has expanded its biolo-gics area and has immediate openings for protein chem-ists and biochemists at the postdoctoral and staff scientist level. Applicants should be expert in traditional protein purification and modification techniques. Somatogen offers salaries competitive with experience and an attrac-tive fringe benefit package. Send curriculum vitae and names of three references in confidence to:

Somatogen 350 Interlocken Parkway Broomfield, CO 80020 OMATOGEN

RESEARCH ASSOCIATE

Position open for POSTDOCTORAL FELLOW to study systemic and renal hemodynamics and changes in vasoactive humoral substances before and after altered divalent ion nutrition. This position is for 2 years of support. Salary is negotiable. Closing date 27 November 1987, Submit curriculum vitae to: Edward T. Zawada, Jr., M.D., Professor and Chairman, Department of Medicine, University of South Dakota, School of Medicine, 2501 West 22nd Street, Sioux Falls, SD 57105

POSITIONS OPEN

ASSISTANT PROFESSOR OF PHYSICS

Eastern Oregon State College (EOSC) invites applications for a tenure-track position at the assistant professor level starting 16 September 1988. Applicants must have a Ph.D. in physics with a strong experimental background. Eastern seeks a dynamic individual who will continue our high quality teaching in physics and has the capability to attract students to these courses. Should be able to instruct a laboratory course in modern electronics instru-Instruct a laboratory course in modern electronics instru-mentation including microprocessors. Send a letter of application, résumé, copy of all college transcripts, and three recent (1985 to 1987) letters of reference to: Paul Stephas, Physics Search Committee, School of Arts and Sciences, Badgley Hall, Eastern Oregon State College, La Grande, OR 97850. Application deadline is 31 December 1987. EOSC is an Affirmative Action/ Equal Opportunity Employer.

RESEARCH ASSISTANT GASTROENTEROLOGY

This position requires a B.S. or M.S. degree in a science discipline, and experience with biochemical techscience discipline, and experience with biochemical tech-niques. Also, familiarity with laboratory animals, radio-isotopes, and other computer analysis is preferred. Send résumé to: Dennis Lee, Department of Human Re-sources, Michael Reese Hospital and Medical Center, Lake Shore Drive at 31st Street, Chicago, IL 60616. Equal Opportunity Employer M/F.

RESEARCH NEUROPSYCHOLOGIST-The Maryland Psychiatric Research Center (MPRC), De-partment of Psychiatry, University of Maryland School of Medicine, is seeking a neuropsychologist with inter-ests in the study of schizophrenia and related disorders for appointment to the full-time research faculty. This position requires the development of independent re-search as well as collaboration with investigators in areas of genetics, brain imaging, clinical drug testing, and Chine al neuroscience. Academic level open. Please send a curriculum vitae, three letters of reference, and reprints of your work to: Neuropsychology Search Committee, MPRC, P.O. Box 21247, Baltimore, MD 21228 by 31 January 1988. The University of Maryland is an Equal Opportunity Employer. clinical neuroscience. Academic level open. Please send a

RESEARCH ASSOCIATE POSITION available immediately for individual holding doctorate degree or equivalent in biomedical sciences or veterinary medicine (M.D., Ph.D., or D.V.M.) and having substantial theo-retical and practical training as well as demonstrated proficiency in mammalian cell, bacterial, and retroviral research; demonstrated proficiency in working with hazardous biologic agents under carefully controlled laboratory conditions, and in supervising others under these conditions. Involves direct participation in hazardous biomedical research with infectious AIDS virus (HIV, HTLV-III/LAV). One year of training in microbiology and retrovirology research is required. Basic salary: and retroviroigy research is required, basic statist's \$23,200 per annum. Qualified applicants should make inquiry to: George M. Shaw, M.D., Ph.D., Division of Hematology and Oncology, University of Alabama at Birmingham, University Station, Birmingham, AL 072041 35294

RESEARCH ASSOCIATE/POSTDOCTORAL

Position available for an individual with experience in intracellular recording and filling techniques. Person will work with a group investigating the auditory system using physiology, ultrastructure and neuroanatomy. Position could start immediately and is currently funded for 2 years. Salary open. Send curriculum vitae and names of three references to: Dr. Arthur N. Popper, Depart-ment of Zoology, University of Maryland, College Park, MD 20742. The University of Maryland is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE, VISION. To elucidate the visual factor on reading performance, independent research projects, and develop a psychophysics labora-tory. Minimum requirements: Ph.D., research experience, and ability to work as a team with visually impaired ence, and ability to work as a team with visually impaired individuals. Interested candidates please submit applica-tions/résumé to: Director of Personnel, Pennsylvania College of Optometry, 1200 West Godfrey Avenue, Philadelphia, PA 19141. Application deadline 5 De-cember 1987. Affirmative Action Employer/Equal Opportu-vity Employer nity Employer.

SENIOR RESEARCH BIOCHEMIST

Merck Sharp & Dohme Research Laboratories, a worldwide leader in the development of pharmaceutical and biological products, has an immediate opening for a Senior Research Biochemist in their Biochemical Regulation Department.

Candidates should possess a Ph.D. degree or equivalent in Biochemistry with research experience in cholesterol and lipoprotein metabolism in small animals. Two or three years of postdoctoral experience required.

Responsibilities include the development of animal models and research projects related to the treatment of atherosclerosis.

Merck Sharp & Dohme Research Laboratories are located in Rahway, New Jersey approximately 25 miles from New York City. Our salaries, benefits, and growth potential are excellent.

