SCIENCE publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no abbreviations. A minimum of 10 weeks must be ordered. Send orders for all issues in a single mailing. Advertising is due 15 days before publication. Rates effective as of July 1, 1987.

POSITIONS WANTED

Entomologist, Ph.D. Creative researcher interested in insect-plant interactions. Experience in natural and managed systems, reproductive strategies, biochemical techniques, gen electrophoresis, and GLC. Three years teaching experience. Excellent communication and analytical skills. Seeking a teaching position in university/industry. Box 86, SCIENCE.

M.D. Experience in virology and clinical research, AIDS surveillance, education, and counseling. Seeks AIDS-related position. Box 88, SCIENCE.


Plant Physiologist, Ph.D. Postdoctoral experience. Expertise in tissue culture physiology. Recently established a forage stress physiology research program. Desire relocation to western United States in academic or industrial environment. Box 81, SCIENCE.

Virology/Immunology, Ph.D. Thirty years of pharmaceutical and industrial experience developing human vaccines, other biological products. Planning, implementing clinical studies to support licensing of new products, with statistical analysis, publication of results. Laboratory director, contract management and consulting. Box 80, SCIENCE.


POSITIONS OPEN

ASSISTANT PROFESSOR, NEUROSCIENCE FACULTY/research position for appropriate Ph.D. Qualifications and experience must include strong graduate or medical school teaching skills and significant research accomplishments. Applicant must have postdoctoral experience and a PhD in Neuroscience. Box 81, SCIENCE.

ASSISTANT PROFESSOR OF BIOCHEMISTRY department MONTANA STATE UNIVERSITY Biochemistry position, tenure-track, assistant professor (higher rank considered). Must have Ph.D. in a molecular or area of comparable discipline. Demonstrated experience is preferred. Demonstrated ability for creative research and the promise of effective teaching of biochemistry courses at the undergraduate and graduate levels, and of establishing a vigorous well-supported research program. Preference given to candidates who have experiences in areas of molecular genetics, nuclear acid chemistry, protein chemistry, molecular pathology and toxicology, molecular biology, bioregulators, immunology, and specific receptor research. Screening of applicants will begin 26 June 1987 and continue until a suitable applicant is hired. Applicants should send a letter of application, résumé, reprints of representative papers, and names, addresses, and current telephone numbers of three references to: Biochemistry Search Committee, Department of Chemistry, Montana State University, Bozeman, MT 59717. Montana State University is an affirmative action/equal opportunity employer.

ASSISTANT PROFESSOR OF PATHOLOGY NORTHWESTERN UNIVERSITY MEDICAL SCHOOL A tenure-track position to begin October 1987. Compensation, flow cytometry, and other instrumentation and as well as a demonstrated commitment to research are essential. Duties include supervision of flow cytometry laboratory and study of patient and research activities. Although persons involved in various facets of biological investigation will be considered, preference will be given to those doing research on cell growth and cell transformation. Applicants should send curriculum vitae, a statement of research, and names and addresses of three references by 15 July 1987 to: Dr. D. G. Assoep, Cell Res., Department of Pathology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611. Northwestern University is an affirmative action/equal opportunity employer.

ASSISTANT/ASSOCIATE PROFESSOR. Molecular biology/virology—tenure track. Develop research program applying advanced molecular biology procedures in studies of viral respiratory diseases of cattle. Seek external funding to help support research. Teach professional and graduate level courses. D.V.M. or chemistry and Ph.D. with postdoctoral experience preferred. Candidates with Ph.D. and a minimum of 2 years of postdoctoral experience will be considered.

Send curriculum vitae and names of three references to: Dr. S. B. Mohanty, Associate Dean, Virginia-Maryland Regional College of Veterinary Medicine, University of Maryland, College Park, MD 20742. University of Maryland is an affirmative action/equal opportunity employer.

The Section of Pediatric Neurology at the University of Michigan in Ann Arbor has a position available immediately. ASSISTANT/ASSOCIATE PROFESSOR, SCIENTIST LEVEL (RESEARCH FACULTY TRACK). A Ph.D. in molecular or cell biology and 2 to 5 years of postdoctoral experience is required. We are investigating interactions between brain endothelial cells and astrocytes with an emphasis on response to injury. A joint appointment with the appropriate basic science department may be arranged. Contact: G. Resnick, 205 Sherman Hall, Buffalo, New York 14214. Target date for receipt of applications is 1 August 1987. State University of New York is an affirmative action/equal opportunity employer.

POSSESSION PLACE.
POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR—The University of Wisconsin-Madison and the William S. Middleton Memorial Veterans Hospital Psychiatry Service, Madison, Wisconsin, is seeking a Board-certified or Board-eligible psychiatrist to direct the Mental Health Clinic outpatient care. Candidates will receive a professor-ship at the assistant or associate level at the University of Wisconsin Department of Psychiatry. We are seeking a person with interest in alcohol or other substance abuse who is able to generate an independent research program in addition to providing leadership for clinical services in the drug and alcohol abuse area. Duties may include involvement at the University of Wisconsin Hospitals, collaboration with other faculty, and involvement in medical student and resident education programs. The salary is competitive. The position is available 1 July 1987 to 1 October 1987. Applications, including curriculum vitae, should be directed to: Dr. Barry Eichelman, G. W. B. Veterans and Mental Health Service, William S. Middleton Memorial Veterans Hospital, 2500 Overlook Terrace, Madison, WI 53705. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

ASSOCIATE/ASSOCIATE PROFESSOR
INSTITUTE OF MOLECULAR BIOLOGY AND BIOCHEMISTRY
SIMON FRASER UNIVERSITY

Applications are being accepted for an assistant/associate professor position in the Institute of Molecular Biology and Biochemistry. Candidates should have research interests which involve modern molecular biology and biochemistry. The successful candidate will be expected to establish an active research program which includes the training of graduate students. The successful candidate is expected to teach both undergraduate and graduate courses in molecular biology and biochemistry. The position is available 1 July 1987. Closing date for applications will be 15 September 1987. Preference shall be given to applicants who are eligible for employment in Canada at the time of application.

BIOLOGY—One-year appointment to teach animal physiology, embryology, histology, microbiology, and general biology. Fall term in Arkadelphia and spring term in Little Rock, with a preferred commencement date of 31 August. Send resume to: Dr. Robert Dorris, HSU Box 7544, Arkadelphia, AR 71923; telephone: 501-246-5811, extension 3207. Henderson State University is an Equal Opportunity/Affirmative Action Employer. Selection begins 1 July 1987.

CHAIRPERSON, Department of Medicinal Chemistry, Virginia Commonwealth University. Applicants are invited for the position of Professor and Chairperson of the Department of Medicinal Chemistry, School of Pharmacy, Medical College of Virginia, Virginia Commonwealth University, Richmond, VA. The Department, with eight full-time faculty, is an integral part of the undergraduate B.S. program in pharmacy and offers M.S. and Ph.D. degrees in medicinal chemistry. Currently 14 predoctoral students are enrolled. Applicants must present a distinguished record of research and teaching accomplishments, success in research funding, and a demonstrated capability for administration. The candidate must possess an earned Ph.D. or Sc.D. degree in medicinal chemistry or the related chemical or pharmaceutical sciences. A professional degree in pharmacy is desirable. The successful candidate must have strong interpersonal skills, the ability to motivate faculty and students, and a demonstrated capacity to provide effective program leadership. Salary and starting date are negotiable. The Search Committee will review applications received by 15 November 1987 or until a suitable candidate is identified. Applications should send a complete curriculum vitae and the names of three references to: Dr. John P. Ford, Chairman, Search Committee, Box 613 MCV Station, Virginia Commonwealth University, Richmond, VA 23298. Virginia Commonwealth University is an Affirmative Action/Equal Opportunity Employer.

