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For literature and demonstration circle reader service number 156

PERSONNEL PLACEMENT

SCIENCE publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no abbreviations. Any deadline in ad must be at least 2 weeks prior to date of issue in which ad appears. Also, personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference.

LINE CLASSIFIED ADVERTISING DEADLINES: Thursday, 10 a.m., 2 weeks prior to issue date (mailed on issue date).

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

LINE CLASSIFIED (POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth): $35.00 per line; $350 minimum, per week. (Minimum charge covers one inch on a single column; one inch equals 10 lines of 52 characters and spaces per line.) No charge for use of box number. No agency commission for ads less than 4 inches. No cash discount. Prepayment required for all foreign ads. Purchase orders and/or cover letter including billing address required for all other advertising.

To ESTIMATE a job cost:
Structure ad copy on a separate page, on lines of 52 characters and spaces. Include any desired heading. Each line of heading, and/or extra line spaces, and all partial lines (including centered reply information) are counted as full lines. Ad titles located within the text are printed in boldface caps and are only 32 characters per line. In ESTIMATING the cost, multiply total lines × $35.00 = approximate cost of ad. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and the resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment.)

CANCELLATION POLICY:
NOTICE may be given at any time after Thursday, TWO weeks prior to issue date incur a 10% production charge. Final deadline for cancellations is 12 p.m. Tuesday, ONE week prior to issue date. Cancellations must be in writing.

Send copy for all Positions Wanted ads and Line Classified ads less than 1/6 page in size (39 lines) to:
SCIENCE Classified Advertising
1333 H Street, NW, Room 410
Washington, DC 20005
Telephone: 202-326-6555

Send copy for Fractional Display ads, 1/6 page and larger, and all Marketplace ads to:
Schenago Associates, Inc.
1131 Broadway
New York, NY 10036
Telephone: 212-730-1860

Blind ad replies should be addressed as follows:
Box (give number)
SCIENCE
1333 H Street, NW
Washington, DC 20005

POSITIONS WANTED

Anatomist, Ph.D. 1984. Publications in neuromuscular physiology, histological, electrophysiological, and morphometric aspects of feeding and locomotion, NIH postdoctoral fellow; teaching experience in gross anatomy, histology, embryology, and anthropology; seeks tenure-track academic position, SCIENCE.

Multitalented Toxicology Team—2 Ph.D., Board-certified, forensic toxicologists with over 25 years of combined experience, looking for an opportunity in academia, industry, or government. Proficient with GC/MS, HPLC, TLC, RIA, UVVIS qualitative and quantitative techniques. Teaching, research, publications, QA/QC, friends in high places, the works. Box 149, SCIENCE.

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

POSITIONS OPEN

ACADEMIC ENDOCRINOLOGIST
The Endocrine-Metabolism-Nutrition Unit of the University of Vermont College of Medicine invites applications at the assistant professor level for a physician-investigator to develop an independent research program studying energy metabolism and its hormonal and nutritional regulation in man. The successful candidate should have experience in analytical methods (isotopes) as well as in in vivo techniques (turnover methodology using tracers, energy metabolism using indirect calorimetry, computer expertise in data acquisition and analysis, insulin clamp, muscle biopsy). The successful candidate must have proficiency in clinical teaching, and documented capacity to secure institutional support and a record of publications in peer review journal is highly desirable. Given the qualifications outlined, women and members of the U.S. minority groups would be given first consideration. Contact: Edward S. Horton, M.D., Chairman, Department of Medicine, 311 Fletcher House, Medical Center Hospital of Vermont, Burlington, VT 05401. Application deadline 1 December 1987.

ANATOMY: ASSISTANT PROFESSOR, Ph.D. The Department of Anatomy, Life Chiropractic College, invites applications for the position of assistant professor beginning September 1987. Applicants would be expected to teach gross and/or neuroanatomy. Salary is dependent upon qualifications and experience. Send curriculum vitae with references to: Dr. Macon Weaver, Chairman, Department of Anatomy, Life Chiropractic College, 1269 Barclay Circle, Marietta, GA 30060.

ANIMAL BEHAVIOR ASSISTANT PROFESSOR
Broadly trained applicants are desired with backgrounds in physiology, behavior, or biochemical bases of animal behavior for a 3-year, tenure-track appointment requiring a Ph.D. degree. Postdoctoral experience desirable. Teaching responsibilities will include courses in animal behavior or related fields. Faculty are expected to conduct active research programs in which qualified undergraduates may participate. Start-up funds for research are provided. Position available 1 July 1988. Please send curriculum vitae, statement of research/teaching interests, and names and addresses of three references by 6 November 1987 to: William C. Grant, Jr., Chair, Department of Biology, Williams College, Williamstown, MA 01267.

ASSISTANT CHEMIST AND INSTRUCTOR OF DIAGNOSTIC RADIOLOGY
The University of Texas System Cancer Center M. D. Anderson Hospital and Tumor Institute has openings for a chemist in the Division of Diagnostic Imaging to participate in a research project on microencapsulation. The position requires a Ph.D. degree in chemistry, physical chemistry, biochemistry, or pharmacology. Interested applicants should send a current curriculum vitae to: Sydney Wallace, M.D., Diagnostic Radiology, Box 57 UT M. D. Anderson Hospital 1515 Holcombe Boulevard Houston, TX 77030

ASSISTANT PROFESSOR OF ANATOMY
The Department of Anatomy, University of Saskatchewan, College of Medicine, invites applications for a faculty position at the assistant professor level. Applicants should be experienced in gross anatomy, neuroanatomy, and ideally histology, and have a special interest in teaching physical therapy students. An interest in kinesiology is desirable. Applicants must have a strong research program. In accordance with Canadian immigration regulations, this advertisement is directed to Canadian citizens and permanent residents. Application, including curriculum vitae, names of three references and an outline of proposed research and previous teaching experience should be submitted to: Dr. G. D. Burkholtzer, Department of Anatomy, College of Medicine, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W6.

PERSONNEL PLACEMENT 443
ASSISTANT PROFESSOR
DEPARTMENT OF BIOLOGY
SAINT PETER'S COLLEGE

Department of Biology—assistant professor—starting 1 January 1988. Ph.D. required, college teaching experience preferred. Must be able to teach introductory level courses and, if the position is filled, upper level courses in immunology, virology, Resümé, transcripts, and three letters of reference by 3 November 1987 to: Dr. Marjorie Collier, Saint Peter's College, 2641 Kennedy Boulevard, Jersey City, NJ 07304. Saint Peter's College is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR
BIOCHEMISTRY AND MOLECULAR BIOLOGY
SUNY HEALTH SCIENCE CENTER
AT SYRACUSE

We invite applications for a tenure-track assistant professor position. Outstanding candidates in all areas of biochemistry or molecular biology will be considered with preference given to investigators using novel approaches to important research problems in the areas of molecular genetics, protein structure, and gene expression. Applicants must have postdoctoral experience, demonstrated research productivity and a commitment to excellence in teaching medical and graduate students. Send letter of application (with curriculum vitae and summary of research plans) and three letters of reference to: Dr. Thomas J. Lucas, Chairperson, Search Committee, Department of Biochemistry and Molecular Biology, State University of New York Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210. Deadline for receipt of resume: 15 December 1987. An Affirmative Action/Equal Employment Opportunity Employer.

ASSISTANT PROFESSOR
BIOCHEMISTRY
MONTANA STATE UNIVERSITY

Biochemistry program, tenure-track, assistant professor (higher ranks considered). Must have a Ph.D. in a molecular biology area with a research emphasis is preferred. Demonstrated ability for creative research and the promise of effective teaching of biochemistry courses at the undergraduate and graduate levels. College teaching experience is required. Positions will become available for the academic years 1988 to 1989. Preference given candidates who have postdoctoral training in an area of molecular biology of interest to the department. Applicants should send a letter of application, résumé, reprints of five peer-reviewed publications, a summary of research plans, and three letters of recommendation to: Biochemistry Search Committee, Chemistry, Montana State University, Bozeman, MT 59717. Equal Opportunity Employer.

ASSISTANT PROFESSOR
BIOCHEMISTRY
THE JOHNS HOPKINS UNIVERSITY

Applications and nominations are invited for a tenure-track position which is open to biochemists or molecular biologists that have significant research accomplishments in the area of genetic control of gene expression. Candidates who employ molecular approaches in their research are especially encouraged to apply. The successful candidate will be expected to conduct a vigorous research program and to participate in teaching graduate students. Send curriculum vitae, representative publications, a succinct description of research plans, and the names, addresses, and telephone numbers of three references to: Dr. Roger McMacken, Chairman, Biochemistry Search Committee, Department of Biochemistry, The Johns Hopkins University, School of Medicine, 615 North Wolfe Street, Baltimore, MD 21205. Applications received prior to 15 December 1987 will be given full consideration. The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR
BIOCHEMISTRY
KANSAS STATE UNIVERSITY

The Department of Biochemistry of Kansas State University hopes to make several tenure-track appointments during the next academic year. Applicants must have a Ph.D. and postdoctoral experience. Successful candidates are expected to assemble a cluster of people active in the area of protein structure and function, including, for example, protein crystallography, and molecular and cell biology. They should be expected to conduct a vigorous research program and should be capable of teaching biochemistry to undergraduate and graduate students. Send letter of application, a statement of research plans, and the names of three references to: Dr. David J. Cox, Head, Department of Biochemistry, Willard Hall, Kansas State University, Manhattan, KS 66506. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR
NEUROBIOLOGY
RICE UNIVERSITY

The Department of Biology, Rice University, invites applications for a tenure-track appointment in neurobiology starting in the Fall 1988. Applicants should have a strong interest in developing an independent research program. A Ph.D. in biology or related field and a publication record is required. Send letter of application, curriculum vitae, and three letters of recommendation to: Professor James R. Keys, Chair, Search Committee, Department of Biology, Rice University, 6100 Main Street, Houston, TX 77251. Applications should be submitted by 15 January 1988. A Ph.D. in neurobiology and equivalent teaching experience is also required. An Equal Opportunity Employer.

ASSISTANT PROFESSOR
BIOLOGICAL SCIENCES
STANFORD UNIVERSITY

The Department of Biology, Stanford University, is seeking a broadly-trained, junior faculty member in biological sciences. The primary research interest should be in an area of molecular biology. Applicants should have completed all requirements for a Ph.D. degree by August 1988. The position will begin July 1988. Deadline for receipt of application is 31 October 1987. Send curriculum vitae, a statement of research interests, and three letters of recommendation to: Search Committee, Department of Biology, Stanford University, 450 Serra Mall, Stanford, CA 94305. An Equal Opportunity Employer.

ASSISTANT PROFESSOR
BIOLOGICAL SCIENCES
UNIVERSITY OF WISCONSIN-MADISON

Applications are invited for a tenure-track position in cell and molecular biology. Applicants should have completed all requirements for a Ph.D. degree by August 1988. The position will begin July 1988. Deadline for receipt of application is 15 December 1987. Send curriculum vitae, a statement of research interests, and three letters of recommendation to: Search Committee, Department of Biological Sciences, University of Wisconsin-Madison, 1200 University Avenue, Madison, WI 53706. An Equal Opportunity Employer.

ASSISTANT PROFESSOR
BIOMATHEMATICS AND SCIENCE DEPARTMENT
UNIVERSITY OF WASHINGTON

Applications are invited for a tenure-track position in biomathematics. Applicants should have completed all requirements for a Ph.D. degree by August 1988. The position will begin July 1988. Deadline for receipt of application is 15 December 1987. Send curriculum vitae, a statement of research interests, and three letters of recommendation to: Search Committee, Department of Biomathematics and Science, University of Washington, Box 351700, Seattle, WA 98195. An Equal Opportunity Employer.

ASSOCIATE PROFESSOR
BIOLOGICAL SCIENCES
UNIVERSITY OF WISCONSIN-MADISON

Applications are invited for an associate professor position in cell and molecular biology. The position will begin July 1988. Deadline for receipt of application is 15 December 1987. Send curriculum vitae, a statement of research interests, and three letters of recommendation to: Search Committee, Department of Biological Sciences, University of Wisconsin-Madison, 1200 University Avenue, Madison, WI 53706. An Equal Opportunity Employer.

ASSISTANT PROFESSOR
BIOCHEMISTRY
UNIVERSITY OF NORTH CAROLINA

Applications are invited for an assistant professor position in biochemistry. Candidates must have completed all requirements for a Ph.D. degree by August 1988. The position will begin July 1988. Deadline for receipt of application is 15 December 1987. Send curriculum vitae, a statement of research interests, and three letters of recommendation to: Search Committee, Department of Biochemistry, University of North Carolina, CB 7280, Chapel Hill, NC 27516. An Equal Opportunity Employer.

ASSISTANT PROFESSOR
BIOCHEMISTRY
UNIVERSITY OF MICHIGAN

Applications are invited for an assistant professor position in biochemistry. Candidates must have completed all requirements for a Ph.D. degree by August 1988. The position will begin July 1988. Deadline for receipt of application is 15 December 1987. Send curriculum vitae, a statement of research interests, and three letters of recommendation to: Search Committee, Department of Biochemistry, University of Michigan, Ann Arbor, MI 48109. An Equal Opportunity Employer.
POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR
UNIVERSITY OF ILLINOIS, CHICAGO COLLEGE OF MEDICINE

The Department of Biological Chemistry is reopening its search for a tenure-track assistant/associate professor position currently open. The candidate is expected to establish an independent research program in the area of biochemistry and biophysics of the cell membrane and/or molecular mechanisms. The Department is interested in any research area and will especially encourage applications from women and members of minority groups. Send applications to: Dr. J. C. Vary, Department of Biological Chemistry, University of Illinois, Chicago, College of Medicine, 1853 West Polk Street, Chicago, IL 60612. The University of Illinois is an Affirmative Action/Equal Employment Opportunity Employer.

ASSISTANT OR ASSOCIATE PROFESSOR OF ANATOMY

The Department of Anatomy, The Ohio State University, is seeking candidates for a tenure-track position at the assistant or associate professor level. The Department has strong research programs in cell biology and neuroscience. We are seeking an individual who could contribute to the program at the Ph.D. or M.D. level, in strong research programs in cell, molecular, or developmental biology and at least 2 years of postdoctoral research experience. Send applications to: Dr. J. K. King, Department of Anatomy, 35 West 10th Avenue, Columbus, OH 43210. An Equal Opportunity/Affirmative Action Employer.