Interested candidates should submit their resume with the names of three references and salary requirements to: Ms. Jacqueline A. Eiermann, Merck & Co., Inc., PO. Box 2000, Rahway, New Jersey 07065.

EQUAL OPPORTUNITY EMPLOYER



SMITHSONIAN TROPICAL RESEARCH INSTITUTE DEPUTY DIRECTOR

The Smithsonian Tropical Research Institute (STRI) invites applications and nominations for the position of Deputy Director which falls vacant due to the appointment of Dr. James R. Karr as the Bailey Professor of Biology at Virginia Polytechnic Institute. STRI, located on the Isthmus of Panama, is a bureau of the Smithsonian Institution. The Institute is devoted to basic research throughout the world's tropics and is responsible for custodianship of a biological reserve, the Barro Colorado Nature Monument, and for the operation of a number of other facilities on the Isthmus for the support of terrestrial and marine tropical research.

The Deputy Director reports to the Institute's Director and is responsible for assisting the Director with the development of policies and the management of the Institute. The Institute's principal responsibilities are to promote research and education in the fields of ecology, evolution, behavior, anthropology and paleontology.

Candidates should possess a Ph.D., be engaged in independent research in a field related to STRI's broad interests, and should have experience appropriate to the effective management of an international research mission in a complex administrative environment. Knowledge of the Spanish language would be useful.

Applications should consist of a letter of interest, curriculum vitae, and names and telephone numbers of three references. Nominations with supporting statements are also welcomed. Replies should be submitted before *January* 1 to:

SEARCH COMMITTEE (DEPUTY DIRECTOR) Smithsonian tropical research institute APO miami 34002-0011.

The salary range for this position is \$53,830-\$72,500. In addition, allowances for housing and overseas living are paid. The starting date for this appointment is no later than 1 September 1988. STRI is an Equal Opportunity Employer and appointments can be made without regard for nationality.

Department Chair Department Of Biology

New York University is seeking suitable candidates for the Chair of the Department of Biology in the School of Arts and Science at Washington Square. We seek an outstanding scientist, teacher and administrator to provide strong leadership in further developing the faculty and the Department's research program. The University is committed to building a leading department and seeks a dynamic chair to spearhead this effort.

The Department has 24 faculty members, approximately 800 undergraduate majors, 120 students in the MS program and 80 students in the Ph.D. program. Development of this Department is an important component of the five-year campaign to enhance scientific research in the Faculty of Arts and Science. Several tenure-track positions are now open and more will become available during the next four years.

Unique opportunities exist at Washington Square for interdisciplinary research in collaboration with a newly-created center for neural science; establish groups concerned with macromolecular structure and dynamics in the Departments of Chemistry, Computer Science, and Biology; a Mathematics-Biology program at the Courant Institute of Mathematical Sciences; and ongoing programs within the departments of basic medical sciences at the NYU Medical Center. At the same time, the Department has a commitment to develop a strong educational program in the core areas of modern biology, particularly molecular biology.

Nominations and applications should be sent by January 1, 1988 to:



Faculty of Arts and Science Biology Chair Search Committee 6 Washington Square North New York, New York 10003 Att: Prof. Samuel J. Williamson, Chair

NYU is an Equal Opportunity/Affirmative Action Employer

PhD Toxicologist SENIOR RESEARCH INVESTIGATOR

The Priceless Ingredient of every product is the honor and integrity of its maker.

Squibb Corporation, a Fortune 200 Company, is an internationally recognized leader in the research, marketing, and manufacture of innovative pharmaceuticals. We are seeking an individual who would thrive in an environment where global competition among pharmaceutical companies presents a rare challenge and a unique opportunity.

This position is responsible for the review and evaluation of toxicologic data and the preparation of summaries and other documents for internal use and for regulatory submissions, including Expert Reports on the Toxicologic and Pharmacologic documentation for NDAs; reviews of in-licensing candidates; reviews of data and literature on residues, contaminants, and formulation components; and special assignments pertaining to our preclinical safetyevaluation program. Additionally, if selected, you will help monitor toxicologic studies conducted for Squibb at contract laboratories, which involve participating in the development of study protocols, monitoring activities during the course of the studies, and reviewing draft reports. We seek applications from individuals who have a PhD in a related field, preferably Toxicology, and a minimum of 2 years experience in drug safety evaluation.

SQUIBB offers professional growth, outstanding benefits and a competitive salary, commensurate with experience. For confidential consideration, please forward your resume with salary history to E.R. Squibb & Sons, Dept. AK-E17887, PO. Box 191, New Brunswick, NJ 08903. An equal opportunity employer.



OCHEMIS

The Procter & Gamble Company has an immediate opening for an entry-level biochemist at our Miami Valley Laboratories in Cincinnati, Ohio. Ph.D.'s with or without postdoctoral training are encouraged to apply.

Research experience in cell culture techniques. growth factor regulation, and cellular differentiation is required. Additional experience in protein separation, purification, and characterization is desired.

Procter & Gamble is a world leader in the research, development, and manufacture of consumer products. We offer a competitive salary, a fringe benefit package in the top 5% of U.S. firms, and excellent opportunity for personal and career growth.

Applicants must be U.S. citizens or permanent residents and should send resume and publication list to:

Dr. T. J. Logan, Manager Ph.D. Recruiting **Biochemist Position** The Procter & Gamble Company Miami Valley Laboratories P.O. Box 398707 Cincinnati, OH 45239-8707

Procter & Gamble is an EQUAL OPPORTUNITY employer.

No agency submissions.