CELL GENETICIST—To work as an independent investigator in a section of molecular genetics composed of four faculty members. Areas of research include the study of research in situ hybridization, somatic cell hybrids, and the analysis of specific abnormalities in inherited disease. The successful candidate will be expected to develop and maintain an active research program. The appointee will be expected to maintain present with an active research program. The position is available 1 July 1987. Send resume to: John A. Barranger, M.D., Ph.D., Professor of Molecular and Medical Genetics, USC School of Medicine; Head, Division of Molecular Genetics, Children's Hospital of Los Angeles, 4650 Sunset Boulevard, Los Angeles, CA 90027.

CHAIR, DEPARTMENT OF BIOCHEMISTRY AND NUTRITION

The School of Medicine of the University of North Carolina at Chapel Hill (UNC-CH) seeks an independent investigator to academic excellence to provide professional and administrative leadership for the research and teaching programs of this basic science department. Located primarily in excellent modern facilities of the School of Medicine, the School of Pharmacy, and the School of Arts and Sciences. Reply with curriculum vitae and a list of at least three references. The position will become vacated before 15 September 1987 to: Dr. G. P. Maniere, Chair, Search Committee for Chair of Biochemistry and Nutrition, School of Medicine, 125 MacNider 2024, University of North Carolina at Chapel Hill, Chapel Hill, NC 27514. Women and minorities are encouraged to identity themselves voluntarily. UNC-CH is an Equal Opportunity/Affirmative Action Employer.

CHAIRPERSON
DEPARTMENT OF PHARMACOLOGY

The State University of New York Health Science Center at Syracuse, College of Medicine, a center for research, professional education, and patient care, invites applications and nominations for the position of Professor and Chairperson, Department of Pharmacology. Candidates must have an M.D., Ph.D., or equivalent degree, a distinguished research record, and proven leadership and administrative ability. A highly competitive salary and generous fringe benefits are offered. Send nominations or letters of application (with curriculum vitae, summary of experience, and four letters of reference) to: Dr. Charles H. Flaherty, Task Force Chair, Search Committee, Department of Anatomy and Cell Biology, SUNY Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210. Applications are invited from women and minorities as a part of affirmative action. SUNY is an equal opportunity employer.

CLINICAL CHEMIST: Applicants with M.D. and/or Ph.D. degree are invited to apply for an unexpected opening in our clinical chemistry section. Faculty appointment can be tenure-track or clinical-track depending on experience and interests. The successful candidate will help to lead the clinical chemistry laboratory of Barnes Hospital, a 1054-bed teaching hospital of the Washington University Medical Center. Successful candidates should have a commitment to excellence in teaching and patient care. Academic rank and salary will be commensurate with experience and accomplishments. Send letter of inquiry and curriculum vitae to: Jack H. Ladenson, Ph.D. or Jay M. McDonald, M.D., Division of Laboratory Medicine, Washington University School of Medicine, 660 South Euclid-Box 8118, St. Louis, MO 63110.

CURATOR OF FISH

Requires B.A./B.S. in marine biology, biology, or zoology, with minimum of 3 years of experience as an associate curator. Responsibilities include supervision and administrative experience preferred. Will assist in the design and planning of major new public aquarium. Send letter, resume, and three references to: P. B. D. Wellington, Vice President, Project Development, Zoological Society of Philadelphia, 34th Street and Girard Avenue, Philadelphia, PA 19104.

POSITIONS OPEN

COMPUTER SCIENTIST. Develop systemwide plans for scientific and commercial application of artificial intelligence. Implement plans for moderate size product components. Design solutions. Standard programming languages, Basic, Pascal, C, LISP, OF55, and FORTRAN. Knowledge of PDP-11, 6502, IBM/370, UNIX operating system. Forty hours per week, $8.00 to $5.00, $55,000 per year. Requirements: B.S. in computer science or computer engineering and 1 year of experience or Master of Computer Science with concentration in artificial intelligence; training required in programming and assembly languages; technical interview and submission to Department of Employment Security, 402 North Randolph Street, Champaign, IL 61820; Attention: Wanda Byrd, Reference #7020-H. An employer-paid ad.

CYTOGENETICIST. A major university-affiliated hospital invites applications of qualified candidates to share the responsibilities to oversee the Clinical and Research Divisions of Genetics. Salary and position will be commensurate with experience. Please send curriculum vitae and telephone number to: James Campbell Assistant Director of Personnel The Long Island College Hospital Brooklyn, NY 11201 Equal Opportunity Employer M/F/H.

DIRECTOR
INSTITUTE OF MOLECULAR BIOLOGY AND BIOCHEMISTRY
SIMON FRASER UNIVERSITY

Applications are being accepted for the position of director of the newly formed and funded Institute of Molecular Biology and Biochemistry. The Institute is a multidisciplinary body with six faculty from the Departments of Biological Sciences and Chemistry. Current faculty research interests vary from physical biochemistry to molecular genetics. The Director will be expected to oversee the growth of the Institute, including the selection of several new faculty members. The duties of the Director, in addition to maintaining a strong research program, will be to operate a general administration program, to serve as an administration advisor, and to act as official spokesman for the Institute, and to administer all funds allocated to the Institute. Applicants should forward a complete curriculum vitae, reprints of recent significant publications, and three letters of reference to: Dr. J. W. George Ivany Vice-President, Academic Simon Fraser University Burnaby, B.C. V5A 1S6 Closing date for applications will be 15 September 1987. Preference shall be given to applicants who are eligible for employment in Canada at the time of application.

DIRECTOR—BOTANIC GARDEN
SANTA BARBARA, CALIFORNIA

Sixty-five acres plus herbarium, requires now an exceptional individual to lead it into the 21st century. Responsibilities: Lead, motivate, manage, and direct 35 staff to plan and implement programs of display, education, and research; establish inter-institutional links; undertake fund-raising; act as spokesman; be technical advisor to the Board. Qualifications: A botanist with leadership skills to manage annual budget approaching $1 million; written/oral communication skills; fund-raising experience; ability to manage research projects; be experienced in active roles to commensurate with experience: health and retirement plans.

Submit résumé in confidence to: Mr. Philip Thresher, President, Santa Barbara Botanic Garden, c/o P.O. Box 50437, Santa Barbara, CA 93150. Job description on request. Appointment date soonest but to suit successful applicant.
POSITIONS OPEN

DIRECTOR OF AQUARIUM OPERATIONS

Requires 5 years of experience in facility maintenance. Experience in water treatment and management. Will assist in design and planning of facility mechanical and life support systems for major new public aquarium. Will be responsible for operation and maintenance of same.

Send letter, resume, and three references to: Dr. Judith L. Wellington, Vice President, Project Development, Zoological Society of Philadelphia, 34th Street and Girard Avenue, Philadelphia, PA 19104.

DIRECTOR

Clinical Cytogenetics Laboratory

The Department of Laboratories and Pathology at Los Angeles County–University of Southern California Medical Center, the principal teaching hospital of the University of Southern California School of Medicine, seeks a Director for its Cytogenetics Laboratory. Requirements include a Ph.D. in cytogenetics or related field, experience in medical diagnostic cytogenetics and molecular genetics, and eligibility for or certified by the American Board of Medical Genetics. Responsibilities include directing the cytogenetics laboratory, establishing an independent research program and participation in the teaching programs of the Department of Pathology. Faculty appointment in the University of Southern California School of Medicine at a rank commensurate with qualifications and experience.

For further information, telephone: 213-226-7151. To apply, send curriculum vitae and three references to: Edward H. Wong, M.D., Associate Director of Laboratories and Pathology, LAC/USC Medical Center, Room 2900, 1200 North State Street, Los Angeles, CA 90033.