ASSOCIATE RESEARCH SCIENTIST
MOLECULAR BIOLOGY

Ph.D. in biochemistry or molecular genetics, or a related field required for projects involving molecular basis for radiation-induced cellular transformation, mutagenesis, and gene regulation in mammalian cells. Applicants should have good background in recombinant DNA techniques. Send credentials and recent reprints to: Dr. Eric J. Hall, Director, Radiological Research Laboratory, Columbia University, 65 West 168th Street, New York, NY 10032. An Equal Opportunity/Affirmative Action Employer.

Tulane University School of Medicine—Seeking
ASSOCIATE PROFESSOR OR PROFESSOR of Medicine in the Endocrine Section of the Department of Medicine to fill the newly established Tullia-Tulane Alumni Chair of Diabetes. The individual selected must be Internal Medicine Board-Certified and Endocrine/ Metabolism fellowship-trained. Duties will involve research in the field of diabetes, 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.

CELLULAR IMMUNOLOGIST: Applications are invited for a faculty position at the assistant professor level in the Division of Infectious Diseases of the Department of Medicine at the Indiana University School of Medicine, Indianapolis, Indiana. Applicants should have a Ph.D. (or equivalent) degree and at least 2 years of postdoctoral research. The candidate must have a strong research background in molecular biology and be capable of establishing an independent research program in the area of cell biology and infectious diseases. Applicants should have a strong research record and be able to teach effectively at the graduate and medical student levels. Send applications to: Dr. J. C. Vary, Department of Biological Chemistry, University of Illinois, Chicago, College of Medicine, 1853 West Polk Street, Chicago, IL 60612. The University of Illinois is an Affirmative Action/Equal Employment Opportunity Employer.

BIOPHYSICIST/PHYSIOLOGIST
ASSISTANT/ASSOCIATE PROFESSOR

A full-time tenure-track position is available for a basic scientist with an interest in biophysics and with courses in physiology to participate in the teaching of these two courses to freshman medical students. The successful candidate, with at least 2 years of postdoctoral experience, should be interested in establishing an independent research program at the University of Illinois at Chicago College of Medicine. Interested persons should send curriculum vitae and names of addresses/telephone numbers of three or more references to: Dr. B. L. Rappaport, Ph.D., Chairman, Search Committee, Fort Wayne Center for Medical Education, Indiana University School of Medicine, 2101 Coliseum Boulevard West, Fort Wayne, IN 46806. The University invites applications/Affirmative Action Employer, Equal Opportunity Employer.

BIOCHEMIST

The Sanders-Brown Center on Aging at the University of Kentucky invites applications for a tenure-track faculty appointment for a biochemist with research interests related to stroke (e.g., lipid/cholesterol metabolism, ischemia, action of trophic factors, molecular neurobiology, etc.). This is a new position for an outstanding investigator to initiate research project in stroke research at the University. The successful candidate will have an academic appointment in the Department of Neuroscience within a proper department within the University. A letter of interest, a current curriculum vitae, and names of three references should be sent to: Dr. W. P. DeMey, Ph.D., Associate Director, Sanders-Brown Center on Aging, 101 Sanders-Brown Building, University of Kentucky, Lexington, KY 40506. The University of Kentucky is an Affirmative Action/Equal Employment Opportunity Institution.

BIOLOGY: ASSISTANT PROFESSOR, beginning fall semester 1988. Candidates must have a Ph.D., and be committed to teaching undergraduates in biochemistry, immunology, microbiology, and related areas. Research, especially involving undergraduates, is encouraged, but the primary responsibility will be teaching. Jackson State University is an independent, liberal arts institution with an enrollment of 4,000. Applicants should send curriculum vitae, official transcripts, and three letters of reference by 1 December 1987 to: Dr. Kenneth Hoover, Chairman, Search Committee, Department of Biology, Jackson State University, Jackson, MS 39211. Jackson State University is an Affirmative Action/Equal Employment Opportunity Institution.

BIOLOGY LECTURER, 3 years, non-tenure-track. Ph.D. in biochemistry or molecular biology required. Teaching load is 2 courses per semester. Salary and benefits are competitive. Submit letter of interest, curriculum vitae, and three letters of reference. Send applications by 20 November 1987 to: Dr. W. S. Davis, Department of Biology, University of the South, Sewanee, TN 37375. The University of the South is an Affirmative Action/Equal Employment Opportunity Institution.

BIOSTATISTICIAN for pharmaceutical research company to provide statistical support for design and analysis of clinical trials of experimental compounds. Prepare statistical analyses and reports for FDA applications. Must have M.S. in applied statistics plus 1 year of biostatistical experience and demonstrated proficiency in the design and analysis of general linear hypothesis and non-parametric procedures, SAS and a programming language together with theoretical background in design of experiments involving one- to two-plus factors and 1,000 plus observations. Job site/ interview, Palo Alto, California. Send this ad and resume to: Job No. CR 10052, P.O. Box 9560, Sacramento, CA 95823–0560, no later than 31 October 1987.

Department of Psychology, University of New Orleans, is continuing its search for a CHAIRPERSON to begin fall 1988. The department has 20 faculty members, has a diverse research program in psychological and applied developmental psychology. Applicants with record of superior research accomplishments, a consistent history of extramural funding, and administrative experience should send curriculum vitae and have letters of reference sent to: Jack McLean, Ph.D., Professor and Chair, Department of Psychology, University of New Orleans, 1745 N. 24th Street, New Orleans, LA 70112. The University of New Orleans is an Equal Opportunity Institution.

POSITIONS OPEN

The Department of Biological Sciences, University of Notre Dame, invites applications for a FEMALE ASSISTANT/ASSOCIATE PROFESSOR. The Department of Biological Sciences, University of Notre Dame, invites applications for a FEMALE ASSISTANT/ASSOCIATE PROFESSOR. The Department of Biological Sciences, University of Notre Dame, invites applications for a FEMALE ASSISTANT/ASSOCIATE PROFESSOR. The Department of Biological Sciences, University of Notre Dame, invites applications for a TENURE-TRACK POSITIONS, IN CELL BIOLOGY AND MOLECULAR GENETICS beginning September 1988. The applicants will be appointed at the assistant professor level with a rank, depending on qualifications, will be considered. CELL BIOLOGY: We solicit applications from individuals who use modern biochemical/molecular techniques to address fundamental problems at the cell level. Partial areas of interest are cellular immunology, membrane biology, and cDNA cloning. The University invites applications from women biologists with research interests in cell biology. MOLECULAR GENETICS: Applicants should have a strong background in modern molecular biology working with either prokaryotic or eukaryotic plant or animal systems. The area of research expertise is open. The potential ability of the candidates to interact with and complement current faculty interests in cell, molecular, and developmental biology will be important. We seek outstanding individuals who will initiate and maintain vigorous research programs. Responsibilities include the direction of graduate students and formal teaching at both the undergraduate and graduate levels. The under-
CLINICAL PATHOLOGY CHIEF. The successful candidate for this position will be Chief of a new Interdepartmental Division of Clinical Pathology and Laboratory Medicine, and Director of the Clinical Laboratories of the Administrative Service, teaching, and research qualifications are preferred. Primary academic appointment in Department of Pathology with joint appointment in other cognate departments possible. Board certification in clinical pathology necessary. Faculty rank and salary according to qualifications. Closing date for applications: 1 December 1987. Applications including full vitae and names of three references should be sent to:

E. Gershensohn, M.D., Professor and Chair
Department of Pathology
University of Colorado Health Sciences Center
4200 East Ninth Avenue, Box B216
Denver, CO 80262

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

NATIONAL SCIENCE FOUNDATION
WASHINGTON, D.C.
DIVISION OF ADVANCED SCIENTIFIC COMPUTING

NSF’s Directorate for Computer and Information Science and Engineering is seeking qualified applicants for the position of Director, Division of Advanced Scientific Computing. The Division is responsible for supporting the operation of national supercomputer research centers, providing supercomputing time, supporting services and training to the nation’s research community. In addition, it supports research to improve supercomputing and explores alternative computing technologies for advanced applications. Appointment to this Senior Executive Service position is a 1-to-3-year limited term basis with a salary range of $64,700 (ES-1) to $73,400 (ES-4).

Applicants must have a Ph.D. or equivalent professional experience in a field of science or engineering related to the NSF mission; demonstrated experience in activities relating to the use of supercomputers in the federal government and scientific/engineering research communities; and the ability to achieve organizational objectives through the supervision and management of subordinates.

Applicants should contact Margaret Cademartori: 202-387-7601 (hearing impaired individuals may call: TDD 202-387-7742). Announcement EX-87-10 (Career Appointment) or EX-87-20 (Limited Term Appointment) for complete qualification requirements and application procedures. Applications must be received by 30 November 1987. An Equal Opportunity Employer.

DIRECTOR—RESEARCH AND DEVELOPMENT (M.D. certified AP/C-P)—Interested parties should have minimum 15 years of experience in flow cytometry and cell imaging combined with fine needle aspiration cytology and morphologic hematology. The scientist will be responsible for developing his/ her own research interests and for developing a research program that will lead to the development of clinical assays of high utility. Applicants must have proven leadership capabilities as demonstrated by previous group management experience. Box 152, SCIENCE.

DIRECTOR, DEPARTMENT OF MEDICINE - PENNSYLVANIA MEDICAL CENTER

Presbyterian—University of Pennsylvania Medical Center is seeking applicants for the position of Director of its Department of Medicine. Presbyterian is an independent 118-bed facility which has a major teaching and research affiliation with the University of Pennsylvania. A full-time academic position with the University is an option. Duties of the position include administration of the clinical department and teaching program, program development, and physician and housestaff recruitment. Involvement in clinical research. More activities is preferred. Applicants should submit their curriculum vitae to:

Benjamin M. Quigg, Jr.
Chairman, Board of Trustees
Presbyterian—University of Pennsylvania Medical Center
39th and Market Streets
Philadelphia, PA 19104

An Equal Opportunity/Affirmative Action Employer.

ECOLOGY-EVOLUTION

The Department of Biology at the University of Oregon is expanding its program in Ecology and Evolutionary Biology. The position will be filled and salaried at the associate professor level (tenured) and is open in any area of ecology and evolution. The Director will have significant programmatic leadership responsibilities and will be expected to recruit in this area. The selected candidate will be expected to have a strong, funded current research program, and be in a position to fit in with and coordinate the existing future research. Send curriculum vitae, description of research interests, recent publications, three letters of reference, and names, addresses, and telephone numbers of three additional references to: Ecology and Evolution Search, Department of Biology, University of Oregon, Eugene, OR 97403. Applications may be obtained by calling Dr. R. A. Capaldi, Head, Department of Biology, 503-686-4526, or by writing to: Chair, Search Committee. Closing date: 15 November 1987. The University of Oregon is an Equal Opportunity/Affirmative Action Employer.

ECOSYSTEM BIOLOGIST—The Ecosystems Research Center at Cornell University has an opening for a research staff scientist with broad interests. Preference will be given to a terrestrial ecosystem biologist. The successful candidate will be expected to develop a research program in coordination with the Center staff and to participate in the environmental policy activities of the Center. The position is open at any level, but at least some postdoctoral experience is desired. The position is open after 15 February 1988. Submit a letter of application, a résumé, and names, addresses, and telephone numbers of three references by 15 December 1987 to: W. Howard, Ecosystem Research Center, Corson Hall, Cornell University, Ithaca, NY 14853.

ENDOCRINOLOGIST—Full-time, clinical, teaching, research position available 1 July 1988 for physician to manage patients with entire spectrum of endocrinological problems including diabetes. Requires minimum of 3 years as endocrine fellow in accredited program; publication record on clinical and basic endocrine disorders; expertise in peptide purification, radioimmunoassay, and related fields. Excellent understanding of molecular biology techniques. Research focus is oncologic endocrinology. Minimum salary $45,763 per annum. Reply to: Personnel Service (OSB), V.A. Medical Center, 508 Fulton Street, Durham, NC 27705. An Equal Opportunity Employer.

The Environmental Defense Fund (EDF), a national nonprofit environmental organization, is seeking a RESEARCH SCIENTIST with expertise in groundwater and soils to work on policy and research issues relating to hazardous waste disposal. Experience in groundwater, knowledge of Resource Conservation and Recovery Act (RCRA) essential; good communication skills required. One-year position. Salary: $30,000. Send resume and writing sample to: EDF, 1616 P Street, N.W., Washington, D.C. 20036.
We represent an exciting, young company involved in the development and manufacture of novel, non-isotopic, diagnostic test kits for rapid detection of a variety of infectious diseases. Located in a beautiful, coastal New England setting, this publicly-owned company offers a unique opportunity to influence the future direction of the organization. Dynamic growth has created immediate openings.

**INFECTION DISEASE MANAGER**

Qualified candidates for this senior executive research management position will have a PhD, a solid background in microbiology with 5 or more years of commercial development experience. Familiarity with a variety of immuno-diagnostic assay formats is a real plus. You must be resourceful and have excellent managerial, leadership, and communication skills as you will have responsibility for several products.

**IMMUNO-DIAGNOSTIC GROUP LEADERS**

These positions require ambitious, results-oriented PhD scientists with very high energy levels and strong interests in developing rapid immunoassays. Candidates should have either commercial experience or post-doctoral training.

**STEROID & DRUG ASSAYS**

To qualify, you must have developed non-isotopic immunoassays for antibiotics, reproductive steroids or related areas.

**BACTERIAL PATHOGEN DETECTION**

This position requires a strong background in microbiology, infectious disease, immuno-diagnostics as well as isolation and purification of microbial antigens and enzyme coupling.

Compensation package includes a generous salary, benefits, relocation, and potential equity. If you would like to be considered for these positions, please call (617) 237-3962 or forward your resume to David M. Bacharach, Jr., Management Consultant, 31 Woodfield Road, Wellesley MA 02181. Our client is an equal opportunity employer.

