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Olympus Corporation, Precision Instrument Division, 4 Nevada Drive, Lake Success, New York 11042-1179.

In Canada: W. Carsen Co., Ltd., Ontario.

OLYMPUS

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POSITIONS OPEN

ASSISTANT PROFESSOR

The Department of Pathobiology at the University of Washington announces an academic position opening in the area of growth regulation. Requires a Ph.D. with at least 5 years of postdoctoral research experience in cellular and molecular biology of growth regulation. Areas of interest include cell growth, development and differentiation, receptor and growth factor signaling, the cytoskeleton, cell-cell interactions, and signal transduction. Submit curriculum vitae, names of three references to: Chair, Search Committee, Department of Pathobiology, SC 38, University of Washington, Seattle, WA 98195. The application deadline for this position is 15 August 1991.

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

Position available for animal sleep research laboratory at Emory University School of Medicine. Position is research track (nontenured) ASSISTANT PROFESSOR of psychiatry and fellowship position from September 1991 to September 1992. Applicant must have expertise in the following areas: sleep research and single unit recording in freely behaving animal model, names and addresses of two references and three published reprints demonstrating such expertise to: Gerald W. Vogel, M.D., Laboratory, Georgia Mental Health Institute, 1550 Woodruff Road NE, Atlanta, GA 30305. Emory University is an Affirmative Action/Equal Opportunity Employer.

The Department of Neurosurgery at Stanford University School of Medicine is currently seeking a full-time faculty position to study basic mechanisms involved in the pathophysiology and pharmacological treatment of cerebral ischemia. The position is at the rank of RESEARCH ASSISTANT PROFESSOR OR STAFF FELLOW. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

The candidate should have a Ph.D. and/or M.D. and have a strong background in cerebrovascular physiology. It is expected that the candidate will spend 100% of their time devoted to research, and demonstrate the ability to become an independent investigator as well as generate funding from external sponsored projects.

Reply to: Gerald D. Webster, M.D., or Gary K. Steinberg, M.D., Ph.D., Stanford University School of Medicine, R155, Stanford, CA 94305-5327.

FACULTY POSITION

ASSISTANT PROFESSOR

MARINE ECOLIGIST: The University of Oregon invites applicants for a tenure-track faculty position in the Department of Biology at the level of assistant professor. The successful candidate will be associated with the University's Oregon Institute of Marine Biology in Charleston, and will be expected to interact closely with faculty and students at the main campus in Eugene.

Applicants should have a strong background in marine ecology and will be expected to establish an active research program in their area of expertise, and teach in marine ecology. Postdoctoral experience is expected. Preference will be given to candidates with an established record of success who have demonstrated commitment to excellence in undergraduate and graduate education.

Submit curriculum vitae, a statement of research interests, and the names of four references to: The Marine Ecology Search Committee, Oregon Institute of Marine Biology, University of Oregon, Charleston, OR 97940, Closing date: 15 September 1991. Equal Opportunity/Affirmative Action institution committed to cultural diversity.

RESEARCH ASSISTANT/ASSOCIATE PROFESSOR: Tulane University/Cardiology. To work in the area of mechanisms of centrally-mediated myocar- dial injury, basic science research in cardiovascular physiology, pharmacology, or pathology desirable. Send curriculum vitae and three references to: Dr. Andrew J. Buck, Chairman, Cardiology, SUNY University School of Medicine, 1430 Tulane Avenue, New Orleans, LA 70112. Tulane is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR

CELL BIOLOGY

The Department of Zoology at the University of Texas at Austin invites applications for a tenure-track faculty position (assistant professor). Candidates should be actively engaged in research on fundamental problems of cellular biology. Areas of interest include cell growth, development and differentiation, receptor and growth factor signaling, the cytoskeleton, cell-cell interactions, and signal transduction. Submit curriculum vitae, names of three references who can provide letters of recommendation, and a brief description of research interests to:

The Chairman
Cell Biology Search Committee
The University of Texas at Austin
Austin, TX 78712

Applications should be submitted by 15 October 1991.