DIRECTOR

Coal Extraction and Utilization Research Center

Southern Illinois University at Carbondale

Applications are invited for the position of Director of the Coal Extraction and Utilization Research Center, available immediately. A Ph.D. degree in science or engineering is required. Applicants must have leadership ability and significant experience in coal or coal-related research, grantmanship, and in developing coal or coal-related research programs. Applicants must also have demonstrated the ability to communicate well with others at all levels, and to work constructively with faculty and staff from a variety of disciplines. Responsibilities include developing and coordinating research programs related to coal, assisting the faculty in securing and managing external research funds, acting as an interface between the University and industry, the state government, and the federal government in coal-related efforts, and to coordinate the collection and dissemination of the results of faculty and staff research relating to coal.

Inquiries should be directed to:
Chairman, Search Committee
Coal Research Center
Southern Illinois University at Carbondale
Carbondale, IL 62901

Closing date: 15 June 1987, or until filled. An Equal Opportunity/Affirmative Action Employer.

DIRECTOR, MOLECULAR BIOLOGY

A leading independent and well-established biotechnology company in southern California is seeking a qualified individual in their research and development department to direct the company's efforts in its newly formed molecular biology department.

The candidate should have a Ph.D. and at least 5 years of experience in all aspects of molecular biology and immunology, especially recombinant DNA such as nucleic acid hybridization, RFLP, and monoclonal technology. In this capacity the candidate will interface with a highly prestigious and knowledgeable scientific advisory board and will be responsible for recruiting an initial staff of ten scientists. The candidate must have proven leadership skills, and be able to communicate well both within the company as well as with outside contacts. Remuneration and fringe benefits commensurate with experience. Further information please forward your résumé in strict confidence to Box 82, SCIENCE.

12 JUNE 1987

EPIDEMIOLOGISTS

The Epidemiology Branch of Environmental Epidemiology and Biometry Division, Health Effects Research Laboratory, U.S. Environmental Protection Agency (EPA) seeks epidemiologists to conduct independent and collaborative research on the effects of environmental exposures on human health. Study designs integrating epidemiologic and laboratory approaches will be emphasized, initially focusing on the use of laboratory measurements of genetic damage in human specimens.

Candidates should have a M.D. or a doctoral degree in a health-related field, and a strong academic background in epidemiology and biology. Experience with complex field studies involving collection of biologic specimens, specialized clinical studies (such as neurologic testing), or other use of laboratory assays in collaborative or clinical epidemiologic studies would be highly desirable. Applications will be considered for positions ranging from the equivalent of postdoctoral fellows to tenured senior investigators (GS-11 to GS-13). The salary range is $27,172 to $50,346 per annum; physicians may be eligible for Comparability Pay up to $10,000 annually. The position is located in Research Triangle Park, North Carolina.

Forward curriculum vitae and three references prior to July 10, 1987, to:
Chief, Epidemiology Branch
c/o Marcye Kesselman, Ph.D. (MD-29)
Research Triangle Park, NC 27711

AN EQUAL OPPORTUNITY EMPLOYER

LEAD SCIENTIST

Drug Residue Research

Food Safety Research

Wyndmoor, PA

ARS is seeking a Research Chemist to lead a drug residue research program to develop poly and monoclonal and immunoaffinity, immunochemical and other chemical or biochemical methods to screen animal physiological fluids and tissues for drug residues. Candidate must have knowledge of and/or actual experience in the analysis of animal drugs, drug metabolism, pharmacology, pharmacokinetics and physico-chemical isolation techniques. Ph.D. is desired. Must be a U.S. Citizen. Salary is commensurate with experience GS-13/15 ($38,727–$53,830). For information on the program or position, contact Dr. Donald W. Thayer, 215-233-6582. For information on application procedures contact Lisa Botella, 215-233-6573. Applications in response to this announcement should be marked 7E023. Applications should be sent to: Lisa Botella, USDA, ARS, NAA, 600 East Mermaid Lane, Philadelphia, PA 19118. Applications must be received by June 29, 1987.

ARS IS AN EQUAL OPPORTUNITY EMPLOYER. WOMEN AND MINORITIES ARE ENCOURAGED TO APPLY.

Bristol-Myers

Postdoctoral Fellowship

Electrophysiology Laboratory

The Bristol-Myers' Pharmaceutical Research and Development Division is seeking a Postdoctoral Fellow to join its Central Nervous System Electrophysiology Research Team at our new research facility in Wallingford, CT. This appointment is for one year (with possible renewal for a second year) and is completely funded by the Company.

Responsibilities will include carrying out neuropharmacological and neurophysiological studies utilizing intracellular recordings from neurons maintained in vitro. Publication of research results will be strongly encouraged.

The successful candidate will be working in a stimulating and interesting multidisciplinary research environment which includes ongoing work in the areas of neurochemistry, receptor binding, neuroanatomy, behavioral pharmacology, and medicinal chemistry. Besides Central Nervous System research, the Bristol-Myers Research Community is composed of Anti-Cancer, Infectious Disease and Cardiovascular research areas. Bristol-Myers supports and encourages interaction and collaboration with the scientific community both internally and externally with scientists affiliated with various academic institutions worldwide.

Candidates must have or be nearing completion of their Ph.D. Persons having previous experience with electrophysiological techniques, especially involving intracellular recording from brain slices or cultured neuron, will be given preference.

For confidential consideration forward your curriculum vitae in confidence to: Bristol-Myers Company, Pharmaceutical Research & Development Division, Department PD-SC24, 5 Research Parkway, PO. Box 5100, Wallingford, CT 06492. An equal opportunity employer. (Principals Only Please)
Research scientist (master's or Ph.D.) with special interest in the immunology of early pregnancy and pregnancy loss is needed for basic and clinical research program in reproductive immunology. Emphasis on cellular and molecular immunology desirable. Expected to be an independent investigator who is willing to work closely with clinicians and oversee an immunology laboratory with experience in lymphocyte cultures and tissue typing assays. Assistant professor level preferred. For further information, send letter and curriculum vitae to:

James R. Scott, M.D., Professor and Chairman
Department of Obstetrics and Gynecology
University of Utah School of Medicine
Salt Lake City, UT 84132

Applications must be postmarked by 30 July 1987. The University of Utah is an Equal Opportunity/Affirmative Action Employer. Applications received after the deadline may not receive consideration.

FACULTY POSITION. Portland State University. The Department of Chemistry announces a tenure-track position at the level of assistant professor starting September 1987 or January 1988. Research experience in biochemistry and/or analytical/spectroscopy are required in addition to teaching ability at the undergraduate and graduate levels of chemistry. Candidates will be expected to develop a strong externally funded research program which will complement our existing Ph.D. program. Applicants should send curriculum vitae, a statement of research goals and interests, and three letters of reference by 15 July 1987 to: Dr. John H. Golbeck, Department of Chemistry, Portland State University, Portland, OR 97207. Position is contingent upon available funding. Portland State University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS IN PHARMACOLOGY UNIVERSITY OF MINNESOTA SCHOOL OF MEDICINE

The Department of Pharmacology has tenure-track positions open for a full professor and an associate professor. Applications are invited from qualified candidates with a Ph.D. and/or M.D. in pharmacology or related fields. Salary commensurate with experience. CURRICULUM VITAE AND LETTERS OF REFERENCE are required. The successful candidates are expected to have shown excellence in research, teaching, and service. Send the above information to: Search Committee, Department of Pharmacology, 3-260 Millard Hall, 435 Delaware Street S.E., University of Minnesota, Minneapolis, MN 55455. Deadline for receipt of applications is 30 June 1987. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

The Department of Anatomy at the University of Missouri–Columbia invites applications from qualified individuals for two full-time, tenure-track FACULTY POSITIONS (one available 1 September 1987, the other 1 January 1988) to conduct research in such areas as molecular biology, neuroendocrinology, and/or cell biology. Teaching duties are negotiable. Applicants should have a Ph.D. or equivalent and should have evidence of proven potential in research and teaching activities. Salary commensurate with qualifications and experience. Applicants are requested to send letters of interest and curriculum vitae to Dr. W. K. Paul Sparber, PhD., Department of Anatomy, University of Missouri Medical School, University of Missouri–Columbia, Columbia, MO 65212 by 1 November 1987. The University of Missouri is an Equal Opportunity/Affirmative Action Employer.
NEUROTOXICOLOGIST
Northrop Services, Inc. - Environmental Sciences is seeking a neurobiologist with expertise in in vitro systems to implement, validate and apply various in vitro approaches to neurotoxicological evaluations.