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**NATIONAL INSTITUTES OF HEALTH**

**NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES**

**GENETICS PROGRAM BRANCH**

**Director, Genetics Program Branch**

This is a civil service position in the Senior Executive Service (SES) with a salary range from $64,700 to $73,400 (Physicians may be eligible for a Physicians' Comparability Allowance up to $10,000 per year).

The Director, Genetics Program Branch, has overall responsibility for planning, organizing and administering a large (about $187 million/year) program of grants, contracts, and both individual and institutional fellowship awards, designed to foster and support biomedical research and research training in the fields of genetics and related molecular biology.

Position information and qualifications requirements may be obtained by contacting:

Howard R. Chernoff, Personnel Officer
National Institute of General Medical Sciences
3333 Westbard Avenue
Westwood Building, Room 9A-13
Bethesda, MD 20892
(301) 496-7161

Applications (Application for Federal Employment/SF-171, CV, and Bibliography) must be submitted to above address and postmarked not later than October 31, 1987. U.S. citizenship is required.

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**Scientists**

**Play An Important Role In Drug Discovery To Combat Human Disease.**

We're CIBA-GEIGY, a world leader in the pharmaceuticals industry. Our significant commitment to research has been critical to our success. We're currently seeking a Scientist to support our ongoing efforts in drug discovery.

**Enzymology (Dept. 434)**

Working in the enzymology group, you will study enzyme structure/function with particular emphasis towards the use of molecular biology as a tool. You will become part of a team of professionals dedicated to the state-of-the-art research, with the purpose of exploiting enzyme mechanisms to find therapeutic agents to combat human disease. A BS, preferably an MS, in Biochemistry or a related discipline, with research experience in the field of enzymology is required. Strong analytical skills are necessary; experience in the techniques of cloning, subcloning, restriction site analysis, fragment isolation and mammalian cell culture are desirable.

**Cell Metabolism (Dept. 436)**

You will study culture cells or tissues under defined conditions and analyze the effects of modulators on the metabolism of cells. Using both classical and modern techniques, you will also purify metabolites and cellular components, and assay enzyme activities in biological fluids, as well as compile and analyze data. An MS in Biology or 1-3 years' experience in analytical biochemistry, including a background in purification techniques and tissue cultures, are required.

In return for your expertise, we offer competitive salaries, excellent benefits and an environment that promotes both personal and professional growth. Please forward your resume, with salary history and requirements, indicating appropriate department number, to: Ms. Virginia G. Jordan, The Pharmaceuticals Division, CIBA-GEIGY Corporation, 556 Morris Avenue, Summit, NJ 07901. We are an equal opportunity employer m/f/h/v.
ENTOMOLOGIST
ORNAMENTAL HORTICULTURE

The Department of Entomology, University of California, Berkeley, seeks tenure-track faculty positions in entomology (11 months plus 1 month of paid vacation) at the assistant or associate professor/entomologist level. A Ph.D. in entomology or related discipline is required. Appointee must be involved in undergraduate and graduate instruction and advising in entomology, with new graduate students, and participate in the Graduate Program in Plant Protection and Pest Management. Appointee will be expected to develop a mission-oriented research program directed toward management of agricultural and ornamental pest problems. Fundamental research is also encouraged. Applicants should submit letter of application, curriculum vitae, summary of teaching and research goals, list and reprint of publications, and names and addresses of three referees to: Dr. L. E. Ehler, Chair of Search Committee, Department of Entomology, University of California, Berkeley, CA 94720, no later than 15 December 1987. The University of California is an Affirmative Action/Equal Opportunity Employer.

ENVIRONMENTAL BIOPHYSICIST

The Department of Soil Science, University of Wisconsin–Madison invites applications for a position at the assistant, associate, or full professor level. Candidates should have a demonstrated ability to integrate quantitative description of the physical and chemical processes in the soil and atmosphere with biological processes in developing unified plant-environment models, and to incorporate these concepts into computational programs. Some background in micrometeorology is required. Send curriculum vitae and a letter describing research and teaching experience to which you have three or more letters of reference sent by 14 December 1987 to: Dr. R. B. Corey, Department of Soil Science, 1525 Observatory Drive, University of Wisconsin, Madison, WI 53706; Telephone: 608-262-0580. An Affirmative Action/Affirmative Action Opportunity Employer.

FACULTY POSITION METEOROLOGY, tenure-track, assistant or associate professor, beginning fall 1988. All ranks will be considered, but those with expertise in climate dynamics and/or remote sensing, with applications to operational forecasting is preferred. Minimum qualifications: Ph.D. in atmospheric science. Send résumé, transcripts, three letters of recommendation, and statements of teaching philosophy and research plans by 15 January 1988 to: Chair, Meteorology Department, San Jose State University, San Jose, CA 95192–0104.

FACULTY POSITIONS
THE EYE RESEARCH INSTITUTE OF RETINA FOUNDATION

The Eye Research Institute is seeking a new faculty member at the assistant scientist level with interests in the mechanism of the vitamin A metabolism and interaction of retinal pigment epithelium, elaboration of extracellular matrix, or degeneration of the vitreoretinal interface which can be studied by the use of retinal degenerosity. Research experience should include cell biology, physiology, or biochemistry. The Institute encourages collaboration with other basic scientists and clinical researchers. Initial funding is available for salary and research costs. Curriculum vitae and letter of interest should be forwarded to:

Sheldon Buzney, M.D.,
Search Committee
Eye Research Institute
20 Stanford Street
Boston, MA 02114

The Eye Research Institute is seeking an additional assistant scientist level Ph.D. cell biologist-microbiologist to join active eye research group. Specific areas of interest will involve corneal inflammation, ulceration and wound healing. Experience in cell culture, immunohistochemistry and monoclonal antibody techniques required. Salary dependent on experience. NTP committee at Harvard Medical School will be sought. Send curriculum vitae and reprints to:

Kenneth Kenyon, M.D.,
Search Committee
Eye Research Institute
20 Stanford Street
Boston, MA 02114

Equal Opportunity/Affirmative Action Employer M/F/V/H and others.

ENVIRONMENTAL CHEMIST

A Ph.D. chemist with a strong background in chemical or biogeochemistry to join an interdisciplinary research team studying the ecology of streams, rivers, and watersheds. The applicant's research interest should emphasize natural and anthropogenic elements in relation to processes affecting the translocation and transformation of organic compounds in surface water, groundwaters, and soils. Applicants should have strong research interests and strengths in theoretical and analytical aspects of both organic and inorganic environmental chemistry. The fulltime research position is available for 2 years. The scientist will be expected to develop a continuing research program, with substantial extramural funding. Send résumés, transcripts, statement of research interests, three letters of recommendation, and names of three references by 1 December 1987 to: Search Committee, Stream Water Research Center, Academy of Natural Sciences, B.D. Lawrence Building, University of Pennsylvania, Philadelphia, PA 19111.

The Academy is an Equal Opportunity/Affirmative Action Employer.

ENVIRONMENTAL SCIENTIST

TetraGulf Chemicals Company, Aurora, North Carolina, has an immediate opening for an environmental scientist. The ideal candidate will have a M.S. degree in a biological science, and have an interest in dealing with wetlands mitigation projects, reclamation reevaluation studies, and general environmental studies. Primary responsibilities will include obtaining appropriate regulatory permits and enforcing both state and federal for all the company's wetlands and reclamation activities. Excellent salary and benefit package. If interested, send résumé to:

Mike Gwynn
TetraGulf
P.O. Box 48
Aurora, NC 27806

Equal Opportunity/Affirmative Action Employer

FACULTY POSITION—The School of Medicine of East Carolina University invites applications for the position of Professor in the Department of Pharmacology. Applicants must have demonstrated excellence in research related to neurotransmitter and electrophysiological and/or electropharmacological involvement. Successful applicants must have current grant support and be a recognized leader in the field. Please send curriculum vitae, a brief description of research plans, and three letters of recommendation by 15 December 1987 to: Dr. Wallace R. Woods, Chairman, Department of Pharmacology, School of Medicine, East Carolina University, Greenville, NC 27858.

An Equal Opportunity/Affirmative Action Employer

PENN STATE FACULTY POSITION
BIOMOLECULAR STRUCTURE AND FUNCTION

Applications are invited for two tenure-track positions at the assistant professor level for research concentration in the area of biomolecular structure and function. Candidates are being sought in each of the following areas: (1) protein crystal structure determination and (2) theoretical/computational studies of biological macromolecules. The University has made a major commitment in this area including laboratory space and equipment necessary for the independent research programs such as x-ray diffractometer including area detector and computer graphics system. The positions will be available in either the Department of Chemistry, the Department of Molecular and Cell Biology, or as joint appointments in these departments. Joint affiliation with the newly formed Penn State Biotechnology Institute is also a possibility. Applicants should have the background, motivation, and ability to develop vigorous, productive research programs and to be excellent teachers. Reply to: Search Committee for Biomolecular Structure and Function, Department of Chemistry, 152 Davey Laboratory, Box 12, University Park, PA 16802. Please indicate the area of research you are applying. Include a detailed curriculum vitae, statement of research interests, and up to three recent representative reprints. In addition, the applicant should ask three individuals to send letters of reference directly to "Chair, Search Committee." Review of applications will commence in November 1987. Deadline for receipt of applications is 15 January 1988 or until suitable candidates are identified. Equal Opportunity/Affirmative Action Employer.

ORGANIC CHEMIST

Celgene Corporation, a leader in the application of biotechnology and chemical technology to the production of fine and specialty chemicals, currently seeking an innovative organic chemist with proven experience in the identification and development of routes to a variety of fine and specialty chemicals.

The successful candidate will have a Ph.D. in organic chemistry, outstanding credentials, and at least five years experience in the synthesis of products and/or intermediates for the pharmaceutical, agrochemical or flavors and fragrances industries. In addition, knowledge of biological chemistry would be an asset.

Candidates should send a detailed resume to:

Department SB-C
Celgene Corporation
7 Powder Horn Drive
Warren, NJ 07059

University of California, Davis
CELLULAR NEUROBIOLOGY TRAINING PROGRAM

Funding is available to support qualified individuals for training in cellular neurobiology at both postdoctoral and predoctoral levels. Successful applicants will join a young, vigorous neurobiology group that is highly interactive and in which collaborations are common. We particularly encourage participation of trainees in projects involving the expertise of two or more training faculty.

Hilary Anderson, Development of insect nervous systems
Richard Carlsen, Cell biology of axonal and muscle regeneration
Leo Chalupa, Prenatal development of mammalian visual system
Carol Erickson, Morphogenesis and differentiation of neural crest
Mark McNamara, Molecular biology of ACh receptors
Brian Mulloney, Generation and modulation of motor patterns
Pamela Pappone, Biophysics of ion channels
Robert Scobey, Retinal physiology
Barry Wilson, Cholinesterases and neurotoxins
Martin Wilson, Cell biology of the retina

For more information, contact Dr. Brian Mulloney, Director, Cellular Neurobiology Training Program, Department of Zoology, University of California, Davis, CA 95616. (916) 752-7468.

UCD is an Equal Opportunity / Affirmative Action Institution.
DEAN OF NATURAL SCIENCES AND MATHEMATICS
University of Southern California

The University of Southern California is an urban, private research university with a student body of over 30,000. USC has in recent years experienced sharp growth both in size and in the excellence of its programs. These improvements have been especially conspicuous in the College of Letters, Arts and Sciences. We seek a Dean of Natural Sciences and Mathematics with the vision and leadership needed to facilitate their continuance and acceleration.

The Division of Natural Sciences and Mathematics of the College has seven major core departments. It also includes interdisciplinary organizations concerned with Neurosciences, Marine and Coastal Studies, Earth Sciences, and Lasers, linked not only with the Social Sciences but also with the Schools of Medicine and Engineering. Its Dean (along with the Deans of Humanities and of Social Sciences) reports to the Dean of the College of Letters, Arts, and Sciences. The Dean of Natural Sciences and Mathematics oversees academic programs, facilitates interdisciplinary and multidisciplinary endeavors, is responsible for a budget of about $21,000,000, and hires faculty and some research staff.

QUALIFICATIONS: The Dean will be a distinguished researcher and teacher in one of the core Natural Science disciplines, and will become a tenured full professor of the appropriate department. The five-year renewable term begins either July 1, or September 1, 1988.

Send nominations (with a CV if possible) or applications (with CV and names, addresses, and telephone numbers of three to five references) to:
Dr. Joan Nay, Assistant to the Dean
College of Letters, Arts, and Sciences
University of Southern California
Los Angeles, CA 90089-0402

USC is an Equal Opportunity/Affirmative Action Employer

DEADLINE: January 3, 1988

NATIONAL INSTITUTE OF NEUROLOGICAL AND COMMUNICATIVE DISORDERS AND STROKE
MOLECULAR NEUROPHARMACOLOGY

Applications are invited from scientists holding a Ph.D. and/or M.D. degree and postdoctoral experience to lead a National Institute of Health Intramural research section studying pharmaceutical approaches to the modification of genetic expression in the mammalian central nervous system. Experience in relevant aspects of molecular biology, cell biology, protein chemistry and neuropharmacology is desirable. Position may be at the senior staff fellow (tenure track) or General Schedule (tenured) level, with a salary of $17,000 to $47,788 annually, depending on qualifications. Further position information and qualifications requirements may be obtained by calling Ms. Chris Steyer on (301) 496-6334.

Please direct written inquiries to Chief, ETB, NIH, NINCDS, 1055C103, 9000 Rockville Pike, Bethesda, MD 20892 or telephone 301-496-7933.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

The Department of Biochemistry and Molecular Biology of Merck Sharp & Dohme Research Laboratories currently has two senior level positions available to join a group studying protein growth factors. Qualified candidates should have Ph.D. in biochemistry or a related area plus two or more years of postdoctoral experience. Candidates will be considered who have extensive experience in one or more of the following areas:

PROTEIN BIOCHEMIST

Experience in protein purification and characterization, including protein sequencing, to identify, purify and characterize novel growth factors, genetically altered forms of known factors or growth factor receptors.

CELL BIOLOGIST

Experience in the characterization of cells as sources and targets for specific growth factors, receptor binding, signal transduction and interactions among protein growth factors at the cellular level.

MOLECULAR BIOLOGIST

Experience in cloning, expression and/or site-directed mutagenesis to study the genetic structure, function and control of novel and previously recognized protein growth factors.