MOLECULAR BIOLOGY GROUP LEADER

Merck Sharp and Dohme Research Laboratories, a world leader in the development of ethical pharmaceuticals for human and animal health, is currently offering an excellent career opportunity for a molecular biologist in the department of Exploratory Genetics and Molecular Biology.

The incumbent will organize a group of prokaryotic and lower eukaryotic molecular biologist to apply the latest molecular biology techniques to challenging problems. The incumbent will collaborate with group leaders involved in developing antimicrobial and antifungal products, and groups studying the molecular genetics of organisms that produce interesting compounds. The incumbent will develop the most recent cloning, sequencing, and other molecular biology technology, will train departmental members in its use.

The successful candidate must have extensive experience in prokaryotic molecular biology, experience in directing other scientists, and a commitment to scientific excellence. The ability to collaborate with other scientists to develop joint projects is essential. Experience in microbial genetics and biochemistry is desirable. Experience with fungal or yeast molecular biology would be useful.

Salary, benefits, and growth potential are excellent. Interested applicants should submit a curriculum vitae to Ms. Dolores Barefield, Merck & Co., Inc., PO. Box 2000, WBD-362, Rahway, New Jersey 07065. An Equal Opportunity Employer.



STRATAGENE

Research Program Director

Stratagene is looking for individuals who can assume the role of research program director. Qualified applicants must have an ongoing research program and have demonstrated the ability to obtain research support in the form of grants or contracts in the areas of genetic disease, genome mapping, mammalian cell biology, or mammalian gene expression, the latter preferably with relevance to expression in transgenic animals. Corporate matching funds are available to supplement research programs supported by grants. In addition, technical support and reagents will be available from Stratagene's molecular biology research products division. Stratagene offers an extremely attractive compensation package to qualified individuals, including a substantial stock option plan

Stratagene's financial success has allowed it to relocate its research facility to the heart of La Jolla's research commu-nity. The Salk Institute, Scripps Clinic, and the University of California, San Diego are among the numerous academic and commercial research centers within one mile of the new Stratagene location. The new site is adjacent to the Torrey Pines State Reserve, offering miles of coastal hiking and jogging trails leading to the Pacific Ocean.



STRATAGENE

Inquiries will be accepted in strict confidence by:

Candra A. Carter Administrative Coordinator Stratagene 11099 North Torrey Pines Road La Jolla, CA 92037

Senior Investigator Drug Delivery

The Drug Delivery Department of Smith Kline & French Laboratories. located near Valley Forge, PA, has an excellent opportunity available for a Senior Investigator to join a multidisciplinary team interested in the optimization of drug absorption, disposition and the development of novel drug delivery systems.

The successful candidate will:

- · design and conduct in vivo experiments on regiospecific drug absorption
- from the gastrointestinal tract. evaluate physiological and pharmaceutical factors influencing drug absorption.
- design and/or consult in the design of pharmaceutical formulations to • improve drug bioavailability.

Candidate specifications include:

- Ph.D. degree in Pharmaceutical Science or related discipline with 2-4 years postocoral experience. Extensive experience in the in vivo evaluation of pharmaceutical
- . formulations required.
- Knowledge of Drug Metabolism desirable.
- Good communication skills required.
- No known allergies to laboratory animals.

We offer an excellent compensation, benefits and relocation package a well as opportunities for personal and professional growth. For confidential review, please forward your C.V. and names of three references to: Mary Ann McCarry, Senior Employment Consultant-C0054, Smith Kline & French Laboratories, Research and Development, P. O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



MOLECULAR GENETICIST

GENEX CORPORATION is seeking a seniorlevel molecular geneticist to direct and participate in interdisciplinary research programs for the development of genetically engineered animal vaccines, human pharmaceuticals, and proteins of industrial interest. The successful candidate will have hands-on experience in techniques of gene cloning and expression of heterologous proteins, excellent written and oral communication skills, and the ability to supervise the research of junior staff members.

Candidates with postdoctoral experience and a documented record of achievement in initiating and successfully completing innovative research programs are preferred. However, mature individuals with less experience but outstanding records are encouraged to apply.

GENEX CORPORATION provides an outstanding research environment in suburban Washington, D.C., and excellent salary and benefits. A curriculum vitae, together with a brief description of your scientific background and letters from three professional references should be submitted to:



Dept. MG 16020 Industrial Drive Gaithersburg, MD 20877 EOE

VETERINARY PATHOLOGIST Pharmaceutical Research

G.D. Searle & Co. is a world-wide leader in the pharmaceutical industry. Presently we are seeking an A.C.V.P. certified veterinary pathologist in the Product Safety Assessment area.

Responsibilities include participation in the design and interpretation of routine drug safety/toxicity assessment studies, as well as special studies to investigate mechanisms of toxicity and efficacy. Though not a requirement, the ideal candidate will have a minimum of two years experience in toxicologic pathology. A working knowledge of specialized anatomical techniques such as morphometry and immunocytochemistry would be a plus.

This position offers high visibility, excellent salary, and comprehensive benefit and relocation programs. We will be attending the upcoming A.C.V.P. meeting, November 9-13 in Monterey. Contact Stu Levin at the Sheraton Hotel for a personal interview or send your resume in strict confidence to: Mr. Ronald Moskal, G.D. Searle & Co., Dept. PS, 4901 Searle Parkway, Skokie, IL 60077. An Equal Opportunity Employer.