The successful applicant will have a major role in developing an approach to utilize in vitro test methods for neurotoxicity screening, and testing chemicals and complex mixtures for their neurotoxic potential. Candidates should have a Ph.D. in neurobiology or related field, a record of publication, and experience with a variety of in vitro techniques.

Qualified applicants should send resume with salary history and salary requirements, in confidence to:

Human Resources
NORTHROP SERVICES, INC.

UNIVERSITY OF MINNESOTA, MINNEAPOLIS
Endowed Chair in Materials Science
Advanced Materials Synthesis,
Characterization and Processing

Applications are invited for appointment to the 3M Harry Heltzer Multidisciplinary Chair in Materials Science. It is anticipated that this tenured professorship appointment will be as early as Fall 1987 but no later than Fall 1988.

The appointment will be made in a field of advanced materials science. This includes such areas as materials synthesis, characterization and processing. Scientists and engineers with outstanding records of research excellence are invited to apply. The new professor will be expected to provide leadership in research, postgraduate supervision, teaching in materials science, and as a link between the University, advanced engineering centers, and 3M.

The Department of Chemical Engineering and Materials Science has excellent facilities for materials research and a growing effort in Materials Science and Engineering. Currently, the Department has about 150 graduate students, mostly Ph.D. candidates, and nearly one half of these are in various aspects of materials research. Additional resources include the Supercomputer Institute, the Surface Science Center, and the Microelectronics and Information Sciences Center (MIES). Salary and research funds available are commensurate with the $2 million endowment. Applications should be made by September 1, 1987 to: Professor William Gerberich, Chairman 3M Chair Search Committee, 151 Amundson Hall, University of Minnesota, Minneapolis, MN 55455. Telephone (612) 625-8548. Include curriculum vitae and the names and addresses of three references. The University of Minnesota is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities.

UNIVERSITY OF MASSACHUSETTS
DIRECTOR,
GRADUATE PROGRAM IN
NEUROSCIENCE AND
BEHAVIOR

The University of Massachusetts at Amherst has opened a search for the Director of the new interdisciplinary graduate program in Neuroscience and Behavior, now in its second year of operation. The membership of the Program includes 21 core faculty from the Departments of Psychology, Zoology, Computer and Information Sciences, Biochemistry, and Microbiology, as well as affiliated faculty at the University and at Amherst, Mount Holyoke, and Smith Colleges. Applicants should have a strong commitment to graduate education, a distinguished record of research accomplishment; and a position of leadership in an area of neuroscience or behavior. The successful candidate will be expected to ensure the excellence of the graduate training program, to assist in the planning and development of common research facilities, to participate actively in the recruitment of new faculty members, and to foster collaboration with other departments and programs in the university. Funding is available for graduate assistantships, support staff, equipment, and other program activities. Space and facilities will be provided for the candidate’s own research group. Appointment will be made at the senior faculty level, preferably in affiliation with the Zoology Department. Salary will be commensurate with qualifications and experience. The position will be available September 1, 1987. Applications or nominations including the candidate’s curriculum vitae, a current list of publications, and the names of three referees, should be sent to: RS Director Search, Neuroscience and Behavior Program, Norris Science Center, University of Massachusetts, Amherst, MA 01003; telephone 413-545-2048. Applications will be accepted until September 15, 1987, or until the position is filled. The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.

BIO/MOLECULAR ENGINEERING
Naval Research Laboratory
NRL, the Navy’s corporate laboratory, is seeking highly motivated Ph.D.’s to fill permanent staff positions for expanding programs in Biosensor and Biomaterials Development. Current research areas include projects on the development of sensitive detection systems using immunological and receptor-based sensor technology, synthesis and characterization of novel lipids, research on the properties of lipid-derived tubules in various matrices, and the use of biomolecules in microelectrode techniques. Candidates should possess the following qualifications:

- Biomedical/Immunological/Experience in protein chemistry, fluorescence techniques, and antigen/antibody coupling to solid substrates.
- Neurochemical/Pharmacology/Strong background in membrane protein biochemistry, receptor isolation, and diagnostic techniques.
- Materials Scientist/Experience in development and analysis of novel materials containing biological components.
- Process Engineer/Experience in colloids, coatings, and electrode processes with potential biophysical applications.
- Lipid Physical Biochemist/Experience in utilizing advanced physical probes to characterize lipids.
- Genetic/Protein Engineer/Experience in chemical and/or genetic modification of proteins.

Salary range GS-11 to 15 ($27,172 to $69,976) based on qualifications and experience. Postdoctoral and technical positions are also available. Send resume and references to:

Civilian Personnel Office
Code 1813.1 (S)
Naval Research Laboratory
4555 Overlook Avenue, S.W.
Washington, D.C. 20375-5000
ATTN: Ms. Kathy Weaver

An Equal Opportunity Employer • U.S. Citizenship Required

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Applicants must possess the ability to establish and support an independent program of research, as well as teaching and interest. Submit current curricula vitae, names of three references, and a statement of research plans to: Kenneth W. Wright, M.D., Division of Ophthalmology, Los Angeles County + University of Southern California, 4650 Sunset Boulevard, Los Angeles, CA 90027.

MOLECULAR BIOLOGIST

The Department of Microbiology, Immunology and Parasitology, New College of Veterinary Medicine, Cornell University, seeks candidates for a tenure-track position as assistant professor. Appointment at a higher level may be possible for exceptional candidates. The successful applicant is expected to develop an independent, scientifically competitive research program that will be supported by independent research funding, as well as by laboratory and institutional core facilities. The minimal qualifications for this position include a Ph.D. and preferably a D.V.M. or equivalent. Experience in molecular virology and training at the postdoctoral level are required. The individual will participate in the department's research programs and will be expected to contribute to the department's research activities. Applications in virology and microbiology are encouraged. The University is an equal opportunity/affirmative action employer.

LABORATORY INVESTIGATOR IN BOWEL MOTILITY

Applications for a full-time research position at the assistant professor level are sought from candidates with a Ph.D. in an appropriate scientific discipline, an M.D. and at least 2 years of postdoctoral experience in studies of bowel motility in large animals with emphasis on changes in motility patterns due to surgical operations. Experience should include both in vivo and in vitro studies of the effects of hormones and of intestinal intrinsic neurons; experience with in vitro studies of small bowel is highly desirable. Teaching responsibilities in related journals are required as documentation of experience. Individual must be proficient in fabrication of bipolar electrodes and strain gages, in aseptic surgical implantation of these devices, and in recording and analyzing myoelectric and motor activities of the bowel. The successful applicant will conduct independent studies of intrinsic nerves of and regulation of small bowel motility, and studies of bowel motility in postoperative patients. Proven ability to secure extramural funding is required. Responsibilities include a commitment to formal and informal teaching activities, as well as to the supervision of graduate students and postgraduate students in the Department of General Surgery. Submit curriculum vitae and references to: Robert E. Condron, M.D., Chairman, Department of Surgery, Medical College of Wisconsin, 8700 West Wisconsin Avenue, Milwaukee, WI 53226. The Medical College of Wisconsin is an Affirmative Action/Equal Opportunity Employer.

NEUROBIOLOGY POSTDOCTORAL POSITION AVAILABLE immediately to conduct monocular antibody to vertebrate olfactory epithelial tissue. Antibody is available for the selection of cDNA clones from bacterial expression libraries. Experience in protein purification, Western blot analysis, antibody preparation, and monoclonal screening is required. The initial term of the position is one year, with possible renewal for a second year. The University is an Equal Opportunity/Affirmative Action Employer.