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. Elemann, Merck & Co., Inc., R0. Box 2000, R80M-TL1, Rahway, New Jersey 07065.

Equal Opportunity Employer

MERCK & CO., INC.

HEAD OF EXPERIMENTAL PATHOLOGY

Hoffmann-La Roche, an established leader in the pharmaceutical and health care/medical research industries, has an attractive opportunity for an experienced Pathologist to join our Department of Toxicology and Pathology.

As Head of Experimental Pathology, you will provide leadership in the investigation of pathogenic mechanisms occurring in toxicological studies with drugs. There will also be a significant opportunity for multidisciplinary collaboration in pharmaceutical discovery and development.

You must possess a D.V.M., M.D. or equivalent training with board certification in Pathology, a proven record of accomplishments as evidenced by a significant publication record, and experience in laboratory animal pathology.

We offer an excellent compensation and benefits package, an attractive relocation policy, all the resources of a research-intensive company, and a convenient suburban location 12 miles from New York City. For confidential consideration, please send your resume to: Eleanor M. Maloney, Professional Employment and Staffing Specialist, Dept. EP, Hoffmann-La Roche Inc., Nutley, New Jersey 07110. We are an equal opportunity employer.

Roche Hoffmann-La Roche

Working Today For A Healthier Tomorrow.
POSITIONS OPEN

FACULTY POSITION

The Microbiology Department of The University of Texas at Austin has an opening for an assistant professor. Appointment at a higher rank will be considered for individuals with an outstanding record of independent research. Women and persons with disabilities are encouraged to apply. This is an outstanding opportunity to join an excellent Department during a period of expansion. Please submit curriculum vitae, publications and addresses of three references and a summary of research interests to: Microbiology Department Search Committee, The University of Texas at Austin, Austin, TX 78712-1098. The University of Texas is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS IN CELLULAR and MOLECULAR BIOLOGY

Applications are invited for a tenure-track position in the Department of Cell Biology and Anatomy at Northwestern University Medical School. This position is at the assistant or associate professor level. Applicants must have a Ph.D., M.D., or equivalent degree, with research experience in cellular and molecular biology. Applicants will be screened with respect to their ability to carry on vigorous research programs, and to participate in the teaching and research programs of the medical student and graduate programs. Experience in mammalian molecular genetics and cell biology will be considered. This is an outstanding opportunity to join an excellent Department during a period of expansion. Please submit curriculum vitae, publications and addresses of three references and a summary of research interests to: Microbiology Department Search Committee, The University of Texas at Austin, Austin, TX 78712-1098. The University of Texas is an Equal Opportunity/Affirmative Action Employer.

IMMUNOLOGIST—EXPERIMENTAL PATHOLOGIST

A tenure-track position is available in the Department of Immunology, University of Virginia. Applicants with a strong commitment to independent research in cellular and molecular immunology are encouraged to apply. The successful candidate will be provided with the opportunity to develop his/her own independent research program and to interact with other investigators and trainees engaged in research on immune to infectious agents, tumors, and allergens. Send a curriculum vitae and the names of three references to: Dr. Robert J. North, Chairman, Department of Immunology, University of Virginia, Charlottesville, VA 22908.

LABORATORY MANAGER

The laboratory manager of the Immunology Department at the University of Virginia is responsible for the management of laboratory operations, including budgeting, personnel, equipment, and safety. The successful candidate will be responsible for ensuring compliance with all regulatory requirements, including those related to animal welfare and human subject protection. Send a curriculum vitae and the names of three references to: Dr. Robert J. North, Chairman, Department of Immunology, University of Virginia, Charlottesville, VA 22908.

MAGNETOELECTROPHYSIOLOGIST/ENGINEER/PHYSICIST

San Juan, University of Puerto Rico, is seeking a full-time Research Associate Professor to establish a laboratory in the Department of Neurology and Neurosurgery. The successful candidate will be responsible for developing a research program in the area of magnetoencephalography (MEG). Applicants must have a Ph.D. in a relevant field and at least three years of postdoctoral research experience. Send a curriculum vitae, publications, and a list of three references to: Dr. Robert J. North, Chairman, Department of Neurology and Neurosurgery, University of Puerto Rico, San Juan, PR 00936.

NEUROBIOLOGY RESEARCH SYNAPTIC REGULATION AND ION CHANNELS

The Department of Neurobiology at the University of California, San Diego, is seeking a postdoctoral researcher to study the molecular mechanisms underlying synaptic plasticity and ion channel function. Applications are encouraged from individuals with a Ph.D. or M.D. in biology, neuroscience, or a related field. Send a curriculum vitae and the names of three references to: Dr. Robert J. North, Chairman, Department of Neurobiology, University of California, San Diego, La Jolla, CA 92037.

Molecular Biology

The Department of Molecular Biology, University of California, Berkeley, is seeking a postdoctoral researcher to study the molecular mechanisms underlying synaptic plasticity and ion channel function. Applications are encouraged from individuals with a Ph.D. or M.D. in biology, neuroscience, or a related field. Send a curriculum vitae and the names of three references to: Dr. Robert J. North, Chairman, Department of Neurobiology, University of California, San Diego, La Jolla, CA 92037.
RESEARCH ASSOCIATE

East-West Center

The East-West Center is a public, nonprofit educational institution with an international board of governors. Some 2,000 fellows, graduate students, and professionals in business and government each year work with the Center’s international staff in cooperative study, training, and research. The Center was established in 1960 by the United States Congress, which provides principal funding. Support also comes from more than 20 Asian and Pacific governments, as well as private agencies and corporations.

Applications are being accepted for a position as a Research Associate in the Center’s Environment and Policy Institute (EAPI), the chief concern of which is the maintenance of environmental quality and the productivity of resource endowments in light of regional population growth and economic development. The position is a full-time limited appointment up to three years with the possibility of renewal. The Research Associate will conduct collaborative, interdisciplinary, multinational research and other activities pertaining to the science-based aspects of renewable resources management and use for the development of land-use policy in such fields as forestry, agriculture, and biological diversity. Responsibilities include organizing research-related conferences and workshops; promoting interaction among scientists, government officials, representatives of donor and technical assistance agencies, and managers of resource development programs; seeking sources of external financial support; advising ERC degree-student grantees; and maintaining liaison with research activities in centers in the Asia-Pacific region.

REQUIRED QUALIFICATIONS: Ph.D. in a natural science concerned with land utilization and management and at least five years of appropriate professional or research post-Ph.D. experience; or M.S. or M.F. degree and at least ten years of relevant professional and research post-degrees experience. A strong publications record and working proficiency in the English language. Experience in the Asia-Pacific region with firsthand knowledge of at least one country in the region as shown by publications and institutional affiliations or other evidence.

PREFERRED QUALIFICATIONS: Professional and research experience in developing countries. Experience in collaborative projects that involved individuals from the United States and different Asian and Pacific countries.

SALARY RANGE: $32,567 to $50,338 per year, depending on qualifications, plus cost-of-living allowance currently at 22.5% (subject to change). An attractive benefits package is also offered.

Submit resume with cover letter which includes institute and title of position you are applying for, a narrative description detailing relevance of your qualifications and background to the responsibilities of the position, and names and addresses of three professional references. Applications must be postmarked by November 30, 1987. Send to: Karen Lee, Personnel Office, Dept. 19, East-West Center, 1777 East-West Road, Honolulu, Hawaii 96844.

An Equal Employment Opportunity/Affirmative Action Employer

NEW ENGLAND BIOLABS

A small, informal biotechnology company on the ocean 20 miles north of Boston that specializes in the production and cloning of restriction endonuclease has openings for:

MOLECULAR PARASITOLOGIST (POST DOCTORAL POSITION) - an individual with experience in molecular biology and/or immunology. Projects will involve the cloning and characterization of filarial antigens.

MICROBIOLOGIST/FERMENTATION SPECIALIST - an individual with prior experience in growth of a variety of microorganisms in 25 to 100 liter fermentations. Cell disruption and protein purification experience would be useful. Good mechanical skills and a B.S. in microbiology or related field required.

Candidates please submit curriculum vitae with three references to:

New England Biolabs, Inc.
Human Resources
32 Tozer Road
Beverly, MA 01915-5510

NEW ENGLAND BIOLABS®
PHYSICS AND ASTRONOMY: Tenure-track position at the ASSISTANT PROFESSOR level beginning 15 August 1988. Applicants must have a Ph.D., be committed to excellence in teaching undergraduate physics courses, and be prepared to develop an active research program. Available positions include: astro- and biophysics, atomic physics, solid state physics, quantum physics, and experimental and theoretical physics. Same start-up funds for research are available. Review of completed applications will begin 8 January 1988. Candidate will present seminar and colloquium vitae (including lists of publications and external grants awarded), statement of research interests, and letter of recommendation from each doctoral advisor. Address application, in care of A. L. Fox, Department of Physics, Cornell University, Ithaca, New York 14853.

POSITIONS OPEN

PLANT PHYSIOLOGY

The Department of Environmental, Population, and Organismic Biology, University of Colorado, Boulder, anticipates opening for 1 December 1987, a faculty position in plant physiology at the ASSISTANT PROFESSOR level beginning in the fall of 1988. The department seeks an individual who will develop and maintain a vigorous research and teaching program. The specific field of plant physiological research is open, although it is hoped that the candidate will develop research programs involving an understanding of the controls of plant growth, development, and reproduction. Teaching responsibilities are flexible, but applicants should be broadly trained and capable of offering advanced courses in plant physiology. Applicants are invited to provide by 1 December 1987, only a statement of research and teaching interests, curriculum vitae, and the names of four persons from whom recommendations can be requested.

Dr. Russell Monson
Chair, Plant Physiology Search Committee
Department of Environmental, Population, and Organismic Biology
Campus Box 334
University of Colorado
Boulder, CO 80309

The University of Colorado at Boulder has a strong institutional commitment to the principle of diversity in all areas. In that spirit, we are particularly interested in receiving applications from a broad range of people, including minorities, women, people with disabilities, and disabled individuals.

PLANT PHYSIOLOGIST/PLANT ECLOGIST

Applications are invited for the position of RESEARCH SCIENTIST (rank open) for the Biological Sciences Center, one of five research centers of the Desert Research Institute, a division of the University of Nevada System. The Biological Sciences Center is currently pursuing regional ecosystem studies, global changes research, and programs addressing biosphere-atmosphere interactions for government and industry. Applicants must have a Ph.D. in biological sciences, professional experience beyond the Ph.D., a strong publication record, and the proven ability to attract research funding. Graduate and generous start-up funds are immediately available. A research background emphasizing plant-atmosphere interactions and/or remote sensing is highly desirable.

Salary is commensurate with qualifications and includes an excellent benefit package. Applications must be received by 20 November 1987. Send curriculum vitae, statement of research interests, and names of three references to: Personnel Office, Desert Research Institute, P.O. Box 62220, Reno, NV 89506. For addi- tional information contact: Dr. Carl Box at 702-672-7322. DRI is an Affirmative Action/Equal Opportunity Employer.

PLANT CELL BIOLOGIST: Applications are invited for a 10-month, tenure-track appointment, rank open, for a plant cell biologist with a strong background in biochemistry, cytology, and/or molecular biology. The successful candidate is expected to conduct a rigorous research program, primarily supported by extramural funding, in the area of light regulation and photosynthesis with biotechnology development potential. Teaching responsibilities include developing courses in photosynthesis/photosynthesis. Applicants must have a Ph.D. degree and postdoctoral research experience. Send a current resume, the names and addresses of three references, and a letter of application by 15 December 1987 to: Chairman, Plant Cell Biologist Search Committee, Department of Botany, University of Mary- land, College Park, MD 20742. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE POSITION AVAILABLE. The Cardio- vascular and Metabolism Section, Laboratory of Molecular and Cellular Biology, National Institutes of Health, National Heart, Lung, and Blood Institute is seeking a postdoctoral fellow to work on projects involving the regulation of gene expression and DNA replication. The postdoctoral fellow will be expected to work interactively within the laboratories of Dr. K. A. Brown and Dr. R. A. Brown. The position is for 1 year to begin December 1987. Responsibilities include development of strategies for the isolation and identification of regulators of gene expression, as well as the cloning and expression of new DNA sequences. The position will be located at the Clinical Center in Bethesda, Maryland. Salary: $25,000. To be considered, include curriculum vitae, previous work, current research plans, and three letters of reference. Applications should be sent to: Dr. Kenneth A. Brown, Laboratory of Molecular and Cellular Biology, National Institutes of Health, National Heart, Lung, and Blood Institute, Building 10, Room 11N22, Bethesda, MD 20892. The positions are subject to Federal and Departmental requirements and are available only to United States citizens.

Sally Mather
Laboratory of Molecular and Cellular Biology
National Institutes of Health
National Heart, Lung, and Blood Institute
Bethesda, MD 20892

The National Institutes of Health is an Equal Opportunity Employer.
POSITIONS OPEN

POSITION IN BACTERIAL PATHOGENESIS

Tenure-track position for established or promising investigator to create a program in bacterial pathogenesis with emphasis upon surface reactions and/or molecular genetics, in a department already strongly committed to research in inflammation, host defense, and molecular virology in the basic and clinical perspectives. Ample space and equipment as well as initial funding for technical help may have been committed. Rank and salary based upon individual qualifications. Please address inquiries along with curriculum vitae by 1 February 1988 to:

Henry Gewurz, M.D.
Chairman
Department of Immunology/Microbiology
Rush-Presbyterian Medical Center
1653 West Congress Parkway
Chicago, IL 60612

Rush is an Equal Opportunity/Affirmative Action Employer.

DEPARTMENT OF PATHOLOGY
UNIVERSITY OF BRITISH COLUMBIA (UBC)
VANCOUVER, B.C., CANADA

POSTDOCTORAL POSITION available immediately for the study of antioxidant enzymes and oxidant injury in eukaryotic cells. A Ph.D. degree and academic training in biochemistry, cell biology, or equivalents are required.

Candidates should have specific experience, supported by publications in peer-reviewed journals, in the study of oxygen free radicals or reactive oxygen metabolites. Salary is commensurate with Medical Research Council rates for the Ph.D. degree and years of experience. Partial support is available for candidates sponsored by other agencies.