SR. IMMUNOCHEMIST/ BIOCHEMIST

Abbott Laboratories is a \$4 billion healthcare company with a history of innovative breakthroughs in diagnostic testing including Hepatitus B, Rubella, German Measles and most recently, AIDS. This success has given us the world leadership position in medical diagnostics and is continuing to create an exceptionally strong research environment. Now our Diagnostics Immunology Research Group seeks an experienced Immunochemist or Biochemist to augment and expand continuing research efforts.

The individual we seek will be heavily involved in the diagnostic areas of autoimmunity, immunocompetence, AIDS, and cancer. A minimum of 6 years relevant experience in these areas beyond the postdoctoral is required. Creativity and the desire to continue professional development as a researcher is desired.

Abbott is recognized by Dun's Magazine as one of the nation's 5 best managed companies for 1986. We're headquartered in an attractive suburban area on the Lake Michigan shoreline 30 miles north of Chicago. In addition to this outstanding scientific environment, we provide excellent salaries, full benefits including profit sharing, stock retirement plan, and relocation assistance, as well as exceptional opportunities for professional growth. For more information, please contact **Peggy Taylor**, **Dept SCI/11-6**. Abbott is an Affirmative Action Employer.



Ph.D Scientist



You'll discover that our commitment to Biologicals Research & Development has made us a leader in Vaccine Production. The Biologicals Group has openings at several levels in the following areas of vaccine research and development:

1. Basic research on sexually transmitted diseases leading to new vaccine candidates.

2. Development of improved fermentation and purification processes for current bacterial products.

3. Application of molecular biology to viral vaccine products.

4. Assay development for current and new vaccine products.

The successful candidates will have a Ph.D. in Microbiology, Biochemistry, Molecular Biology or a related field and postdoctoral or related experience.

At our suburban Rockland County, NY, facilities, you'll find a highly professional work environment in a campus-like setting 30 miles from New York City. We offer competitive salaries and complete company benefits. Please reply in confidence to: John Cerio, Professional Employment Representative, Lederle Laboratories, American Cyanamid Company, Pearl River, NY 10965. We are an

equal opportunity employer m/f.



Dedicated People Dedicated to People Since 1906

RESEARCH SCIENTIST to conduct research work to develop ultrasonic, optic, and electromagnetic sewage flow measurement systems, to study the physical process in the sewage flows (turbulent Doppler scattering, wave interference beating, I- ω spectrum reflection) to deduce precise real time correlations between the physical quanwork in sewers. Must have M.S. degree in physics, work in sewers. Must nave M.S. degree in physics, background in mechanical engineering, familiarity with numerical analysis, and computer graphics. Salary: \$29,300 per year. Send résumé to: Mrs. Armstrong, Alabama State Employment Service, P.O. Box 428, Huntsville, AL 35804. Job Order number: AL0418804.

RESEARCH SCIENTIST

The New Jersey Department of Health is seeking a candidate with experience in molecular virology, including cloning techniques and retrovirus gene expression for vaccine development. Primary duties involve Public Health research activities in the Division of Laboratories.

Candidates must possess at least 4 years of experience in a relevant field and a master's degree in a discipline appropriate to the position. An appropriate doctorate degree may substitute for 2 years of experience. Salary range: \$36,510 to \$41,986.

Satary range: \$30,510 to \$41,980. Send résumé with references to: Ms. Barbara Gra-bowski, Chief, HRMP, NJ. State Department of Health, CN-360, John Fitch Plaza, Trenton, NJ 08625-0360.

Equal Opportunity Employer

RESEARCH SCIENTIST OR SENIOR RESEARCH SCIENTIST PROKARYOTIC GENOME ANALYSIS

The Center for Prokaryotic Genome Analysis (CPGA), University of Illinois at Urbana-Champaign (J. Konisky and C. Woese, Co-directors) seeks a qualified individual to participate in the sequencing of archaebac terial genomes.

The CPGA comprises scientists whose interests span molecular biology, microbiology, evolution, computer sciences, mathematics and electrical/computer engineering. Its members derive from several University of Illinois departments as well as other major research universities in the United States and Canada. Support for the Center derives in part from a NSF Biology Facilities Award. The main goal of the CPGA is to determine the sequences of archaebacterial genomes, using these to better understand the evolution of the cell, phylogenetic relationships in general, mechanisms of genome evolution as well as gene structure and function. The Center will be particularly concerned with the development of

proper procedures for the analysis of sequence data. Applicants should be Ph.D. level with postdoctoral experience in molecular biology, genetics, microbiology or a related field. They should have expertise in all aspects of DNA sequencing, and be fully capable of directing a staff of six to eight support personnel. A background in related areas such as computer applications, instrumentation, oligonucleotide synthesis is also desirable.

Salary is negotiable based on experience. Full-time position. Title will be based on experience. Starting date is 1 March 1988.

Applicants should send curriculum vitae including a full description of experience, relevant reprints and the names of three referees to: **Dr. Jordan Konisky, Center** for Prokaryotic Genome Analysis, Department of Microbiology, University of Illinois, Urbana, IL 61801; telephone: 217-333-1142.

Closing date for applications is 15 December 1987. Interviews may be conducted before that time, but all applications received before 15 December 1987 will receive full consideration.

The University of Illinois is an Equal Opportunity/Affir-mative Action Employer.

RESEARCH SCIENTIST with a strong back-ground in either neurophysiological and/or neurochemical research to join a team of scientists to conduct integrative studies of neurochemical, behavioral and neurophysiological aspects of alcohol tolerance and dependence in animal models. Previous experience with alcohol research desirable. Candidates with two or more years of postdoctoral experience preferred. Ph.D. in biological sciences or neuroscience required. Send curriculum vitae to: Howard Blane, Director, Research Institute on Alcoholism, 1021 Main Street, Buffalo, NY 14203. An Affirmative Action/Equal Employment Opportunity Employer.