MAGNETIC RESONANCE IMAGING SPECIALIST

The Fox Chase Cancer Center, a nationally known comprehensive cancer center, is seeking a highly qualified MRI Specialist. Candidates for this position should possess a Ph.D. in physics, chemistry, electrical engineering, or a related field, with an understanding of both MRI and NMR theory, as well as experience with hardware, software, and programming. The individual selected for this position will be responsible for developing and extending the imaging methodology with the department's 2 T Magnetom Clinical Imager, the initiation and implementation of experimental imaging sequences on the department's 2.3 T Biocore and 9.3 T AM400 and in a broader sense, they will have responsibility for developing and expanding the imaging research program both in terms of its application within the overall goals of the MMR Department. For consideration, please send curriculum vitae along with list of references and publications to:

Director of Personnel
Fox Chase Cancer Center
7701 Burholme Avenue
Philadelphia, PA 19111
Equal Opportunity Employer

NEOGENE/QUATERNARY STRATIGRAPHER

The Bureau of Economic Geology has a Ph.D.-level position open for a geologist or physical geographer (research or teaching interest) with experience in geologic stratigraphy and paleontology, and neotectonics of a large region in the Panhandle of Texas. The candidate is expected to contribute to this effort through his/her abilities to investigate Cenozoic geology, soils development and geomorphic processes. Applicants should have Ph.D. level experience in soil development, stratigraphy, and surface processes. Research experience in geologic processes in semiarid environments is desired. The successful candidate should have good interpersonal skills. Publication record of research results is expected.

The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer. Submit résumé and names of three references to:

E. G. Weurman
Bureau of Economic Geology
The University of Texas at Austin
Bureau of Economic Geology
Austin, TX 78713–7508

PERMANENT TRACK POSITION in immunology and molecular biology for person with M.D. and/or Ph.D. degree. Applicant should have experience in the techniques of molecular biology and conducting research related to the ontology and differentiation of immunocompetent cells and/or the pathogenesis of virally induced immune abnormalities. This position is in the Department of Immunology, which conducts basic research and has active predoctoral and postdoctoral programs. Excellent start-up funds are available for the establishment of the laboratory. Will receive academic rank, starting at the level of assistant professor. Send curriculum vitae and brief description of research interests to: G. J. Bleich, M.D., Department of Immunology, The University of Texas Medical Branch, Galveston, TX 77555; Pat A. T. Wolf, Ph.D., Department of Immunology, University of Illinois, Chicago, IL 60612; or Dr. John F. Adkinson, Department of Pediatrics, University of Texas, Houston, TX 77225. An Equal Opportunity/Affirmative Action Institution.

POSTDOCTORAL ASSOCIATE

Position available immediately to study microcirculatory blood flow by intravital techniques. Microhemodynamics of normal and abnormal erythrocytes; erythrocyte-endothelial interaction; role of vascular tone in regulation of blood flow; development of improved techniques in in vivo background in circulation physiology. Please send curriculum vitae and names of three references to: Dr. Doris R. Stetler-Coupe, Department of Physiology, University of Illinois, Urbana, IL 61801. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL ASSOCIATE

Position available immediately to study microcirculatory blood flow by in vivo techniques. Microhemodynamics of normal and abnormal erythrocytes; erythrocyte-endothelial interaction; role of vascular tone in regulation of blood flow; development of improved techniques in in vivo background in circulation physiology. Please send curriculum vitae and names of three references to: Dr. Doris R. Stetler-Coupe, Department of Physiology, University of Illinois, Urbana, IL 61801. An Equal Opportunity/Affirmative Action Employer.
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The professional we seek will have responsibility for process development in our R & D area. Your engineering degree will be utilized in solving coating problems on both exciting and new R&D products. Will act as liaison with our Scientists requiring proficiency in light sensitive media coating.

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Excellent opportunity for results oriented, hands-on individual able to solve problems of converting bulk rolls into manageable pieces. A proven track record working with light sensitive media as well as a thorough understanding of various converting techniques a must. Background in an R&D and/or process development environment required.

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Highly visible opportunity for seasoned professional with at least 10 years quality control experience in a photographic and/or light sensitive media industry. We require a problem solver with familiarity with SPC (Structured Process Control) and be familiar with Oriental philosophy of Q.C. (i.e. Kaizen). Responsibilities will entail maintaining Q.C. programs throughout the manufacturing level.

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POSITIONS OPEN

POSTDOCTORAL ASSOCIATE to conduct NIH-funded research on postsynaptic modifications of proteins in diabetes and aging. Candidates with a Ph.D. in biochemistry or chemistry and a strong background in fields related to protein chemistry, analytical biochemistry, and immunochromatography are invited to send curriculum vitae, reprints, and names of references to: Dr. Vincent Monnier, Department of Pathology, Case Western Reserve University, Cleveland, OH 44105. CWRU is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATES BIOPHYSICS/BIOCHEMISTRY

Research on structure and assembly of viruses, and protein-nucleic acid interactions, using laser spectroscopy, FTIR, and biochemical methods. Objectives include development of classical and resonance Raman methods to probe structure/function relationships, protein folding, DNA packaging. Positions require background in either (i) physical methods for macromolecular structure determination, or (ii) molecular virology. Send curriculum vitae, statement of research interests, and names of references to:

Dr. George J. Thomas, Jr., Head Division of Cell Biology and Biophysics School of Basic Life Sciences University of Missouri–Kansas City Kansas City, MO 64110.

UMKC is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL/INSTRUCTOR position available immediately to study angiotensin II receptor regulation and relationship to changes in polyphosphoinositides and calcium flux in adrenal cells. Relevant Ph.D. required; experience in cell culture, cell fractionation, and membrane protein biochemistry desirable. Send curriculum vitae and names of three references to: Thomas J. Moore, M.D.; Endocrinology Division; Brigham and Women's Hospital; 221 Longwood Avenue; Boston, MA 02115. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW in molecular genetics of human cancer. Position immediately available for a Ph.D. with a background in molecular biology and genetics. Candidate will work with team to map loci, refine linkages, and pursue molecular bases of these genetic diseases as linkages are found. Current projects focus on familial colon cancer, melanoma, and neurofibromatosis. Appointment for 2 years with possible renewal. Competitive salary. Send curriculum vitae with three letters of reference to: David F. Barker, Genetic Epidemiology Group, Department of Medical Information, Research Park, 410 Chipeta Way #105, Salt Lake City, UT 84108. The University of Utah is an Equal Opportunity Employer.

POSTDOCTORAL FELLOW, PULMONARY HYPERSENSITIVITY. Position beginning immediately with assured support for 3 years to develop methods for assessing the allergic potential of inhaled anthraquinone-based dyes in small laboratory animals. These methods will then be used to evaluate several dye mixtures. Work would involve close collaboration with established small animal pulmonary physiologists and immunotoxicologists. Send curriculum vitae to: Roberta Spratt, Center for Environmental Medicine, University of North Carolina–Chapel Hill, Trailer #4, Medical Research Building C, 224H, Chapel Hill, NC 27514.

POSTDOCTORAL FELLOW AVAILABLE immediately to study the generation of active oxygen radicals by cells and subcellular organelles and their role in alcohol toxicity. Experience in oxygen radical biochemistry and/or liver cell preparations and cultures desirable. Salary commensurate with experience. Please send resume, brief description of research experience and interest, and names of three references to: Dr. Arthur I. Cederbaum, Department of Biochemistry, The Mt. Sinai Medical Center, Box 1020, One Gustave L. Levy Place, New York, NY 10029. An Equal Opportunity Employer.

POSTDOCTORAL POSITION AVAILABLE immediately for Environmental Toxicologist with expertise in aquatic and terrestrial toxicology. Experience in teaching is desirable. Positions require Ph.D. in toxicology or related field and preferably 3 years of experience in toxicology or equivalent industry experience. Send curriculum vitae and names of references to: Dr. Roberta Spratt, Center for Environmental Medicine, University of North Carolina–Chapel Hill, Chapel Hill, NC 27514. U.S. citizenship required.