Please send curriculum vitae with application letter to:

Dr. Anne P. Autor
Professor of Pathology, UBC
Associate Director, Pulmonary Research Laboratory
St. Paul's Hospital
1081 Burrard Street
Vancouver, B.C. Canada V6Z 1Y6

NATIONAL SCIENCE FOUNDATION

NSF's Division of Biotic Systems and Resources (BSR) is seeking qualified candidates for the position of Program Associate, Scientific Coordinator for Long-Term Ecological Research (LTER). The incumbent in this position will assume responsibility for several activities related to the LTER, and a major portion of the Ecosystem Studies Program's activities in connection with coordination and synthesis among LTER projects and between LTER and other research efforts. Other activities will include:

- Oversight of the research program
- Review of applications
- Management of the research program
- Facilitation of interactions among researchers
- Assistance in the development of new activities

The position requires a Ph.D. in ecology or related field, and will be based in Washington, DC. Salary is competitive and negotiable. Applicants should send a letter of interest, CV, and the names of three references to:

Dr. S. J. Quist, Department of Biology, Mayo Clinic/Foundation, Rochester, MN 55905.

An Equal Opportunity/Affirmative Action Institution.

KAROBIO

KaroBio AB is a recently formed biotechnology company that primarily employs molecular biology and other biotechnology methodology for research in the area of infectious diseases, bone and calcium metabolism, and steroid antigens. KaroBio benefits from a closely integrated relationship with the well-established biotechnology firm, California Bio-technology Inc.

KaroBio has excellent opportunities for qualified individuals at all levels with expertise in:

- Molecular Biology
- Cell Biology
- Protein Biochemistry

KaroBio will be located at the Huddinge Hospital in suburban Stockholm, and will operate in collaboration with the Karolinska Institute's recently established Center for Biotechnology. We offer a competitive compensation and benefits package within a stimulating research environment. Please submit curriculum vitae and names of three references to our affiliate: Human Resources, Attn: MF-PCs, California Biotechnology Inc., 2495 Borestone Parkway, Mountain View, CA 94043. An equal opportunity employer.
POSTDOCTORAL POSITION
Available to study the transcriptional activation of the shh gene and the simultaneous transcriptional inhibition of the shh gene by the repressive binding of the shH protein at adjacent operator sites in the divergent-overlapping shH-shH promoter region of Escherichia coli. [R. W. W. Hunte, 2441-2450 (1986)].

Applicants trained in either protein chemistry or molecular biology seeking additional training in either of these cognate areas are encouraged to apply. UCI is located in a desirable coastal area of Southern California.

Send inquiries to:

G. Wesley Hatfield, Ph.D.
Department of Cell Biology and Molecular Genetics
University of California, Irvine
Irvine, CA 92717

An Affirmative Action Equal Opportunity Employer

POSTDOCTORAL POSITION—Available immediately. EM, immunohistochemistry, and biochemistry of developable and immunoassay. Excellent research facilities and ample research time. Starting salary $20,000. Send curriculum vitae and names of three references to: Dr. E. Wise, Ph.D., Chairman, Department of Anatomy, Texas College of Osteopathic Medicine, 3516 Camp Bowie, Fort Worth, TX 76117-2690. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION to study surface antigens of Haemophilus and/or trichomons. Project includes antigen purification, characterization, definition of serotype and mucosal immunity, and gene cloning. Qualifications: recent Ph.D. in immunobiology/biochemistry/molecular biology and interest in host-parasite relationships. Salary commensurate with experience. Funding for 2 to 3 years. Submit resume and three letters of reference to: Dr. L. Corbel, Pathology Department, H811F, University of California San Diego Medical Center, 225 Dickinson Street, San Diego, CA 92103.

POSTDOCTORAL POSITION available early 1988 to study the role of DNA repair in resistance of human tumors to therapeutic alkylating agents. This NIH-funded project requires an expert in DNA cross-link formation and repair. Experimental approaches include: purification and characterization of DNA-repair enzymes, cell culture, and monoclonal antibody production. A recent Ph.D. in biochemistry or related discipline, with experience in any of these areas is preferred. Salary range: $22,000 to $25,000, depending on experience, plus housing, travel, health insurance, and phone. Send curriculum vitae and names of three references to: Thomas P. Brest, Ph.D., Department of Biochemical and Clinical Pharmacology, Sharp Memorial Hospital, 325 North Landerdale, Memphis, TN 38101. Equal Opportunity Employer.

POSTDOCTORAL POSITION for work on the design, construction and testing of retroviral vectors capable of gene insertion into murine bone marrow and other tissues as part of an anti-cancer strategy [Cancer Res. 46, 5276 (1986)]. Recombinant DNA experience desirable. Please send curriculum vitae and names of three references to: Dr. Frederick L. Moolten (151), Veterans Administration Medical Center, Bedford, MA 01730. Telephone: 617-275-7600. The VA is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to participate in USDA-funded study of environmental stress effects on the physiology and biochemistry of photosynthetic carbon metabolism. Ph.D. required. Application with supporting gas exchange data or detailed experience in biochemistry would be helpful. The position is for a maximum of 2.5 years at $20,000 per year to start. Send curriculum vitae, official transcripts, and three letters of recommendation to: Dr. Jeffrey R. Long, Department of Biochemistry, University of Nevada, Reno, NV 89557. Telephone: 702-784-6031. Application deadline: 30 November 1987. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to investigate regulation of T. brucei differentiation to the insect-infective form. Emphasis on effects of oncogenes and growth factors. Background in molecular biology, protein chemistry, or parasiology desirable. Two years of support available on NIH training grant for U.S. citizen, non-citizen national, or permanent resident. Reply with curriculum vitae and three references to: Dr. Charles B. Davis, H811F, University of California, San Diego Medical Center, 225 Dickinson Street, San Diego, CA 92103.

POSTDOCTORAL POSITION—MOLECULAR BIOLOGY. Available immediately, to study genetic regulation of T. brucei differentiation to the insect-infective form. Emphasis on effects of oncogenes and growth factors. Background in molecular biology, protein chemistry, or parasiology desirable. Two years of support available on NIH training grant for U.S. citizen, non-citizen national, or permanent resident. Reply with curriculum vitae and three references to: Dr. Charles B. Davis, H811F, University of California, San Diego Medical Center, 225 Dickinson Street, San Diego, CA 92103.

POSTDOCTORAL POSITION: Immediate opening for Ph.D. with 0 to 3 years of experience to investigate nucleofication of DNA in living cells, transcription/translation of DNA, and cell division. New modern facility. $21,000 to $27,000 per year. Send curriculum vitae to: Dr. K. C. Ingham, American Red Cross R&D, Biochemistry Division, 9300 Pacific Way, Rockville, MD 20855. Telephone: 301-738-0731.

POSTDOCTORAL POSITION available immediately for work in synthetic physiology and pharmacology in insects. Main focus is the use of genetic and molecular tools for characterizing the neuronal mechanisms underlying insect locomotion. Applicants with a Ph.D. and postdoctoral experience will be considered. Send curriculum vitae to: Dr. E. Adams, Department of Toxicology and Physiology, University of California, Riverside, CA 92521.

POSTDOCTORAL POSITION to study regulation of growth and maturation of mast cells. Large group research studying cell growth, biology, and cell-cell interaction. Background in cell culture and protein isolation, purification, and identification by chemical and molecular biological methods required. Opening as of 1 January 1988. Salary $18,000 to $22,000. Send resume and three references to: Dr. W. M. Gold, M.D., Cardiovascular Research Institute, Box 10130, San Francisco, CA 94143.

POSTDOCTORAL POSITION available for cell biologists/biochemists with 1 to 2 years of experience to study mechanisms of angiogenesis in vitro. Applicant should be familiar with tissue culture techniques, electron microscopy, immunohistochemistry, and in vivo angiogenesis in a chemically induced model of angiogenesis in vivo. Experience in photocoagulation and laser angiography sent. Send curriculum vitae to: Dr. Ivan Smith, Department of Surgery, University of Maryland Baltimore County, Catonsville, MD 21228. UMBC is an Equal Opportunity/Affirmative Action Employer. Qualified minorities and women are encouraged to apply.

TWO POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE POSITIONS available immediately. One position is for work on the role of cyclic nucleotides and calcium in the control of intestinal blood flow. The second position is for work on the regulation of insulin release in pancreatic beta cells. Candidates should have Ph.D. or equivalent degree with research background in biochemistry or pharmacology. Experience in animal physiology or pharmacology is desirable. Send curriculum vitae and names of three references to: Dr. Geoffrey W. G. Sharp, Chairman, Department of Pharmacology, NYS College of Veterinary Medicine, Cornell University, Ithaca, NY 14855. Application must be received by 15 November 1987. Salary range: $17,600 to $19,500. Cornell University is an Affirmative Action/Employer/Educator.

POSTDOCTORAL POSITION available for biochemical/cellular biology studies on the structure, purification, and regulation of a rDNA gene product. Recent Ph.D. in biochemistry, pharmacology, or molecular biology required. Experience with membrane-bound receptors useful. Send curriculum vitae and names of three references to: Dr. Gary L. Stiles, Department of Medicine, F.O. Box 3444, Duke University Medical Center, Durham, NC 27710.

POSTDOCTORAL POSITION available January 1988 to employ techniques of biochemistry, cell biology, and molecular biology to study intracellular cholesterol metabolism in mast cells. Experience in cell biology and molecular biology desirable. Send curriculum vitae to: Dr. Ira A. Tabas, Department of Medicine, Columbia University, 630 West 168 Street, New York, NY 10032.
Teaching Positions from Autumn 1988
In a Rapidly Expanding Institution
In Hong Kong

Department: Applied Science

Posts & Subject Areas: Principal Lecturer/Senior Lecturer/Lecturer/Assistant Lecturer in Physical Sciences/Life Sciences/Environmental Science

Requirements for Appointment: A good honours degree and a higher degree, preferably a PhD. Relevant professional, including teaching and research/industrial experience.

Salary Scale: HK$94,800 p.a. to HK$358,920 p.a. depending on level of appointment. (Exchange Rate: 1 US$ = HK$7.809 approx.)

Terms & Conditions: Excellent fringe benefits are offered including a 25% gratuity payable on successful completion of agreement, medical & dental schemes, and long leave. Passages and housing are provided where appropriate.

Application Procedure: Please rush detailed resume together with names and addresses of 3 appropriate academic and professional referees to reach the General Secretary, City Polytechnic of Hong Kong, P.O. Box 98441, Tsim Sha Tsui Post Office, Kowloon, Hong Kong by 14 November 1987. The latest. Information regarding the Polytechnic and on posts advertised may be obtained by mail upon request.

Research Scientists

With Genelabs, finding tomorrow's cures holds special urgency and significant reward. Today's health care concerns are daily challenges at Genelabs. Performance and pioneering technology are what set us apart. We're looking for the right people—with sound research skills and a genuine sense of mission—willing to join our highly interactive professional team.

Protein Chemist

Ph.D. in biochemistry plus 3-5 years experience in structural determination of macromolecules; fragmentation and sequencing of proteins and peptides. Experience with HPLC, 2D gel electrophoresis and automated sequencing/syntheses important.

Immunologist/Cell Biologist

Ph.D. and 3-5 years of relevant experience in tissue culture and the production and characterization of hybridomas/monoclonal antibodies. Prior experience with human hybridomas as well as supervisory experience desirable.

Molecular Biologists

Ph.D. or M.D. with 3 or more years experience and strong research capabilities in molecular cloning. Must be skilled in identification, expression and characterization in eukaryotic and prokaryotic systems. Positions exist in several ongoing projects.

Immunodiagnostic Scientist

Ph.D. in molecular biology, immunology or biochemistry with 3-5 years experience in protein modification. Will have project level responsibility for research and development of innovative immunodiagnostic products.

Opportunities also exist for qualified Research Assistants & Associates.

Our work environment is exceptional in our new facilities located in the Seaport Centre on the San Francisco Peninsula. Please forward CV and names of 3 references, in confidence, to: GENELABS INCORPORATED, 505 Penobscot Drive, Redwood City, CA 94063. Attn: Personnel. An equal opportunity employer.

Postdoctoral Research Fellowships

Postdoctoral fellowships are available to work on eukaryotic gene expression and viral induced transformation in Dr. Nicholas Jones' laboratory at the Imperial Cancer Research Fund, London, England. Two main areas of research are being pursued. The first involves the mechanism by which the Adenovirus E1A gene products can transactivate and repress expression of a variety of mammalian genes. The second involves the role of the E1A gene in the establishment of primary cells.

Candidates should have experience in molecular biology and recombinant DNA technology. The fellowships are tenable for three years in the salary range £12,500 to £16,000 depending upon qualifications and experience.

For further details contact Dr. N. Jones, Imperial Cancer Research Fund, Lincoln's Inn Fields, London WC2A 3PX or call 011-44-1-242-0200 Ext 2323.

Genelabs Incorporated
POSTDOCTORAL POSITION available 1 January 1998 to study the differential expression of nuclear genes encoding two chloroplastic ammonium- and nitrate-utilizing enzymes in marine invertebrates. The successful candidate will have experience with molecular biology, enzyme, cell biology, or immunology. Please send resume and letters of reference to: Dr. S. D. Varma, Professor and Director of Research, Department of Ophthalmology, University of Maryland School of Medicine, 10 South Pine Street, Baltimore, MD 21201. An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE Position available to study cellular and molecular pharmacology (mechanisms of action and/or toxicity) of trivalent and AIDs drugs. Ph. D. degree with experience in cell culture, drug–nucleic acid interactions and molecular techniques (transcription, translation, etc.) is desirable. Excellent opportunity for interaction with multidisciplinary research teams. Applicants should have research experience in nucleic acid technology and be available with three references to: Dr. J. P. Sommadossi, Department of Pharmacology, University of Alabama School of Medicine, Box 186, Birmingham, AL 35294. An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE Position available to study genes encoding proteins responsible for signal transduction/transport in the plasma membrane of plants. Experience with DNA cloning techniques preferred; prior work with plants unnecessary. Send curriculum vitae and names of three references to: Dr. Michael R. Sussman, 1575 Linden Drive, Department of Horticulture and Cellular/Molecular Biology, University of Wisconsin, Madison, WI 53706.
If you're not getting everything you want from your career, here's something to consider.