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

HAROLD H. BAILEY
PROFESSOR OF BIOLOGY
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

The Department of Biology invites applications and nominations for the Harley H. Buda Chair of Biology. We are seeking an internationally recognized scholar whose research uses modern approaches in ad- vanced molecular, developmental, and cellular biology and who is well versed in the field of vertebrate biology (broader defined). It is expected that the Bailey Professor will contribute to the instructional mission of the university and conduct original research at the highest level. Applicants should be at a rank of full professor or very close to being promoted to full professor.

Application materials should include curriculum vitae, a statement of anticipated future research directions, and names of three potential references. Applicant evaluation will begin 1 October 1991, and continue until the position is filled. Applications and nominations should be sent to: J. R. Webster, Chairman, Bailey Search Committee, Department of Biology, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. Women and minorities are encouraged to apply. Virginia Tech is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF TORONTO DEPARTMENT OF CLINICAL BIOCHEMISTRY AND MEDICINE ASSISTANT PROFESSORS

Applications are invited for three positions at The Toronto Hospital (a 1500-bed Tertiary Referral Hospital affiliated with the University of Toronto) in one of the following areas: CLINICAL EPIDEMIOLOGY/TECHNOLOGY ASSESSMENT: M.D., FRCPC (or equivalent) with training in clinical epidemiology to develop an independently funded research program related to the effective use of diagnostic laboratory resources and to participate in general medical practice at The Toronto Hospital. CLINICAL INVESTIGATOR: M.D., FRCPC (or equivalent) specialized in metabolism and endocrinology; training or experience in medical biochemistry is an advantage; to supervise a specialized analytical biochemistry laboratory in a metabolic center to carry out clinical research through the Clinical Investigation Unit.

CLINICAL GENETICIST: M.D., CCMG, or ABMG eligible/certified to provide consultation and diagnostic services related to adult genetic disease. Laboratory space, start-up funds, and appointments in the Graduate School will be available. The University of Toronto encourages both men and women to apply for this position. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Interested persons should direct enquiries and applications no later than 31 October 1991 to:

Dr. A. D. Baines
Biochemistry Chair
Department of Clinical Biochemistry
ES 3-404D, Toronto General Division
200 Elizabeth Street
Toronto, Ontario, M5G 1L5 Canada
POSITIONS OPEN

ASSOCIATE PROFESSOR OF BIOCHEMISTRY IN UROLOGY

The Division of Urology and the Department of Biochemistry at the Case Western Reserve University School of Medicine seeks applications for the position of associate professor of biochemistry in medicine. Preference will be given to individuals with teaching experience in protein chemistry (Ph.D. or M.D.) with 2 to 3 years of postdoctoral experience. Individuals with expertise and interest in translational and disease-related research are preferred but those with experience in other disciplines will be considered as well. Applicants should be capable of developing a funded research program and be committed to the training of graduate and undergraduate students. To apply, send curriculum vitae and names of three references to:

Martin J. Resnick, M.D.
Chief, Division of Urology
Case Western Reserve University
2074 Abington Road
Cleveland, OH 44106

Deadline for application is 1 September 1991. Case Western Reserve University is an Equal Opportunity Employer.

FACULTY POSITION

The Department of Developmental and Cell Biology at the University of California, Irvine, is seeking a full professor with 5 years of experience investigating the application of microscope-based lasers to cell genetics in culture. A working knowledge of laser biochemistry is essential. The candidate must have experience in the manipulation of chromosomes and cells with laser beams through the microscope, and this must be documented by publications. Experience teaching graduate students must also be documented. A high level of skill with optical microscopes is required. Please send curriculum vitae, copies of significant publications, concise statement of research accomplishments, and the names of three references with addresses to: Professor Michael W. Berns, Beckman Laser Institute and Medical Clinic, 1002 Health Sciences Road East, Irvine, CA 92715, before 31 August 1991. The University of California is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.