POSITIONS OPEN

Ph.D. Roger Williams General Hospital seeks a RE-SEARCHER with a Ph.D. in immunology. The candidate must qualify for a position on the faculty of Brown University as Assistant or Associate Professor of Surgery (Research). He or she must have skills and interest in with training or experience in immunochemistry. It is expected that 100% of the successful candidate's time expected that 100% of the successful candidate's time will be devoted to research. Roger Williams General Haspital is an Equal Employment Opportunity/Affirmative Action Employer. Please send curriculum vitae by (18 December 1987) to: Harold J. Wanebo, M.D., Chair-man, Search Committee, Roger Williams General Hospital, 825 Chalkstone Avenue, Providence, RI 02908.

SCIENTIST—The Department of Pathology, University of Iowa College of Medicine, has a part-time opening for a scientific advisor in the area of molecular opening for a scientific advisor in the area of molecular pathology. The required qualifications for this position include a Ph.D. or M.D. degree and a strong background in laboratory molecular biology. This includes the devel-opment of genetic probes with an emphasis on diagnos-tic molecular hybridizations and experience in the area of non-radioactive molecular genetic detection systems. Salary is commensurate with training and experience. Qualiand is conintensuate with training and experience. Quali-fied applicants should submit their curriculum vitae to: Ms. Donna Muller, Department of Pathology, Uni-versity of Iowa College of Medicine, Room 144 Med Labs, Iowa City, IA 52242. The University of Iowa is an Affirmative Action/Equal Opportunity Employer.

SENIOR AND JUNIOR SCIENTISTS, INSTI-TUTE OF BIOMEDICAL SCIENCES, ACADE-MIA SINICA, TAIWAN, R.O.C.: Positions are now being offered by the Institute of Biomedical Sciences, Academia Sinica, Taiwan, in all areas of basic and clinical sciences including biochemistry, biophysics, molecular genetics, cell biology, microbiology, parasitology, immu-nology, physiology, pharmacology, pathology, and epidemiology. Emphasis will be on those related to cancer, infectious and cardiovascular diseases, as well as neuroscience. Full operation of the Institute starts in 1987 with new building and excellent facilities. There will be close collaboration with the newly established Institute of Molecular Biology, and an opportunity to work with the Clinical Research Centers in major medical centers in Taipei. Send curriculum vitae and three references to: Dr. Cheng-Wen Wu, Department of Pharmacological Sciences, SUNY Stony Brook, NY 11794. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and employer. AK #267-B.

SENIOR DETECTOR SCIENTIST-To design, test, analyze space-qualified infrared detectors, optimize designs and specifications for components and materials for commercial and aerospace applications. To supervise technicians, engineers. Full responsibility for thermal detector manufacturing and test program development. Requires Ph.D. or equivalent demonstrated ability for independent research or development in solid state phys-ics or material science with 3 years of experience in materials processing and in diffusion and electromigra-tion in Pb-based alloys; experience in use of scanning electron microscope; 2 years of laboratory supervision or teaching experience. \$38,000 per year, health insurance, 40-hour week. Submit résumé to: Personnel, EDO Corporation/Barnes Engineering Division, 88 Long Hill Cross Roads, Shelton, CT 06484.

SENIOR SCIENTIST

Microbiological Associates, Inc., a world leader in biological safety testing and health effects research, has an opening for an experienced Ph.D. with a biochemistry/ cancer research background and an interest in epidemiol ogy. This individual will administer existing government contracts in the broad areas of the biochemical epidemiology of cancer and will have the opportunity to develop new methodology related to these programs. Applicants should submit curriculum vitae and the names of three references to: Microbiological Associates Inc., Life Sciences Center, 9900 Blackwell Road, Rockville, MD 20850. Microbiological Associates is an Equal Oppor tunity/Affirmative Action Employer.

POSITIONS OPEN

Anticipated TENURE-TRACK position beginning in August of 1988. Postdoctoral experience preferred with research emphasizing experimental approaches to marine or freshwater fauna, or theoretical ecology. The successful candidate is expected to develop a fundable research program, teach a graduate specialty course, and commensurate with experience. Submit curriculum vitae, statement of research interests, recent reprints, and a list of references by 15 January 1988 to: Dr. Kenneth Brown, Chair, Ecology Search Committee, Depart-ment of Zoology and Physiology, Louisiana State University, Baton Rouge, LA 70803–1725. LSU is an Equal Opportunity Employer.

UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA)

The Department of Anthropology invites applications for TENURE-TRACK POSITION IN BIOLOGI-CAL ANTHROPOLOGY. Search is open to all spe-cialties in biological anthropology. Candidate should have strong research record. Preference will be given to candidates with strong commitment to field research. Appointment preferably at the assistant professor level but higher ranks not excluded. Ph.D. required at time of application. Send curriculum vitae and names of three references by 10 December 1987 to: Chair Allen Johnson, Department of Anthropology, UCLA, Los An-geles, CA 90024. Equal Opportunity Employer/Affirma-tive Action Employer. Proof of U.S. citizenship or eligibil-ity for U.S. employment required prior to employment.