**Syva.**

We're a top medical diagnostics company that develops, manufactures, and markets a broad range of innovative tests that can diagnose infectious diseases or detect clinically significant substances. Syva's facilities are considered among the finest in the country with sophisticated lab equipment to handle the more routine scientific tasks.

**The result?**

You'll be free to do what a scientist does best — question, investigate and discover. You'll have many opportunities to advance your career and develop as a scientist. And you can positively determine the degree of your success. Because the last thing you want to experiment with is your career.

Right now, Syva has a growing number of opportunities for scientists in a variety of disciplines. Specific openings include:

**Senior Chemists**

Im mobilize proteins and enzymes for use in immunodiagnostic assays. Some research will involve hands-on activities studying the transport of materials from solution to surface membranes as well as determining methods of immobilization. Qualifications: PhD in Biochemistry or Physical Organic Chemistry with experience in surface chemistry, properties, absorption and biological system.

**Senior Chemist**

Investigate new measuring techniques for immunodiagnostics group and help solve problems with instrumentation. This position requires good digital electronic skills, mechanical abilities and knowledge of high and low level programming. PhD in Physical or Biological Sciences required.

We have other Sr. Chemist positions open which require a strong background in Physical, Organic and Biochemistry skills.

If you're looking for a career with results, consider Syva. Our benefits package includes generous relocation assistance. Please send your resume or CV to: Syva, Dept. DP, Professional Staffing, P.O. Box 10058, Palo Alto, CA 94303. An equal opportunity employer.

**A career with results.**
**POSITIONS OPEN**

**POSTDOCTORAL/RESEARCH ASSOCIATE**

A postdoctoral/research associate position is available for September 1988 to study the molecular genetics of muscle gene expression. Applicants must have a Ph.D. and experience in recombinant DNA methods. Starting salary is competitive. Send curriculum vitae with names of three references to: Dr. Robert V. Storti, Department of Biochemistry, University of Illinois College of Medicine, 1853 West Polk Street, Chicago, IL 60612.

**POSTDOCTORAL RESEARCH ASSOCIATE—**

Positions are available for an electrophysiologist to characterize the properties of central axons which have regenerating axons. The candidate has a potential for long-term appointment; to start January 1988. Send curriculum vitae and names of three references to: Dr. Stephen J. T. Baker, Division of Electrophysiology, Department of Neurology, Boston University School of Medicine, 33只是 I Street, 9th South, Boston, MA 02118. Position immediately available for a POSTDOCTORAL SCIENTIST in molecular genetics. The successful candidate will participate in a recombinant DNA techniques to investigate human T-cell activation. Please forward curriculum vitae and the names of three references to: Dr. Susan Han, Director, Laboratory Medicine, Children's Hospital, 300 Longwood Avenue, Boston, MA 02115.

**POSTDOCTORAL TRAINING IN CARDIOVASCULAR PHARMACOLOGY—MOLECULAR BIOLOGY.** A position is open to study the cell and molecular biology of proteoglycans and other arachidonic metabolites and their role in physiological and pathophysiological processes. Candidates (Ph.D. or M.D.) should have a strong background in biochemistry and/or pharmacology. Send curriculum vitae to: Dr. Phillip Needleman or Dr. John Merlie, Department of Pharmacology, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110. Washington University is an Equal Opportunity/ Affirmative Action Employer.

**BOSTON UNIVERSITY MEDICAL CENTER—ASSOCIATE PROFESSOR OF BIOCHEMISTRY IN MEDICINE**

The Departments of Biochemistry and Medicine at Boston University Medical Center invite applications for a senior academic position as Professor or Associate Professor of Biochemistry in Medicine. Applicants should be established scientists in an area of cellular or molecular biology related to human disease. The appointee will head a unit within our expanding programs in Biochemical Medicine, and will have the opportunity to recruit one or more junior research faculty. Additional facilities are under construction and substantial start-up funds are available. Interested individuals should submit their curriculum vitae, names of at least three referees, and a brief summary of past research accomplishments and future directions. Applications should be sent to: Biochemistry/Medicine Search Committee Room K-225 Boston University School of Medicine Medical Center, Boston, MA 02118

**Boston University is an Equal Opportunity Employer.**

**RESEARCH ADMINISTRATIVE POSITION:** Marine mammal/seabird ecologist. Applicants must have Ph.D. in biogeochemistry or ecology. One-year position with subsequent renewal possible. Salary: up to $30,000, with dependent health insurance and travel. Position contract/grant funding. Position available November 1987. Contact: P. Michael Payne, Marine Mammal and Seabird Research Unit, 4001 Bird Station Road, Annapolis, Maryland, 21405. Telephone: 410-264-6521.

**REFERENCE LABORATORY SCIENTIST**

Research and development scientists with Ph.D. in biochemistry and 3 years of research experience specializing in development of human T-cell regulation protein chemistry. Responsibilities include the development and implementation of tests to diagnose diseases of blood coagulation and the support of research technicians. $36,000 per year, 40 hours per week. Job site/interview in San Diego, California. Send this ad and your resume to: Dr. Mary A. Kimball, Box 9560, Sacramento, CA 95823-0560 no later than 30 October 1987. An Equal Opportunity/Affirmative Action Employer.


The Department of Biochemistry and Biophysics of the University of Pennsylvania invites applications for the position of RESEARCH ASSOCIATE-POSTDOCTORAL SCIENTIST. Applicants should have a strong background in ion-channel protein reconstitution including expertise with techniques used for purification such as tracer fluxes, planar bilayer incorporation, and patch clamping. Postdoctoral experience in these areas necessary. Candidates should have a University curriculum vitae, a summary of research experience and interests, and arrange for three or more letters of reference to be sent to: Franz Machensky, M.D., Chairman, Department of Biochemistry and Biophysics, University of Pennsylvania School of Medicine, Philadelphia, PA 19104-6056. Deadline for applications is 1 December 1987. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates.

**RESEARCH ASSOCIATE PROFESSOR OF PATHOLOGY:** Non-tenure-track position for individual interested in models of host-parasite interactions in human periodontal disease. Successful candidate will be provided with laboratory facility. He/she must have grant support to fund salary and research costs. Send CV and salary expectations to: Dr. Norton Taichman, Department of Pathology, School of Dental Medicine, University of Pennsylvania, Philadelphia, PA 19104-6002. An Equal Opportunity/Affirmative Action Employer.

**RESEARCH ASSOCIATE**

The University of Maryland at Baltimore, Center for Vaccine Development, has immediate openings for research associates in its Plasmid Culture and Applied Immunology laboratories. Candidates should have a Bachelor's or Master's degree in the biological sciences, and at least 1 year of laboratory experience. First-hand knowledge of the procedures and equipment employed for preparing and analyzing microbial and immunological specimens is essential. Tissue culture experience is desirable. Annual salary range: $18,500 to $26,000. Submit resume to: Mr. Charles R. Young, Division of Genetics, 1501 North Draper Street, Baltimore, MD 21201.

**RESEARCH ASSOCIATE—CHEMISTRY.** Work with new cancer drug (photensitizer), whose structure is unknown except that it is a mixture of porphyrin-type compounds. (a) Characterization and toxicity studies. (b) Syntheses of regioisomers and analogs. (c) Characterization and toxicity studies in vivo using biochemical and pharmacological approaches. Preference will be given to applicants with experience in EM, immunocytology, and/or radioimmunossay. M. D. or Ph.D. in anatomy, physiology, biochemistry, or related discipline based on experience. Please send curriculum vitae to: Dr. James N. Davis, Box 2900, Duke University Medical Center, Durham, NC 27710. A affirmative Action Employer.

**RESEARCH ASSOCIATE**

A young and dynamic Long Island biotechnology firm has immediate openings for talented individuals to work in a stimulating and multidisciplinary environment.

**PROTEIN/PEPTIDE CHEMISTRY**

RESEARCH ASSOCIATES AND SCIENTISTS with experience in protein/peptide purification and characterization, and/or peptide modifications, and/or physical protein chemistry.

**IMMUNODIAGNOSTICS/IMMUNOCHEMISTRY**

We need energetic and creative people at both RESEARCH ASSOCIATE and SCIENTIST levels to learn state-of-the-art methods and apply them to develop advanced immunodiagnostic products. Candidates with product development experience in immunochemistry, microbiology, and/or immunology are preferred. United Biomedical, Inc. provides a unique and challenging environment for personal and professional growth, as well as an outstanding benefits package. Qualified applicants should send their résumé to: Anne-Marianne Schuler, United Biomedical, Inc., 2 Nevada Drive, Lake Success, NY 11042.

**RESEARCH ASSOCIATE:** Two positions available, current year, recommended 3 years of grant support. Recent Ph.D., strong chemical background. Join a career laboratory conducting research on marine mammal photosensitizers and their potential to inhibit. Get on-job experience with proteins, structure-function relationships. Mail résumé to: Dr. Darrell N. Ward, Department of Biochemistry, Marine Mammal Biology, 224A School of Marine Science, University of North Carolina, Morehead City, NC 28557. An Equal Opportunity/Affirmative Action Employer.

**RESEARCH ASSOCIATE:** Available immediately for Ph.D. or M.D. to study the structure and function of molecular proteins. The project will use chemical and molecular biological approaches to elucidate events and mechanisms in the early stages of ribosome assembly. Salary will be competitive and commensurate with experience. Send résumé and names of three references to: Dr. Mark Olson, Department of Biochemistry, University of Minnesota, St. Paul, 2500 North State Street, Jackson, MS 38216-4505. An Equal Opportunity Employer, M/F/H/V.

**RESEARCH ASSOCIATE**

To conduct research and develop diagnostic procedures in the field of maternal and fetal placental hemodynamics, using the Doppler ultrasound technology and computers. Duties involve controlled in vitro model experiments in the laboratory, in vivo experiments in the biological systems of pregnant women, and statistical analysis of the clinical Doppler indices. Hemodynamic study in the pulsatile flow systems includes the use of high-speed data acquisition and analysis of the Doppler techniques. Immediate opening for a postdoctoral researcher experienced in Doppler instrumentation by interfacing with the computer. Ph.D. in chemical engineering required, 40 hours per week, salary $24,000 per year. Résumé to: Division of Employment Security 421 East Dunklin Street Jefferson City, MO 65101 Attention: John E. Scott Reference J.O. # 061700

**RESEARCH ASSOCIATE**

Position for candidate with Ph.D. in immunology to conduct studies on pancreatic tumor antigens. Candidates must have minimum of 1 year of experience in hybridoma technology, DNA technology, monoclonal, FACS, ELISA, RIA assays. Research publications required. Salary $17,400 minimum. Submit curriculum vitae and names of three references. Apply to: Employment Commission Office, 516 North Mangum Street, Durham, NC 27701 or local Job Service Office. Refer to Job Order No. 710071. A/E/O 227-010, 4 affirmative Action Equal Opportunity Employer.

**RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW: Opportunity to join laboratory investigating catecholamine neuronal plasticity and catecholamine reuptake in vivo using biochemical and pharmacological approaches. Preference will be given to applicants with some experience in EM, immunocytochemistry, and/or radioimmunossay. M. D. or Ph.D. in anatomy, biochemistry, or related discipline based on experience. Please send curriculum vitae to: Dr. James N. Davis, Box 2900, Duke University Medical Center, Durham, NC 27710. A affirmative Action Employer.**
MicroGeneSys, Inc.
is strongly committed to developing recombinant vaccines for AIDS and other infectious diseases. Recent achievements in MicroGeneSys' vaccine programs have established a platform for dynamic growth. We invite qualified scientists to consider a career with MicroGeneSys. Senior Scientist (Ph.D.), Research Associate (M.S.), and Research Technician (B.S.) level positions are now available in the following areas:

- **Protein Biochemistry**
- **Immunology**
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At MicroGeneSys, we offer a stimulating and challenging scientific environment, competitive salaries and an excellent benefit package. The Company's south central Connecticut location, near New Haven is convenient to New York City and New England locations.

For immediate consideration, please submit a curriculum vitae along with a statement of research interests and salary history, in confidence, to the Personnel Director, MicroGeneSys, Inc.

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**Clinical Research Project Manager**

Squibb Corporation is recognized internationally as an innovative leader in the research, development and marketing of pharmaceutical and related health care products. Due to our continued growth, we currently have a newly created opportunity available for a senior level scientist with a strong interest and experience in document planning and preparation to join our Clinical Research Operations Group.

Qualified candidates should have a PhD in Pharmacology or Microbiology or equivalent with a minimum of 5 years' experience in basic research, scientific documentation and computer application. Excellent writing skills are essential. You will be responsible for analyzing, integrating and supervising the preparation of documents from information gathered primarily from the clinical research area. These documents will be utilized in support of New Drug Applications and related scientific publications. Additional responsibilities include document planning and design, manual and automated data retrieval and handling, and the coordination of documentation activities.

This position is based at our Corporate Headquarters in Princeton, N.J., a pleasant semi-rural setting convenient to both Philadelphia and New York City. For confidential consideration, please submit your curriculum vitae to Squibb Corporation, Human Resources Dept., 658, P.O. Box 4000, Princeton, N.J. 08543-4000. An equal opportunity employer.

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**Mycogen Corporation**

Mycogen Corporation is advancing in many areas of research. Our company, based in San Diego, has several opportunities for top research professionals:

- **MOLECULAR GENETICS RESEARCH SCIENTIST** — PhD with 5-8 years' experience in prokaryotic molecular biology, particularly bacilli. Work will involve gene isolation, gene expression, conjugation, fusion and mutagenesis in a variety of bacilli including *Bacillus thuringiensis*.

- **RESEARCH ASSISTANTS**
  - **BIOCHEMISTRY:** Experienced research assistant with Bachelor's or Master's in biochemistry and lab experience supporting protein chemistry related projects.
  - **MOLECULAR GENETICS:** Bachelor's or Master's in molecular biology and 1-3 years' lab experience involved in associated research projects.

- **FERMENTATION:** BS in microbiology with 1-2 years' related experience including bacterial, mutagenesis and/or small scale fermentation. Positions involve the isolation and fermentation optimization of specialized fermentation production strains of *Bacillus* and other bacteria.