POSTDOCTORAL POSITION IN MOLECULAR NEUROBIOLOGY available immediately for molecular-level studies of peptide packaging and/or regulation of secretion from neuronal cells in culture and in a reconstituted system. Applicants should have background in cell biology and neurobiology, and experience in biochemical, immunological, or molecular genetic approaches. Send curriculum vitae and three letters of reference to: Dr. Brian Kozlowski, Department of Anatomy, University of Wisconsin School of Medicine, Madison, WI 53706.

POSTDOCTORAL POSITION IN SYSTEMS ECOLOGY

Systems ecologist for interdisciplinary study of coastal lagoon in Puerto Rico. Experience desirable in modeling of nutrient cycling and factors affecting productivity of coastal and mangrove-estuarine environments. Send curriculum vitae and three references to: Dr. José M. López, Director, Marine Ecology Program Center for Energy and Environment Research University of Puerto Rico College Station, Mayaguez, PR 00708 Telephone: 809-832-7912 CEER is an Equal Opportunity Employer.

Senior Regulatory Toxicologist

The Agricultural Research Division of American Cyanamid Company has an immediate need for a Senior Regulatory Toxicologist to design, monitor, and review the full range of toxicity testing performed in-house and on contract for EPA and FDA registrations of pesticides and animal drugs.

Requires Ph.D in Toxicology or related medical field and preferably 7 to 10 years of experience in toxicology in industry, government or a contract laboratory.

American Cyanamid offers a competitive compensation and benefits package. For prompt and confidential consideration, please forward your resume and salary history to the Employment Office.

American Cyanamid Company
Agricultural Research Division
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DIRECTOR

Institute of Biosciences and Technology
The Texas Medical Center - Houston

Applications are being sought for the position of Director of a new Institute of Biosciences and Technology to be located in The Texas Medical Center in Houston. The qualified individual will have the responsibility for planning and implementing the development of the Institute in the areas of molecular biology, comparative animal medicine, nutrition and bioengineering; serving as scientific spokesman for Texas A&M in the Houston community; and developing linkages between the College Station campus and Texas Medical Center institutions. Candidates should have the Ph.D. degree in molecular biology or related fields with the Ph.D.M.D. being preferred, and at least 10 years of experience. Candidates also must have demonstrated achievement in research and leadership ability, direct line management experience at university department head level or higher, and competence to assume leadership in planning, staffing, directing and allocating resources for a major research program.

Closing date for applications is July 15, 1987, or until a suitable candidate is found. Applicants should send curriculum vitae to: Dr. Perry L. Adkisson, Chancellor, The Texas A&M University System, College Station, Texas 77843.

The Texas A&M University System is an Equal Opportunity Employer

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Immunoadvantageous Chemist

The Procter & Gamble Company is seeking an individual with experience in the development and application of immunoadvantageous (RIA, ELISA) techniques for the measurement of analytes in biological matrices. This individual should have Ph.D. or postdoctoral training in analytical chemistry, clinical chemistry, biochemistry, or immunology. The position is at the Miami Valley Laboratories in Cincinnati, Ohio.

Responsibilities will include the supervision of a divisional immunoadvantageous ligand binding laboratory as well as the development of assay systems for novel drug candidates and endogenous species of pharmaceutical interest. Background experience in poly/monoclonal antibody production and purification, hapten-carrier conjugation, and enzymatic/isotopic labeling is highly desired.

Good communication skills and research experience in an interdisciplinary team environment are also important candidate requirements.

Applicants must be U.S. citizens or possess a permanent resident visa and should send their resume and publication list to:

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

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BIOCHEMIST

ADME

BOEHRINGER INGELHEIM PHARMACEUTICALS, Inc., a highly respected and rapidly growing pharmaceutical company is currently seeking to add a qualified individual to its Research and Development staff.

This opening is in a laboratory responsible for providing information on the absorption, distribution, metabolism and excretion of drug candidates at the preclinical stage of drug development. The incumbent will perform in vivo studies to determine drug pharmacokinetics, tissue distribution, routes of drug elimination, and metabolite profiles in biological samples. In vitro techniques will also be employed to answer special questions relating to drug absorption and metabolism. The position will involve new methods development and additional experimental capabilities are needed. The incumbent will also participate on interdepartmental project teams. The candidate we seek must be skillful in animal surgery and possess a Masters degree or equivalent experience in a biomedical discipline. Practical knowledge of analytical methods, such as chromatography and scintillation counting, and statistics is desirable.

Our state-of-the-art research facility located in DANBURY, combined with a competitive compensation/benefits package, including generous relocation assistance makes this an excellent opportunity for an individual interested in developing a career in pharmaceutical research.

Please send your resume and salary history to: Dept. JC-11, R & D, BOEHRINGER INGELHEIM PHARMACEUTICALS, Inc., 90 East Ridge, PO. Box 368, Ridgefield, CT 06877. An equal opportunity employer.

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The opportunity to do important research — work that really makes a difference. And at Cetus, you'll have that opportunity, because we're committed to pioneering work in pharmaceuticals and biotechnology. We offer you the resources to do that work — in a stimulating environment with the support of other dedicated, knowledgeable professionals.

We currently seek a specialist in AUTOIMMUNITY RESEARCH to establish relevant animal models for autoimmune diseases. You should possess a Ph.D./MD/DVM and at least two to three years of post-doctoral experience with spontaneous and antigen-induced models. A familiarity with the relationship between animal models and in vitro cellular interactions would be beneficial.

Please send resume in confidence to:

Cetus Corporation
Box IBS
1400 Fifty-third Street
Emeryville, CA 94608

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POSTDOCTORAL POSITIONS

IMMUNODEFICIENCY VIRUS REPLICATION—Involved in project to clone and express the HIV reverse transcriptase in microorganisms, to develop assays for the purification of human host factors, and to reconstitute HIV reverse transcription in vitro.

ENZYMEOLOGY OF DNA REPLICATION—Position involves characterizing the unique reactions of a natural protein replicative complex and/or determining its structure.

GENETIC REGULATION OF REPLICATION PROTEIN SYNTHESIS—Position involves studying the regulation of replication protein expression and the coordination of this process with the global control of cell division.

Applications should send their curriculum vitae, a description of their research and career goals, and the names of three references to: Dr. Charles McHenry, Department of Biochemistry, Biophysics and Genetics, B-121, University of Colorado School of Medicine, 4200 East Ninth Avenue, Denver, CO 80262. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS—PROTEIN KINASES/CANCER BIOLOGY

Two positions available to study the role of the distal arms of signal transduction in the function of normal and malignant mouse lung development. One project will focus on cAMP-dependent protein kinase; RII-binding proteins, substrates and their regulatory mechanisms in lung cancer. The other concerns protein kinase C; interactions with calpain, in vitro changes using lung tumor promoters, characterization of endogenous substrates. Please send curriculum vitae and names of three references to: Dr. Alvin M. Malkinson, Molecular and Environmental Toxicology Program, School of Pharmacy, University of Colorado, Boulder, CO 80309. The University of Colorado has a strong commitment to the principle of diversity. We are interested in receiving applications from women, and/or minorities and disabled individuals.

POSTDOCTORAL POSITIONS DEPARTMENT OF MOLECULAR BIOLOGY GENENTECH, INC.