TENURE-TRACK POSITION IN MARINE SCIENCE

The University of Maryland wishes to make a tenuretrack faculty appointment in Marine and Estuarine Sci-ences in the University's campuses on the Eastern Shore of Chesapeake Bay. The appointment will be joint be-tween the Horn Point Environmental Laboratories of the Center for Environmental and Estuarine Studies (CEES) and the University of Maryland Eastern Shore UMES

The Horn Point Environmental Laboratories is one of three laboratories of CEES devoted to research, education, and public service in areas concerned with the environment and natural resources. UMES, historically Black, is a land-grant campus of the University of Maryland.

The successful appointee will be responsible for direct-ing a joint B.S./M.S. Degree Program in Marine and Estuarine Sciences. The Director of the Program will be expected to contribute to the research and teaching missions of both CEES and UMES. Areas of professional expertise remain open within the context of campus missions and needs.

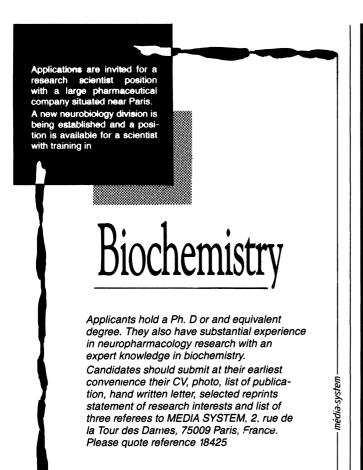
Applications, including the names and addresses of five people who can be approached for references, should be sent to:

Professor Victor S. Kennedy Chairman, CEES/UMES Search Committee Horn Point Environmental Laboratories Post Office Box 7 Cambridge, MD 21613

Applications received by 4 December 1987 will be

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

VIROLOGIST/CLINICAL MICROBIOLO-GIST. San Francisco State University's (SFSU) Center for Advanced Medical Technology anticipates an assistant or associate professor tenure-track appointment for fall 1988. The Center, a graduate department, conducts two programs: an M.S. degree in clinical science and a medical technology certificate program with eight affili-ated clinical laboratories. The candidates must have a doctoral degree with specialty in virology and clinical microbiology. The position requires half-time direction of M.S. level students in an active research program, halftime teaching of graduate lecture, laboratory and seminar courses, and lectures to the medical technology program. Applicants should submit a résumé, list of publications, statements of reaching and research interests, and three letters of recommendation by 4 December 1987, to: Dr. W. N. Bigler, Director, CAMT, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132. SFSU is an Equal Opportunity/Affirmative Action Employer



CONGRESSIONAL SCIENCE AND ENGINEERING FELLOWSHIPS

Applications Invited

The American Association for the Advancement of Science (AAAS) invites applications for two one-year Congressional Science and Engineering Fellowships it will offer for the period beginning 1 September 1988. The Fellowship Program provides an opportunity for accomplished and societally aware postdoctoral to mid-career scientists and engineers to participate in and contribute to the public policy-making processes within the Congress. Fellows work as special legislative assistants within the congressional staff system.

Persons may apply from any physical, biological, or behavioral science or any field of engineering. The term "science" is used broadly to include the system sciences, public health, and other technical professions. In addition to the fellowships awarded by the AAAS, about 15 others are given by other participating professional societies. The AAAS runs a year-long educational program for both its own Congressional Science and Engineering Fellows and those selected by the participating societies. Addresses of all participating societies are available from the address listed below.

The 1987–88 AAAS Congressional Science and Engineering Fellows will receive a stipend of \$26,500; an additional \$1,500 is available for relocation expenses and travel in connection with the Program.

In order to obtain detailed information on the Program and specific application requirements, write:

Congressional Science and Engineering Fellows Program American Association for the Advancement of Science 1333 H Street, NW Washington, DC 20005

The deadline for submission of application materials is 15 January 1988. The award will be announced around 1 May 1988.

Opportunities in Protein Structure/ Function Research

The Macromolecular Sciences Department of Smith Kline & French Laboratories, located in suburban Philadelphia, PA is seeking outstanding scientists to conduct research in the structurefunction analysis of proteins. The Department is comprised of scientists experienced in the application of biochemical and biophysical methods to protein structure and in the isolation, purification, characterization and chemical modification of proteins. A number of positions are currently available.

Protein Biochemist

Candidates must have a Ph.D. in Chemistry/Biochemistry with 1-3 years of postdoctoral experience; experience in protein purification and characterization, experience with membrane-bound proteins would be desirable.

Protein Crystallographer

Candidate must have a Ph.D. in a relevant scientific discipline with one or more years of postdoctoral experience; demonstrated ability to determine the crystal structure of proteins; strong background in biochemistry, computer programming and molecular modeling.

Postdoctoral Scientists

Candidates for the two available positions must have a Ph.D. in Chemistry/Biochemistry or other biomedical science; experience in state-of-the-art protein isolation and characterization. In addition, experience in one or more of the following areas would be desirable: (1) receptor/ligand interactions, (2) protein refolding, (3) chemical modification of proteins, (4) protein engineering as applied to structure-function analysis. Our postdoctoral appointments are normally for a two year duration.