HEAD

DEPARTMENT OF HUMAN ANATOMY AND MEDICAL NEUROBIOLOGY

TEXAS A&M HEALTH SCIENCE CENTER COLLEGE STATION, TEXAS 77843

The College of Medicine is seeking a head (chair) for the Department of Human Anatomy and Medical Neurobiology. This candidate should have demonstrated commitment to teaching excellence in the classical subdivisions of anatomy and possess the organizational and administrative skills to facilitate the growth and development of the Department of Human Anatomy and Medical Neurobiology. Reflected in the new name change effective 1 September 1991, the department is assuming a new orientation which embraces the neurosciences. As part of this new direction, the department head will be expected to foster the neurosciences at Texas A&M University by way of a vigorous interaction of the department in campus-wide programs and the development of a strong neuroscience component to our graduate program in biomedical sciences. It would be advantageous if the candidate had extramural funding research and publications in the area of neuroscience although other research areas shall also be considered.

This is an exciting opportunity for an energetic and creative individual to develop a nationally recognized department and develop interactions within a broad-based university.

Applications should consist of a resume and the names of three persons from whom we may request letters of reference. Interested individuals should contact:

Julius A. Gordon, M.D., Chair
Anatomy Search Committee
Pathology and Laboratory Medicine
Texas A&M College of Medicine
Texas A&M University Health Science Center
College Station, TX 77843-1114

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

ASSISTANT PROFESSOR, DEPARTMENT OF PHYSIOLOGY, UNIVERSITY OF TORONTO

Applications invited for a non-tenure stream appointment.

Qualifications: Ph.D. or M.D. degree and postdoctoral training in metabolic control with interest in diabetes. Duties: research and teaching in undergraduate and graduate programs. Applications, including curriculum vitae and names of three referees, should be sent to: Dr. J. G. Rigor, Department of Physiology, University of Toronto, Toronto, Ontario, Canada M5S 1A8. Closing date: 1 September 1991.

ASSISTANT PROFESSOR, DEPARTMENT OF PHYSIOLOGY, UNIVERSITY OF MICHIGAN

The University of Michigan School of Medicine seeks candidates with expertise in either cardiovascular or endocrine research. Appointment at the assistant professor level is anticipated. The successful candidate will be expected to develop a competitive, externally funded research program and to obtain an academic appointment at the associate or full professor level. A Ph.D. or M.D. degree is essential and a demonstrated record of publication in peer-reviewed journals is required. The successful candidate will be expected to organize a research group and to establish and direct a research program in the area of endocrine or cardiovascular function. A demonstrated record of potential for excellence in the area of interest is required.

Applications should be addressed to: Dr. J. L. Weiss, Department of Physiology, University of Michigan School of Medicine, Ann Arbor, MI 48109. The University of Michigan is an Affirmative Action/Equal Opportunity employer.

ASSOCIATE VICE PRESIDENT FOR RESEARCH/AUBURN UNIVERSITY

Auburn University invites nominations and applications for the position of associate vice president for research. Auburn University is a land-grant institution with an emphasis on agricultural education and research programs. The University also has wide-ranging research and graduate programs in its 12 academic colleges and 65 academic departments. Organized research support for fiscal year 1990 was $46.4 million.

The associate vice president for research is the chief research development officer in the office of the vice president for research. In this capacity, the associate vice president is responsible for facilitating the development of the University's extramurally supported research programs and will represent the office of research in interactions with federal, state, and private funding agencies. The associate vice president is also involved in the establishment of research policy. Candidates for the position will be expected to hold an earned doctorate, have experience in research and research management, and have a proven record of success in obtaining extramural support for research. Some knowledge of research administration is desirable.

Auburn University is an Equal Opportunity/Affirmative Action Employer. Minority and women are encouraged to apply.

USDA/FOREST SERVICE

ASSISTANT STATION DIRECTOR (two positions), Southeastern Forest Experiment Station. Positions are located in Asheville, North Carolina. One position is responsible for providing long-range planning and implementation of multi-functional research and application of multi-functional resource programs related to the station's research and development program. The other position is responsible for leadership, administration, coordination, and integration of the research efforts of the station and for supervision of a major portion of the total station's research program. Salary range is $52,406 to $61,643 per annum. Applicants should submit a one-page résumé to: Southeastern Forest Experiment Station, P.O. Box 2680, Asheville, NC 28802; Attention: Donald Downs. The review of applications will begin 1 September 1991. This position will be filled as soon as possible.