Positions are available for work in two areas: (i) the function of cellular oncogenes and their activated counterparts; and (ii) mechanisms of gene control and mammalian cells. Applications are invited from highly motivated individuals with backgrounds in related areas of molecular and cellular biology. Duration of appointments will be 2 years, with the possibility of extension. Salary is funded internally and is very attractive; excellent benefits are also provided. Send curriculum vitae, names of three references, and a short summary of research interests to:

Amber D. Levinson, Genentech, Inc. 460 Point San Bruno Boulevard South San Francisco, CA 94080 Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE BIOCHEMIST/CELL BIOLOGIST

Study of peptide hormone processing and secretion by normal and genetically transformed mammalian cells. Background should include techniques of cell culture, protein separation procedures, and familiarity with molecular biology techniques. Salary $18,000 to $20,000 per annum, 2-3 year term. Send applications to: Dr. David V. Cohn, Health Sciences Center, University of Louisville, Louisville, KY 40292. R.S. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH dealing with behavioral and molecular components of maternal care in birds and their chicks. Application of communication theories to studies of the functions of multicomponent pheromones. Background in insect behavior or chemical ecology preferred. Available after Jan. 1987. Send curriculum vitae, relevant publications, and names and addresses of three references to: Dr. Kenneth F. Haynes, Department of Entomology, University of Kentucky, Lexington, KY 40546.

PROTEIN CHEMIST

Junior faculty level position for experienced protein chemist to conduct an independent research program within the Center for Neurologic Diseases, Brigham and Women's Hospital and Harvard Medical School. Successful applicant will participate in a research program directed by the protein chemistry and molecular biology of neuronal aging, particularly in Alzheimer's disease, and will develop independent experiments in tandem with this research. Salary will also direct a protein microsequencing facility requiring a 25 to 30 percent time commitment. Prefer three plus years of productive postdoctoral research, including experience in protein modification and a secure grant support is desirable. Send curriculum vitae and letter detailing experience to: Dr. Dennis J. Selkoe, Center for Neurologic Diseases, Women's Hospital, Harvard Medical School, 75 Francis Street, Boston, MA 02115. An Equal Opportunity Employer.

PROTEIN CHEMISTRY. Two postdoctoral/research associate positions available in the laboratory of Professor Timasheff, Brandeis University, to carry out research in protein chemistry. Areas of research are: (i) Mechanisms of protein- and protein assembly structural stabilization by solvent additives and of solvent modifications of biological activity; (ii) mechanisms of interaction of anticancer drugs with tubulin and consequent inhibition of microtubule formation; linkages between drug binding and tubulin polymerization, and effects of structural modifications and structural simplifications of the drug molecules on interactions with tubulin; (iii) pathways of tubulin self-assembly and ligand (microtubules, icosid lattice) of the end products (microtubules, rings, sheets); (iv) solution mapping of the surface of the tubulin molecule by distance measurements between various ligating sites (GTP, cations, drugs and drug moiety) using energy transfer fluorescence and resonance techniques. Applicants should be highly motivated, be flexible, and have background and research experience in various ligands. Send applications to: Dr. Serge N. Timasheff, Graduate Department of Biochemistry, Brandeis University, Waltham, MA 02254. Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE (MEDICAL RESEARCHER): Will perform medical research pertaining to the cardiovascular, metabolic, and nutritional aspects of endotoxin-induced shock. Will perform hemodynamic and liver function studies by cannulating carotid artery and jugular veins, and portal veins in rats and dogs to determine cardiovascular measurements such as cardiac output and heart rate. Will perform such measurements using Roche dye-dilution densitometers, Rollem Holter pump, and Universal chart recorder. Will prepare necessary biological samples after performing proper dissection. Will report to various societies on findings as well as instruct medical students and medical staff on proper research techniques and findings as they relate to any particular medical specialty. Requires M.D. or Ph.D. in physiology. Also requires 2 years of experience in the job to be performed. Experience must include cannulation of carotid arteries, jugular veins, and portal veins in rats and dogs. Will require this equipment: Roche dye-dilution densitometer, Rollem Holter pump, Gould Universal amplifier and X-Y plotter. Hours: 8:00 a.m. to 4:00 p.m., 40 hours per week at $35,000 per year. This is a 3-year position. Resumes should be sent to: Illinois Department of Employment Security, 401 South State, 5 South, Chicago, IL 60605, Attention: Leonard Bokuta, Reference #0756-B. An employer paid ad.
POSTDOCTORAL FELLOWSHIPS

The Garvan Institute of Medical Research has several postdoctoral positions available in molecular and cellular biology. Applicants should have experience in techniques of modern molecular biology and will join world class research teams investigating the molecular mechanisms responsible for diabetes, osteoporosis, senile dementia and cancer. In particular, vacancies exist for work on DNA polymorphisms in Type II diabetes, steroid hormone regulation of gene expression, molecular genetics, osteoporosis and the role of growth factors in control of breast and prostate cancer.

Applicants should send a curriculum vitae including the names of two referees to:
Dr. John Shine,
Deputy Director,
GARVAN INSTITUTE OF MEDICAL RESEARCH,
St Vincent’s Hospital,
Darlinghurst,
Sydney, NSW 2010
AUSTRALIA

SHOWA UNIVERSITY RESEARCH INSTITUTE FOR BIOMEDICINE announces the establishment of a Department of Cellular Biochemistry. The Institute, which is non-profit, is seeking a highly motivated SENIOR INVESTIGATOR with established leadership capabilities to serve as Chairman. This department, which will occupy approximately 8,000 sq. feet of laboratory space, will be comprised of five independent laboratory programs in the general area of cancer biology with particular emphasis being placed on the characterization of underlying mechanisms at the molecular genetic level. Investigations in this department will complement studies in the already established Departments of Virology and Molecular Genetics.

Showa University Research Institute is unique in its affiliation with a major Japanese medical university. The Institute is based in a new facility with excellent individual laboratory and office space and centralized services, including a biotechnology laboratory. Its central location within the rapidly growing Tampa Bay area is most attractive. Investigators are allowed complete freedom to pursue research goals and while generous program support is provided, scientists are expected to secure extramural funding. An internationally recognized group of scientists comprise the Scientific Advisory Board.

Institute professional staff hold academic ranks at the University of South Florida. A full range of predoctoral and postdoctoral training programs involving the Institute, Showa University Medical School in Tokyo and the University of South Florida are ongoing as are collaborative relationships with Bay area hospitals and clinics.

Individuals interested in the position should send their curriculum vitae, a list of publications and the names of five references to: Chairman, Search Committee, Showa University Research Institute for Biomedicine, 15998 Roosevelt Boulevard, St. Petersburg, Florida 33702.

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ELECTRON MICROSCOPY SCIENTIST

The sophisticated R&D projects conducted at our state-of-the-art Research Center in Richmond are major contributors to Philip Morris U.S.A.'s continued status as one of the world's most successful tobacco products manufacturers. Become part of the team involved in developing research techniques for a diversity of projects.

You will be required to provide interactive problem-solving support to R&D groups and other departments in the areas of Light and Electron Microscopy (TEM and SEM) with particular emphasis on qualitative and quantitative x-ray microanalysis.

Position requires an MS/PhD in Biology or Chemistry with 2-5 years experience in an Analytical Electron Microscopy Laboratory. Technical skills must include the ability to operate both light and electron microscopes (SEM, TEM), with emphasis on quantitative/qualitative x-ray microanalysis equipment; ability to prepare samples for transmission electron microscopy (including fixation, conventional and low temperature techniques), and subsequent morphological and elemental analysis; ability to work with various computers and software for statistical analysis; and knowledge of low temperature cryo-microscopy techniques.

We offer you a competitive salary and comprehensive benefits. For consideration please send your resume to: Barbara Wolf, Dept. #1987, PHILIP MORRIS U.S.A., P.O. Box 26603, Richmond, VA 23261. Equal Opportunity/Affirmative Action Employer.

PhilipMorris U.S.A.

Visiting Scientist Immunology

A postdoctoral Visiting Scientist position is open within the Medical Products Department at Du Pont's Glenolden Laboratory in Pennsylvania. The successful candidate will conduct innovative basic research in immunoregulation with special emphasis on lymphokines and their cellular receptors. Candidate should possess a Ph.D. and one or more years of experience in Immunology or Molecular Biology. The appointment will be for one year, renewable for a second year upon mutual agreement.