We offer an excellent compensation and benefits package and an attractive relocation policy as well as a work environment that offers considerable opportunity for personal and professional growth. For confidential consideration, send your C.V. and names of three references to: Robert F. Obst, Manager, Personnel Relations, R0099, Smith Kline & French Laboratories, Research and Development Division, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



AWARDS

THE CHARLES H. REVSON CAREER DEVELOPMENT AWARDS PROGRAM AT THE WEIZMANN INSTITUTE OF SCIENCE

Purpose: To recruit outstanding young faculty members to the Weizmann Institute of Science, offering them an award which will secure their salary at the Institute for 3 years and provide them as well with a 3-year research budget of \$20,000 a year. The recipients have to qualify for a temporary appointment at the Weizmann Institute of Science at the rank of Senior Scientist (equivalent to assistant professor). They will be selected on the basis of excellence and the poten-

selected on the basis of excellence and the poten-tial to develop into leaders in their field. Deadline for applications is 31 December 1987. Further information is available on re-quest from: Academic Secretary's Office, Weizmann Institute, Rehovot 76100, Israel (Bitnet: RSMARJOR at Weizmann, Telex: 281300) 381300).

CALL FOR PAPERS

CALL FOR PAPERS

Dimensional Research Lab., Inc., a nonprofit research and development institution, is starting a new Journal promoting the usage and understanding of fifth-dimensional mathematics among the professions. Specific em-phasis is to be on theory, and application. Some contributive topic examples are Klein-Klause Theory, Fifth Dimensional Relativity, or Gravitation. For further in-formation contact: Dimensional Research Laboratory, 142 South Eighth Street, Lindenhurst, NY 11757.

POSTDOCTORAL TRAINING

POSTDOCTORAL TRAINING IN MEMBRANE DIFFRACTION METHODS

A postdoctoral position is available for a Ph.D. scientist with a strong background in physical chemistry or physics who wishes to gain experience in diffraction methods in the context of lipid bilayer and cell membrane structure. The laboratory is engaged in x-ray diffraction, neutron diffraction, and NMR studies of peptide/bilayer interactions. The position is available immediately. *Mi*interactions. The position is available immediately. Mi-norities and women are encouraged to apply. Applicants should submit curriculum vitae, representative publica-tions, and the names of three references to: Professor Stephen H. White, Chairman, Department of Physi-ology and Biophysics, College of Medicine, Universi-ty of California, Irvine, CA 92717. The University of California, Irvine is an Affirmative Action/Equal Opportunity Employer.

PRE- AND POSTDOCTORAL TRAINING PO-PRE-AND POSIDOCTORAL TRAINING PO-SITIONS IN PULMONARY PHYSIOLOGY. Training is offered at the University of Wisconsin-Madison under the terms of a NIH training grant. Training faculty includes G. E. Bisgard, J. A. Dempsey, G. S. Mitchell, J. B. Skatrud and E. H. Vidruk. Research emphasis includes chemoreceptor physiology, any large discrete the second proceder physiology. neural regulation of tracheal smooth muscle, exercise and sleep effects on neural-mechanical regulation of breathing, and the pathophysiology of respiratory muscle func-tion. Write to: J. A. Dempsey, Ph.D., Department of Preventive Medicine, 504 Walnut Street, Madison, WI 53705. Include curriculum vitae and three references.

SYMPOSIUM

CALL FOR POSTERS ERIC K. FERNSTRÖM SYMPOSIUM NEUROMUSCULAR JUNCTION 6 to 11 JUNE 1988, LUND, SWEDEN

Topics: Ion Channels, Transmitter Release, Acetylcholine Receptor, Excitation-contraction Coupling, Degenerative Mechanisms, Genetic Regulation and Expression.

Satellite Symposium of the European Society for Neurochemistry, Gothenburg, Sweden

For information: Eva Björkbom, Department of Pharmacology, Sölvegatan. 10, S-223 62 Lund, Sweden.

CONVOCATION

11TH INTERNATIONAL CONVOCATION ON IMMUNOLOGY Buffalo, New York 12 to 16 June 1988 IMMUNOLOGY AND IMMUNOPATHOLOGY OF THE ALIMENTARY CANAL

Presented by The Ernest Witebsky Center For Immu-

nology at the Hyatt Regency Hotel. Closed plenary sessions will focus on the topics: Immune Response of the Oral Cavity and the Gastrointestinal Tract: Periodontal Diseases; Inflammatory Bowel Diseases; Liver Host Response to Metastases; Nutritional Effects on the Im-mune Response; and Development of Vaccines. Open poster sessions on the theme will be offered. Contact: Dr. James F. Mohn, Director, 230 Sherman Hall, State University of New York, Buffalo, NY 14214. Telephone: 716-831-2901.

PROGRAM

CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain a doctor of optometry (O.D.) degree in two calendar years. Employment opportunities exist in private practice, industry, education, and research. Contact: Ph.D.-O.D. Program Director, Admissions Office, The New England College of Optometry, Room 14, 424 Beacon Street, Boston, MA 02115.

DOCTORAL PROGRAM IN MOLECULAR AND CELLULAR BIOLOGY AND PATHOBIOL-OGY. Interdisciplinary program seeks qualified candi-dates interested in fundamental molecular and cellular biology and its application to disease. Stipends of \$9000 available on a competitive basis. Contact: Director, MCBP Program, College of Graduate Studies, Medi-cal University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.

Medical University of South Carolina (MUSC) offers **PROGRAMS** leading to Ph.D. and M.D./Ph.D. de-grees in each of the basic biomedical sciences (anatomy, biochemistry, biometry, microbiology and immunology, pathology, pharmacology, and physiology), pharmaceu-tical sciences, and molecular and cellular biology/medicine; \$9000 assistantships available to highly qualified students. Contact: College of Graduate Studies, MUSC, 171 Ashley Avenue, Charleston, SC 29425.