- **ENTOMOLOGY:** BS or MS in microbiology with 1-3 years' directly related experience involving culture maintenance, colony identification and microbiological screening. Strong analytical and aseptic technique skills required. Fluency in Japanese strongly preferred.

- **FERMENTATION MICROBIOLOGISTS** — Positions available for skilled fermentation microbiologists to develop bacterial and fungal fermentations to 10-liter scale. BS or MS with 3-5 years' industrial fermentation development experience.

- **FERMENTATION RESEARCH SCIENTIST** — PhD in microbiology/biochemistry. Project will involve optimization of a proprietary process for killing and fixing bacterial cells to be used as pesticide products. Experience with immobilized cells or enzymes preferred.

- **FERMENTATION SCALE-UP SUPERVISOR** — Will be responsible for in-house pilot fermentation operations and will assist with scale-up and supervision of manufacturing processes. BS or MS with strong background in microbiology and process development. 5 years' or more industrial pilot or large-scale fermentation experience.

Mycogen offers a highly competitive compensation and benefits package, and prides itself on accomplishing objectives that stretch our technical capabilities. If you have a desire to work at the edge of technology, send your resume indicating specific position desired, including salary requirements, to: Stan Sewitch, Director of Human Resources.

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Where science comes to life.
RESEARCH OPPORTUNITIES IN BIOTECHNOLOGY

The Department of Biotechnology Research has openings for three RESEARCH TECHNICIANS to work in the molecular Genetics group. Minimum required baccalaureates are a B.S. degree or equivalent in genetics, or one of the biological sciences with course work in biochemistry, molecular biology, and genetics. Applicants with work experience in molecular biology and a demonstrated competency in nucleic acids analysis (DNA/RNA extraction, gel electrophoresis, gel transfers, and hybridization) will be preferred.

Lab Automation: Applicants should have practical experience in equipment development or design for molecular biology systems.

Technique Development: Applicants should have a strong background in chemistry and biochemistry. Will be involved in developing novel solutions to molecular biology problems.

RFLP Mapping: Will join a group currently using RFLPs to study quantitative traits in maize.

Send resumes indicating which job you are applying for, including the names and addresses of two references and a description of relevant experience to:

Dr. David Grant
Pioneer Hi-Bred International, Inc.
7300 NW 62nd Avenue, P.O. Box 38
Johnston, IA 50131

PIONEER

Pioneer Hi-Bred International, Inc. is an Equal Opportunity/Employer.

RESEARCH SCIENTIST—DNA/PROTEIN CHEMIST

The University of Arizona has an opening for a research scientist with experience in DNA and/or protein chemistry. Appropriate Ph.D. or equivalent degree in some branch of chemistry or biological sciences. Duties will involve managing a core facility equipped with state-of-the-art automated sequence and synthesis instruments, and conducting independent research. The facility has a technical support staff and operating budget of $650,000. The successful applicant will be expected to apply for grants to support his/her research program. The position is continuing or continuing eligible, depending upon qualifications. Salary is open, subject to negotiation. Applications will be accepted until 30 November 1987, and will be accepted until the position is filled. The University of Arizona is an Equal Opportunity/Affirmative Action Employer. Address applications to: Dr. John H. Law, Biotechnology Program, Biosciences West, University of Arizona, Tucson, AZ 85721. The University of Arizona is an Equal Opportunity/Affirmative Action Employer.

RESEARCH SCIENTIST FOR KRESGE EYE INSTITUTE OF WAYNE STATE UNIVERSITY

The Director of Research will be retiring in the near future from the Kresge Eye Institute (KEI) and his position is being vacated. KEI, in conjunction with Wayne State University School of Medicine, is conducting a search for his replacement. The search emphasizes the need for a leader with a track record of excellence in research directed toward the solving of fundamental problems in clinical ophthalmology. The position requires demonstrated administrative and organizational ability and a commitment to teaching. The position provides a tenure-track professorship, modern laboratory space, and University and Departmental support. Inquiries and curriculum vitae are invited. Robert S. Jampel, M.D., Ph.D., Chairman of Search Committee, Department of Ophthalmology, Kresge Eye Institute, 30944 John R., Detroit, MI 48201. An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE

A research position for an individual with a recent Ph.D. in molecular biology, or a related area of biomedical science and with specific expertise in recombinant DNA techniques. Funding available for 5 years. Send curriculum vitae and names of three referees to: Dr. J. Peirce Walker, Department of Microbiology, Box 3028, Duke University Medical Center, Durham, NC 27710. Affirmative Action/Equal Opportunity Employer.

RESEARCH INSTRUCTOR

RESEARCH INSTRUCTOR with recent Ph.D. in biochemistry and research experience in the design and synthesis of radioactive affinity reagents for labeling ATPase and kinases, and in the elucidation of structure-function relationships of enzymes. Starting date: 1 April 1988. Send curriculum vitae and names of three referees to: Karen Connelly, SUNY/Buffalo, Einstein Chair, 170 Acheson Hall, Buffalo, NY 14214-3094. An Equal Opportunity/Affirmative Action Employer.

RESEARCH PHARMACOLOGIST

Ph.D. or M.D. required. Candidates for this position should have at least 2 years experience in the measurement of anticholinergic and their metabolites in biological samples taken from patients. Candidates should demonstrate independent research experience by scientific publications. This position requires the supervision of laboratory assistants, laboratory set-up, and the teaching of fellows.

Experiences with the following analytic methods are also necessary: High-pressure liquid chromatography with UV and electrochemical detectors; radioimmunoassay; and gas chromatography. Candidates should also have experience in the development of radioimmunoassays preferably for anticholinergic drugs and their metabolites.

The salary is $34,600. We are an Affirmative Action/Equal Opportunity Employer. Submit a letter of interest, curriculum vitae, and the names of three references to: Stephen B. Marder, M.D., VA Department of Veterans Affairs, 3101 Wilshire Boulevard, Building 210, Room 15, Basement Los Angeles, CA 90073.

SENIOR IMMUNOLOGIST—Riker Laboratories Inc., the Pharmaceutical Subsidiary of 3M, has an immediate opening for a Ph.D. immunologist to conduct research on the immune regulation of allergic diseases. Candidates must have a strong background in research capabilities in antibody regulation, and in cellular immunology. Experience with animal models and computational data analysis is desired. At least 2 years of postdoctoral research experience is required.

SENIOR LIPID BIOCHEMIST—Also, an immediate opening exists for a Ph.D. biochemist to conduct research on lipid mediators of allergic diseases. Candidates must have a strong background in receptor-based assays of lipid mediators and animal pharmacology experience. At least 2 years of postdoctoral research experience is required.

Riker Laboratories Inc. is located in St. Paul, Minne- sota, in a state-of-the-art environment, benefits, competitive salary, and opportunities for professional advancement. For confidential consideration, please send your résumé with salary history to: F. H. Capiz (no later than 16 November 1987)—Staffing and Employment Resources/3M, Building 224-1W-02, St. Paul, MN 55144-1000. An Equal Opportunity Employer.

SENIOR PHARMACOLOGIST/ GROUP LEADER

(CANADA)

Merck Frost Canada Inc., a leading Canadian pharmaceu- tical company with modern research facilities located near Montreal, has a challenging opening for a Senior Pharmacologist in its Department of Pharmacology. The candidate should maintain international reputation, a proven publication record and the ability to lead a team of scientists and to define new program initiatives. The candidate should preferably be experienced in one of the following areas of pharmacology: respiratory, smooth muscle, cardiovascular, renal or gas- trointestinal. An academic background in physiology is required to define the role of eicosanoids (in particular leuko- trienes and thromboxane A2) in a variety of pathophysiological processes, to develop novel therapeutic approaches to the treatment of allergic and respiratory diseases and to elucidate new therapeutic targets. The successful candi- date would have a unique opportunity to initiate a major new program.


SENIOR FACULTY POSITION IN GENETICS

DEPARTMENT OF BIOLOGY

THE JOHNS HOPKINS UNIVERSITY

We invite applications or nominations for a tenured position, full professorship, for a distinguished individual with an active research program in molecular genetics. The Department of Biology is located in a modern building on our Homewood campus in the University's new Health Science Center. Further information telephone: 301-338-7285. To apply or nominate, send curriculum vitae before 1 December 1987 to: Allen Shearn, Chairman, Genetics Search Committee Department of Biology The Johns Hopkins University Baltimore, MD 21218 The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.

SENIOR RESEARCH ASSOCIATE: Starts 1 January 1988. To conduct research on human natural killer (NK) cells in tumor development. Duties include computer instruction and operation of an Epics 541 flow cytometer. Requirements include completion of academic requirements for M.S. in microbiology/immunology; 2 years of computer instruction; experience with Epics flow cytometer, prefer 541; human tissue culture and assays for polys and NK cells. Starting salary $15,600 per year. Applications accepted for one month. Send résumé and three reference letters to: Antony Bakke, Ph.D., Oregon Health Sciences University, L471, Portland, OR 97201. Affirmative Action Employer.

SENSORY NEUROPHYSIOLOGIST: Tenure- track position for position available at assistant profes- sor level. Serious commitment to collaborative work within the Microsurgical Research Center. Expertise in electrophysiology and histology required; knowledge of sensory systems and plasticity and effects of peripheral nerve and axonal remodeling is required. Applicants should have a Ph.D. and at least one year of postdoctoral experience in sensory neurophysiology. Preference for applicants experienced in spinal cord neurophysiology and tract tractography by anterograde and retrograde techniques. Please send curricu- lum vitae with three letters of recommendation to: Dr. Julia Terzic, Micrornusical Research Center, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501.
POSITION ANNOUNCEMENT
CELL AND MOLECULAR BIOLOGISTS

The School of Life Sciences at the University of Illinois, Urbana-Champaign, announces the further development of its graduate and undergraduate programs and an expansion of its faculty in an emerging department of eukaryotic cell and molecular biology. Several new tenure-track faculty will be recruited over the next several years at the Assistant and/or Associate Professor levels. Up to two of these positions will be filled for the 1988-89 academic year, with a starting date of August 21, 1988. Applicants should hold the Ph.D. degree or equivalent, and show exceptional promise in research, which preferably should address molecular issues in developmental, neural, or cell biology. Salary will be commensurate with rank and experience. Duties will include participating in the teaching of courses in the broad areas of eukaryotic cell and molecular biology.

Substantial start-up funds and laboratory facilities will be available to initiate new faculty research programs for which the UIUC offers exceptional and broad-based supporting resources. These resources include the Center for Electron Microscopy, with state of the art instrumentation; the Center for Biotechnology, which includes facilities for molecular cloning and DNA and protein synthesis and sequencing; the Cell Science Center, which houses and staffs a hybridoma facility and flow cytometry unit; School of Life Sciences-subsidized shops; and a superb university library system, the third largest in the nation. The UIUC is a National Center for Supercomputing Applications, and construction of the Beckman Institute for Advanced Science and Technology, which will combine research in the physical and biological sciences, is well underway. Many other units within the Schools of Life Sciences and Chemical Sciences and the Colleges of Medicine and Engineering offer opportunities for interactions in the cellular and molecular sciences.

Urbana-Champaign combines the residential advantages of a medium-sized city (population 120,000) with outstanding cultural amenities within the University, and its location in east-central Illinois gives easy access to the cities of Chicago and St. Louis.

Applicants are requested to send a curriculum vitae, a summary of research interests, and three letters of reference to:

David L. Stecum, Search Committee Chairman
School of Life Sciences
University of Illinois
393 Morrill Hall
505 S. Goodwin Ave.
Urbana, IL 61801
Telephone: (217) 333-6118

In order to ensure full consideration, applications should be received by February 15, 1988.

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

Manager, Industrial Toxicology

The Occupational Health and Safety Department of SmithKline Beckman Corporation announces the new position of Manager, Industrial Toxicology, located at world corporate headquarters in Philadelphia. Incumbent will evaluate toxicological information on research compounds, products and workplace materials, and manage the hazard communication program. Responsibility involves all major components of SKB’s health care related businesses.

A Ph.D. or M.S. in toxicology, or equivalent experience, is required, with seven or more years professional experience in toxicology, at least two of which are in industrial toxicology. Must be knowledgeable re-testing protocols, reference databases and regulatory issues including hazard communication requirements. Experience with computer systems is also required.

Top-tier corporation offers high quality professional and personal environment. Competitive compensation includes stock options and flexible benefits in 1988. Submit resume to F. J. Best, SmithKline Beckman Corporation, 1540 Spring Garden Street, Philadelphia, PA 19101. We are an equal opportunity employer, M/F/H/V.

SmithKline Beckman

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BIOCHEMIST/ MOLECULAR BIOLOGIST (PhD)

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As a PhD in Biochemistry or Molecular Biology, you can enjoy a high visibility role on a team that is exploring the molecular regulation of LDL receptors. Prior experience with lipoprotein receptors is necessary. Postdoctoral experience would be helpful.

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SERIAL PEPTIDE/PROTEIN BIOCHEMIST

Cortech is a Denver-based research and development company in the biopharmaceutical industry. We are seeking a senior biochemist with at least 2 years of postdoctoral training in protein chemistry and peptide synthesis. The biochemist must be able to work independently in a multidisciplinary research group and be experienced in state-of-the-art peptide synthesis, amino acid analysis, and protein chemistry techniques. Cortech offers a competitive salary and benefits package including opportunities for stock options. Please send resume to: Dr. Timothy C. Rodell, Cortech, Inc., 6040 North Broadway, Unit F, Denver, CO 80211

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STAFF DIRECTOR
BOARD ON ASSESSMENT OF NATIONAL CURRICULUM
PROGRAMS

The National Research Council is seeking a Staff Director to manage, direct, and assure scientific quality for activities of the Council. Responsibilities include evaluating the scientific functions and operations of the National Bureau of Standards of the U.S. Department of Commerce, primarily through annual reviews of each of the major NBS technology units. Principal managerial responsibilities include financial oversight, relations with the Department, and oversight of preparation of evaluative reports. Candidates should have a Ph.D. in a technical discipline relevant to the NBS programs, and four or more years of experience directly relevant to the administration of multidisciplinary programs. Technical experience and interest in highly desirable. Demonstrated organizational abilities, interpersonal skills, and writing abilities also desired. Please submit resume to: National Research Council, Position #006.001, 2101 Constitution Avenue, N.W., Washington, DC 20418. Equal Opportunity Employer.