At the world renowned Du Pont Company, you'll find a highly stimulating scientific environment in addition to an excellent salary. To be considered, please send resume, bibliography and references by July 31, 1987 to: Dr. Richard Robb, Glenolden Laboratory, E.I. Du Pont de Nemours and Company, 500 S. Ridgeway Avenue, Glenolden, PA 19036.

U.S. Citizenship required.
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DU PONT
RESEARCH ASSOCIATE for plant growth and development, specifically biochemistry and physiology of flowering and seed development. Knowledge and experience in the study of biochemistry of the plant β-(1,3) glucans, callose required and ability to use standard plant phenotyping equipment and experience with high performance liquid chromatography. Assists in teaching graduate students and preparation of grants and technical reports. Requires a Ph.D. and 1 year of related directed experience. Minimum salary of $17,000 per year. Normal work week: 40 hours. Qualified persons should apply to: Personnel Services, 1 Au-1810 S. University Ave., Tucson, AZ 85721 and refer to job order number NCA91373 D.O. Code 090.227-010.

RESEARCH ASSOCIATE/PHARMACOLOGY—BIOPHYSICS POSTDOCTORAL POSITIONS AVAILABLE immediately for investigation of various enzymes encapsulated in carrier cytochrome for drug antagonists studies. Knowledge of enzymology and/or pharmacokinetics preferred. Send curriculum vitae and names of three references to: Dr. J. L. Way, Department of Pharmacology, Texas A&M University, Medical Sciences Building, College Station, TX 77843. Equal Opportunity/Affirmative Action Employer.

RESEARCH COORDINATOR to provide statistical consultation on multivariate analysis, experimental design, linear modeling, structural analysis, numerical analysis, and several stochastic inference methods in an interdisciplinary research institute of approximately 30 faculty members; checks the reasonable and probable accuracy of all statistical output from computerized computations; gives statistical advice and counsel to faculty and graduate students; writes new statistical programs using SAS, SPSS, BMDS, LILREL, and other advanced languages. Requires Ph.D. in statistics with demonstrable ability to perform stated duties. Salary: $1,925 per month. Apply in person with resume to: Georgia Department of Labor, 788 Prince Avenue, P.O. Box 272, Athens, GA 30613, or to the nearest Georgia Job Service Center. Control GA 5226365.

RESEARCH INVESTIGATOR A research investigator is sought for a laboratory pursuing equilibrium and kinetic measurements of protein conformational changes. Candidates must have a Ph.D. in chemistry or biochemistry, a minimum of 2 years of postdoctoral training with progressive responsibility and documented evidence of experience with protein purification, size exclusion chromatography and optical instrumentation including circular dichroism, absorbance and fluorescence spectrophotometry. Experience in computer-controlled site-directed mutagenesis would be useful. Salary: $21,500 per year, 40 hours per week. Send resume and two letters of reference within 30 June 1987 to: Personnel Services, 1810 Lowry Messine Road, Iowa City, Ia. 52244. Job Order #1A1691056.

RESEARCH COORDINATOR. Available 1 August 1987 at the University of Georgia School of Forest Resources. Coordinate research effort on a 2-year study of the effects of ozone and water stress on mature loblolly pine. Ph.D., preferably with experience in air pollution research and/or plant physiological ecology. Salary $24,600. For information contact: Dr. Robert Teskey, 404-542-5055. Send resume and names of three references, by 30 June 1987 to: Ruth Anderson, Personnel Services, University of Georgia, Athens, GA 30602. Equal Opportunity/Affirmative Action Employer.

SCIENTIST MOLECULAR BIOLOGY Position available in suburban Washington, D.C., for Ph.D. degree in molecular biology, initiation, and performance experiments in prokaryotic gene expression of recombinant proteins. Ideal candidate will possess Ph.D. in molecular biology, bacteriology and/or immunology and 2 years of postdoctoral experience in E. coli expression vectors, DNA sequencing, and protein purification. Send curriculum vitae, transcript and names of three references with addresses and telephone numbers and other pertinent material to: Bionetics Research, Inc. 12345 A-5 East Drive Rockville, MD 20850 Equal Opportunity Employer. M/F/H/V

YORK UNIVERSITY DEPARTMENT OF PHYSICS Applications are invited for THREE TENURE-TRACK appointments at September 1987, or as soon as possible thereafter, in the following research areas: experimental laser physics, astrophysical sciences, and electronics, including astronomy and space physics, theoretical and atomic molecular physics. The appointments will be as assistant professor although appointment to an exceptional candidate at a higher level. The successful candidates will be expected to teach courses in physics and/or applied computational and mathematical science and to provide training in the undergraduate level and to pursue an active research program. In accordance with Canadian Immigration requirements this advertisement is directed to Canadian citizens or permanent residents. York University is implementing a policy of employment equity. Qualified women and men are invited to apply. Applications with curriculum vitae and the names of three referees (including the candidate's two most recent supervisors or collaborators) should be sent, to arrive by 31 July 1987, to: Professor W. J. Megaw, Chairman, Department of Physics, York University, 4700 Keele Street, North York, Ontario M3J 1P3, Canada

SYMPOSIUM RECEPTORS AND DISEASE SYMPOSIUM 11 TO 15 AUGUST 1987 A concentrated review and discussion of the role of Hormone Receptors in Disease by top national speakers, including recent Nobel Prize Winner Michael S. Brown. The symposium will focus on why we are now able to understand and investigate in all specialties of medicine as well as basic scientists. Inquiries to: Office of Continuing Medical Education C-205, University of Colorado School of Me., University Center, 1415 East 4200 East 9th Avenue, Denver, CO 80262; telephone: 303-394-5195.

FELLOWSHIPS POSTDOCTORAL FELLOWSHIP: Position for recent Ph.D., preferably in nucleic acid biochemistry to investigate mechanism of tryptophan action. Project involves mRNA isolation, in vitro translation, eukaryotic DNA cloning, and related techniques. Send curriculum vitae and names of three references to: Dr. H. Sidney, Department of Pathology, The George Washington University Medical Center, Washington, DC 20037. Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP UNIVERSITY OF NEBRASKA—LINCOLN Two postdoctoral fellowships are available for the study of plant chemistry, e.g. (1) regulation of genes) and protoaxon photoreceptor (stel- torin for photosynthetic responses in Stenom). Annual stipends are $20,000 to $22,000, depending on qualifications and experience in the area of protein and/or membrane biochemistry. Send curriculum vitae and arrange to send letters of recommendation by 15 July 1987 to: Dr. Pill-Soon Song, Professor and Chairman, Department of Chemistry, University of Nebraska—Lincoln, Lincoln, NE 68588-0304. Telephone: 402-472-3501. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN VISION Several NIH postdoctoral fellowships are available beginning 1 July 1987 for a 2-year period in the following research areas: Retinal cell biology, neurochemistry and anatomy, invertebrate neurophysiology, visual and retinal genetics, photochemistry, axonal neurobiology and neurotoxicology, binocular vision and ocular motor systems, color vision, psychophysics, human development, learning and memory. The appointments are available from the University of Houston College of Optometry, Rice University, and the University of Texas Health Science Center. Send curriculum vitae and three letters of reference by 20 June 1987 to: Houston Area Vision Sciences Program, University of Texas, Sensory Sciences Center, Room 316, 6420 Lamar Fleming Avenue, Houston, TX 77003. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN NEUROLOGY AND ENDOCRINOLOGY Several positions are available beginning 1 July 1987 for 2 years at the National Institute of Neurological Disease and Blindness, National Institutes of Health. Positions are available in the following areas: Neuroanatomy, Neuropharmacology, Neuroendocrinology, Neuroimmunology, and Neurosurgery. Send curriculum vitae, three letters of reference and names of three other references to: Dr. R. B. Maggio, Department of Neurology, National Institute of Neurological Disease and Blindness, National Institutes of Health, Bethesda, MD 20892. Equal Opportunity Employer.

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