TRAINING PROGRAMS

TRAINEESHIPS, Medical Scientist Training Program offers \$9000 stipends for studies leading to com-bined M.D./Ph.D. degrees in each of the basic biomedi-cal sciences and molecular and cellular biology/medicine. Contact: Director, Medical Scientist Training Program, College of Graduate Studies, Medical Universi-ty of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP CENTER FOR CLINICAL NEUROPHYSIOLOGY

An unexpected opening as a postdoctoral fellow (ei-ther M.D. or Ph.D.) in clinical neurophysiology is available at the Centers for Clinical Neurophysiology (CCN), University of Pittsburgh Health Center. The CCN provides a full range of evoked potential and monitoring. The CCN is completely computerized with its own Ethernet and over 40 computers and emphasizes the development of new computational approaches to clinical neurophysiology. Opportunities are provided for active participation in a number of funded research active participation in a number of number of number projects in both the basic and clinical neurosciences. Participating faculty include: M. Bennett, Ph.D.; J. R. Boston, Ph.D.; D. Krieger, Ph.D.; A. Møller, Ph.D., M. Møller, M.D., Ph.D.; R. J. Sclabassi, M.D., Ph.D.; L. Sekhar, M.D. For information please contact:

Robert J. Sclabassi, M.D., Ph.D. Director, Center for Clinical Neurophysiology Center for Cunical Neurosurgery University of Pittsburgh Pittsburgh, PA 15260 Telephone: 412-647-5093

FELLOWSHIPS

C. H. BEST FOUNDATION POSTDOCTORAL FELLOWSHIPS

In diabetes research, molecular endocrinology, molecular biology, differentiation, reproductive biology, im-munology, structure and function membranes, or lipid metabolism. Tenable in the Banting and Best Depart-ment of Medical Research for 2 years after 1 July 1988 with a competitive stipend. Available to new Ph.D.'s or value a competitive superior. Available to new Ph.D.'s of candidates with less than 2 years of postdoctoral training by 30 June 1988. Send curriculum vitae, transcripts, and three letters of reference, preferably before 30 November 1987 to: Dr. Arnis Kuksis, Fellowship Committee Chairman, Banting and Best Department of Medical Research, University of Toronto, Toronto, Ontario M5G 11 6 M5G 116.

POSTDOCTORAL FELLOWSHIPS

Joint Graduate Program in Toxicology of Rutgers, The State University of New Jersey and the University of Medicine and Dentistry of New Jersey/Robert Wood Johnson Medical School. Postdoctoral fellowships are available to candidates who have recently received the Ph.D. or M.D. and wish to train in the rapidly expanding field of toxicology. Our internationally recognized faculty will provide an opportunity for you to conduct research in cellular/molecular toxicology, immunotoxi-cology, hepatotoxicology, solvent toxicology, carcinogenesis, inhalation/respiratory toxicology, neurotoxico-logy, environmental and aquatic toxicology, and metabolism of environmental chemicals. Successful candidates will be supported by a N.I.E.H.S., training grant. For further information please contact: Robert Snyder, Ph.D., Director, Joint Graduate Program in Toxicol-ogy, Rutgers University College of Pharmacy, P.O. Box 789, Piscataway, NJ 08855–0789. Telephone: 201-932-3720. Rutgers, the State University of New Jersey is an Equal Opportunity/Affirmative Action Employer.

STATEMENT

U.S. POSTAL SERVICE

Statement required by the Act of 12 August 1970, Section 3685, Title 39, United States Code, showing the ownership, management, and circulation of:

1-6. Science is published weekly on Friday except the last week in December, at 1333 H Street, NW, Washing-1ast week in December, at 1333 H Street, NW, Washing-ton, D.C. 20005. Date of filing: 21 October 1987. This is also the address of the publisher, the editor, and the managing editor, who are, respectively, Alvin W. Trivel-piece, Daniel E. Koshland, Jr., and Patricia A. Morgan. 7. The owner is American Association for the Ad-vancement of Science, 1333 H Street, NW, Washington, D.C. 20005. Steekholder: Nora.

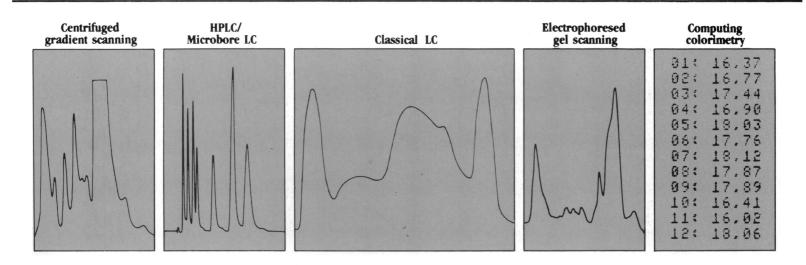
D.C. 20005. Stockholders: None.
8. Known bondholders, mortgagees, and other secur-

o. Known bondholders, mortgagees, and other securities ity holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities: None.
9. The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes have not changed during the preceding 12 months. months.

10. The average number of copies of each issue during the preceding 12 months is (A) Total number of copies printed: 161,332; (B) Paid circulation: (1) sales through (2) Mail subscriptions: 149,397; (C) Total paid circula-tion: 149,397; (D) Free distribution by mail, carrier, or other means: samples, complimentary, and other free copies: 2,351; (E) Total distribution: 151,748; (F 1) Office use, leftover, unaccounted, spoiled after printing: 9,584; (F 2) Returns from news agents: None; (G) Total: 161,332.

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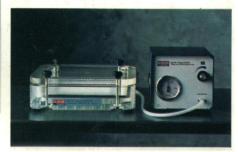
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