THEORETICAL POPULATION BIOLOGIST

The Department of Biological Sciences at the State University of New York at Binghamton invites applications for a tenure-track faculty position in theoretical population biology. Preference in combining mathematical and computational approaches to test modeling hypotheses and to interpret predictions is desired along with an interest in contributing to the development of a center for organized research in theoretical population biology. The candidate should have the ability to support productive research projects, maintain a dynamic graduate training program and interact effectively with undergraduate students. Appointment will be at the assistant or associate professor level.

Applications should send a letter of application, including a statement of research and teaching interests, curriculum vitae, copies of recent publications, and the names, addresses, and telephone numbers of three referees to: Dr. Dale Madison, 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 UTAH DEPARTMENT OF BIOCHEMISTRY

TWO TENURE-TRACK POSITIONS are available for autumn 1988. Preference will be given to applicants at the level of assistant professor, but candidates for associate professor will also be considered. Applicants should hold a doctoral degree, have postdoctoral experience, and have demonstrated research ability. Although areas of research are open, they should fall into the broad province traditionally understood as being biochemistry. Teaching responsibilities are largely to graduate and medical students. Interested individuals should submit curriculum vitae, a statement of research background and interests, and three letters of recommendation to: Faculty Search Committee, Department of Biochemistry, University of Utah School of Medicine, Salt Lake City, UT 84132. Deadline for applications is 15 December 1987; late applications may be considered if openings are still available. Equal Opportunity/Affirmative Action Employer.

UROLOGIC RESEARCH POSITION

A tenure-track position is available for an individual to further develop his/her research programs. Applicants should have a Ph.D. with background in cell biology and/or biochemistry, and some postdoctoral experience. Current projects involve research into growth factors that play a role in the pathogenesis of urinary tract tissue. Prior exposure to techniques with respect to prostate malignancy, but the recruited individual should have the opportunity to develop independent research as well. The position is currently open, and salary will be commensurate with experience. Please send curriculum vitae and any letters of support to: Mark J. Noble, M.D., Urology, U. of Utah Medical Center, 39th and Rainbow, Kansas City, KS 66108.

UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA)—INTERCAMPUSSCIENCE MEDICAL GENETICS TRAINING PROGRAM

The UCLA intercampus postdoctoral research training program in Medical Genetics utilizes the research and clinical resources of its affiliated campuses and teaching hospitals. This program is oriented to applicants with the M.D., Ph.D., D.D.S., or equivalent degrees. A wide variety of research training opportunities in molecular, biochemical, immunof, cancer, cytogenetic, cell, population, and clinical genetics are available. The program also meets all the requirements of the American Board of Medical Genetics. Application forms are available from David Rimoin, M.D., Ph.D., Department of Pediatrics, Cedars-Sinai Medical Center, 8700 Beverly Boulevard, Los Angeles, CA 90048.

FELLOWSHIPS

POSTDOCTORAL RESEARCH FELLOWSHIPS

Position available 1 January 1988, to study the molecular biology of the retinoblastoma gene. This individual will join an expanding group that is part of the Basic Research Program emphasizing urogenital gene expression and regulation and molecular oncology. Experience in molecular or molecular virology is desirable, but not essential. For further information contact: Dr. David J. Garfinkel, BRL-Basic Research Program NC/ Frederick Cancer Research Facility P.O. Box 5, Building 589 Frederick, MD 21701

An Equal Opportunity Employer M/F/H/V.
The National Institute of Neurological and Communication Disorders and Stroke (NINCDS) invites nominations and applications for the position of Chief, Laboratory of Neuronal Growth and Regeneration (LNGR), Division of Intramural Research (DIR). This is a Civil Service position in the Senior Executive Service with a salary range of $64,700-$73,400 per annum. The person selected may be eligible for Physician’s Comparability Pay ranging from $4,000 to $10,000 per year. A one-year probationary period must be served by the individual selected if not currently in the Senior Executive Service.

The Chief, Laboratory of Neuronal Growth and Regeneration provides technical and administrative direction and leadership to the Institute’s research program in neuronal growth, regeneration, and implantation of neural tissue and serves as the focal point within the Federal sector, scientific community and the public for these activities.

For more information on the position, contact Dr. Eugene Streicher on 301/496-5745. For information regarding qualifications requirements, contact Ms. Janet Clagett on 301/496-6334. The following forms are required: Application for Federal Employment (SF-171) accompanied by a current curriculum vitae and bibliography. These must be submitted to: Ms. Janet E. Clagett, National Institutes of Health, NINCDS Personnel Office, Building 31, Room B225, 9000 Rockville Pike, Bethesda, Maryland 20892.

Applications must be postmarked no later than November 30, 1987.

All qualified candidates will receive consideration without regard to race, religion, color, sex, age, national origin, lawful political affiliation, marital status, union membership, or any nondisqualifying physical or mental handicap.

The National Institutes of Health is an equal opportunity employer.
FELLOWSHIPS

OPPORTUNITIES FOR ADVANCEMENT IN MAMMALIAN REPRODUCTIVE BIOLOGY

NIH-supported predoctoral and postdoctoral training opportunities with an interdepartmental, multidisciplinary orientation. Research areas include: glycoprotein synthesis and secretion, fertilization (Collar), steroid hormones and carcinogenesis (Jones), neuroendocrine control of gonadal function in primates (Knobil), biosynthesis and metabolism of steroid hormones (Steinberger), steroid and sex hormone receptors (Dunathan), and gonadal and interstitial cell tumors (Kuksis, Fellowship Committee Chairman, Banting and Best Department of Medical Research, University of Toronto, Toronto, Ontario M5G IL6).

Academic Anesthesiology fellowships

University of Michigan Medical School
Ann Arbor, MI 48109-0048
Telephone: 313-936-4235

The Department of Anesthesiology at Michigan is offering Academic fellowships for the 1988 to 1989 Academic Year in Critical Care Anesthesiology, Obstetrical Anesthesiology, Cardiovascular Anesthesiology, and Research in Anesthesia. Minimum qualifications include: Board eligibility. These fellowships are designed for individuals looking towards a career in academic anesthesiology. Forty percent of each fellow's effort will be devoted to clinical care; 60% will be devoted to research. Please contact: J. S. Finch, M.D., Professor and Chairman at the address and telephone number listed above for further information.

A Nonresident Fellowship, Affective Action/Equal Opportunity Employer.

Postdoctoral fellowship. A vacancy exists for a postdoctoral fellow interested in studying the regulation of immunity to tumor transplantation antigens and histocompatibility antigens. Applicants should have basic training in immunobiology. Starting salary will be $18,500 plus liberal fringe benefits. Subsidized Institute housing is available. The Trudeau Institute is a private, non-profit, basic medical research institute located on the shore of Saranac Lake, N.Y.

Send curriculum vitae and names of three references to:

Dr. Robert J. North, Director
Trudeau Institute, Inc.
P.O. Box 59
Saranac Lake, NY 12983

NIH Postdoctoral Fellowships available at Loma Linda University in Southern California for U.S. citizens or permanent residents with Ph.D. interest in molecular biology or receptor biology of growth factors. Fellows will join large multidisciplinary, multidisciplinary laboratory, the interaction of growth factors and connective tissue cells, with emphasis on the role of growth factors and their receptors in regulating end organ functions in disease and health. Research projects available in molecular biology, receptor studies, protein purification, enzyme kinetics, monoclonal antibody production, cell culture, histochemistry, morphology and protein synthesis. Competitive stipend, including health benefits, commensurate with experience. Send curriculum vitae and two letters of reference to: J. B. S. M. S., M.D., (151), Petit's VA Hospital, Loma Linda, CA 92357.

FELLOWSHIPS

Doctoral fellowships in molecular biology

The University of Illinois announces the availability of Ph.D. graduate fellowships for predoctoral training in molecular biology of infectious diseases and the physiology of growth/reproduction. Successful candidates will have the opportunity to study and work with faculty in the Departments of animal science, biochemistry, microbiology and veterinary pathology. Faculty interests encompass topics related to Apis mellifera in molecular genetics of bacteria, viruses, and parasites as well as molecular immunology and genetics of growth/reproduction. The fellowship will emphasize molecular biology and will be tailored to the area of interest and training needs of the student's interest. In addition to dissertation research with a selected faculty member, students will have access to other laboratories via special research projects. In addition, the fellow will be provided with an opportunity for instruction in our campus-wide Genetic Engineering and Biotechnology Research Centers.

To qualify, individuals must be U.S. citizens with an excellent scholastic record and have a B.S. degree in some area of biology. Postbaccaleurate, graduate training or other relevant experience will be favorably considered. Individuals with D.V.M. or M.D. degrees are encouraged to apply. The selected candidates will receive a 12-month stipend of $15,000 plus a tuition and fee waiver. Applications will be considered at any time for the 1987 to 1988 academic year and interested applicants should forward resumes and three letters of reference to:

Dr. Wayne A. Tompkins, Department of Veterinary Pathobiology, University of Illinois, 2001 South Lincoln Avenue, Urbana, IL 61801.

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

FELLOWSHIPS

Postdoctoral fellowships available immediately in biochemical genetics for a Ph.D. or M.D. to work on research projects involving lysosomal storage disease, hereditary hemorrhagic telangiectasia, and cystic fibrosis. A Ph.D. in biochemical genetics, cell biology, or biochemistry preferred. CLINICAL GENETICS fellowship available for an M.D. emphasizing drosophila biology, genetics and counseling. Applicant should have a minimum of 2 years of residency training. Send resume and three references to: Professor C. C. W. Corcoran, Acting Director, Division of Human Genetics, Children's Hospital, 3200 Atlantic Avenue, Boston, MA 02118.

A Nonresident Fellowship, Affective Action/Equal Opportunity Employer.

Postdoctoral fellowship available immediately. Study involves VLDL influences on cultured endothelial cell function. The interaction of translational and transcripional levels (use of cDNA probes) including activator binding studies. Send curriculum vitae and names of three references to: Dr. F. A. E. Doel, Division of Cardiovascular Disease, University of Alabama at Birmingham, 1038 Zeigler Research Building, Birmingham, AL 35294, A Affirmative Action/Equal Opportunity Employer.

Postdoctoral fellowship available immediately. Study involves VLDL influences on cultured endothelial cell function. The interaction of translational and transcripional levels (use of cDNA probes) including activator binding studies. Send curriculum vitae and names of three references to: Dr. F. A. E. Doel, Division of Cardiovascular Disease, University of Alabama at Birmingham, 1038 Zeigler Research Building, Birmingham, AL 35294, A Affirmative Action/Equal Opportunity Employer.

The Beineberg Graduate School of the Weizmann Institute of Science is now offering postdoctoral fellowships in the following fields of study: BIOLOGY, PHYSICS, CHEMISTRY, MATHEMATICS, BIOCHEMISTRY-BIOPHYSICS, and SCIENCE TEACHING.

These fellowships are intended for young scientists who have recently received a Ph.D. degree. The fellowship provides a 12-month stipend (with COL, adjusted) a relocation allowance, and airfare to Israel. If the fellowship is renewed for a second year, return airfare is provided. Application forms and additional information may be obtained from:

The Beineberg Graduate School
The Weizmann Institute of Science
Rehovot, 76100 Israel

Applications are reviewed twice each year:

1 January and 15 May

OPENINGS FOR SCIENTISTS

The Weizmann Institute of Science is now offering a limited number of temporary appointments to the position of Scientist. Candidates must have completed 2 years postdoctoral training.

Appointments will be made in all the areas of scientific research at the Institute. BIOLOGY, PHYSICS, CHEMISTRY, MATHEMATICS, BIOCHEMISTRY-BIOPHYSICS, AND SCIENCE TEACHING.

Appointments are for a period of 1 year; however, they may be extended for a period not to exceed 3 years from receipt of Ph.D. degree (or equivalent). Successful appointees will be eligible to apply for promotion to the position of senior scientific researcher.

Financial remuneration for a scientist is at the level of lecturer and includes all of the associated benefits. In addition, a relocation stipend is provided. Application forms and additional information may be obtained from:

The Beineberg Graduate School
The Weizmann Institute of Science
Rehovot, 76100 Israel

Applications are reviewed twice each year:

1 January and 15 May

The Division of Geographical and Planetary Sciences at the California Institute of Technology expects to offer POSTDOCTORAL RESEARCH FELLOWSHIPS in one or more of the following areas: geology, geophysics, chemistry, geombiochemistry, and planetary sciences. Interested persons are asked to send their resumes to: The Division Chairman, Division of Geological and Planetary Sciences (PD), California Institute of Technology, Pasadena, CA 91125, A Equal Opportunity/Affirmative Action Employer.

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Bristol-Myers Company is pleased to announce a $16,000,000
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search program is to identify the mechanisms by which human
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will be awarded for research which directly tests laboratory
findings in human trials.

Applications are invited from qualified investigators world-
wide. Applicants may be associated with academic institu-
tions, research institutes, government laboratories or other
facilities capable of conducting these types of investigations.
Applications will not be accepted from individuals affiliated
with or employed in the pharmaceutical industry or engaged
in for-profit research.

Applications will be accepted until January 1, 1988 and will
then be reviewed by a panel of experts, independent of Bristol-
Myers. Awards will be announced on or about April 1, with
funding commencing July 1, 1988. Additional information
about this program can be obtained by writing:

Mr. Gary Doyle
Program Coordinator
Bristol-Myers Company
5 Research Parkway
P.O. Box 5100
Wallingford, CT 06492-7660
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Optical Sectioning: Purkinje cell, mouse cerebellum. Photo at left taken at 7.5 microns below the surface of the sample. Photo at right taken at 15 microns below the surface.

Confocal imaging offers improved horizontal resolution — as much as 1.4 times that of a conventional light microscope. In addition, TSM provides powerful optical sectioning. This feature allows imaging at any depth (or depths) within a sample, limited only by the transparency of the material and the working distance of the objective used. This feature results from the TSM’s ability to reject light scattered outside the focal plane.

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