FACULTY POSITION IN ANATOMY

Mercer University School of Medicine announces a tenure position in the neuroanatomy department. Teaching responsibilities include problem-based teaching of medical students and development of an independent research program. Experience teaching gross anatomy, neuroanatomy, and embryology to medical students is preferred. Applicants must possess a Ph.D. (preferably in anatomy) and/or M.D. and postdoctoral training. Faculty rank will be commensurate with the qualifications of the successful candidate. Interested individuals should send cover letter, curriculum vitae, statement of career goals and objectives, teaching experience, and names of three references to: Dr. Robert J. Moon, Chairman, Division of Basic Medical Sciences, Mercer University School of Medicine, Macon, GA 31207. An Equal Opportunity/Affirmative Action Employer.

FACULTY TEACHING POSITION.

The New York Chiropractic College, an accredited chiropractic college, announces a teaching position in PATHOLOGY. Applicants should have a Ph.D. in the appropriate discipline, or an M.D. degree and also be committed to excellence in teaching. Interested individuals should send cover letter, curriculum vitae, and names of three references as soon as possible, but no later than 1 August 1991 to:

Director, Pre-Clinical Studies
New York Chiropractic College
P.O. Box 800, Seneca Falls, NY 13148
Career Opportunities for Research Scientists and Technicians

Oncogene Science is expanding its basic drug discovery and research product divisions in the application of oncogene technology to innovative product development. We currently have postdoctoral, research scientist, and technician positions available in the following general areas:

**Molecular Biology**
- Gene Cloning
- Eukaryotic Gene Expression
- Transcriptional Regulation

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- Protein Kinases
- Calcium Mobilization

**Production/Manufacturing**
- DNA Probe Products
- Antibody Products
- Immunoassays

**Protein Biochemistry**
- Protein Purification
- Protein Characterization

**Immunology/Imunochemistry**
- Hematopoietic Factors
- Immunoassay Design
- Hybridoma Development

**Cell Biology**
- In Vitro Drug Evaluation
- Atherosclerosis

The company also has opportunities in its patent development program for Ph.D.s with a minimum of three (3) years' postdoctoral experience in molecular biology/drug discovery and/or research and diagnostic product development.

Oncogene Science is strategically located on Long Island with ready access to major academic institutions in the New York City metropolitan area.

Oncogene Science offers an excellent compensation and benefits package. Qualified candidates should send their resumes, including a list of publications and references to: Oncogene Science, Inc., Human Resources Department, 350 Community Drive, Manhasset, New York 11030; Attn: CO. An Equal Opportunity Employer.
**POSITIONS AVAILABLE**

**HASKELL** Laboratory for Toxicology and Industrial Medicine of Du Pont has three available positions.

**BIOSTATISTICIAN**

Ph.D. or equivalent experience in biostatistics and biology/toxicology familiarity are essential. Experience in computer programming (e.g., VAX, FORTRAN, SAS) is highly desirable. This position involves participation with other staff scientists in a multidisciplinary program of safety and health assessment. Responsibilities include consulting in design and analysis of toxicity studies, validating and developing custom computer programs, and training others in statistical concepts and program use. Research interests in risk-assessment modeling and other areas of applied biostatistics are encouraged.

**RESEARCH GENETIC TOXICOLOGIST**

Ph.D. degree and two or more years of advanced post-doctoral training in genetic toxicology or related disciplines are required, as well as experience with modern molecular biology methods and/or cytogenetics. The position will direct studies in genetic toxicology testing and will be expected to initiate and conduct research on problems in cellular and molecular toxicology. The position offers excellent opportunities to collaborate with a professional research staff whose expertise includes toxicological aspects of genetics, developmental biology, neuroscience, immunology, and carcinogenesis.

**POSTDOCTORAL POSITION IN NEUROTOXICOLOGY**

The position involves multidisciplinary basic research on in vitro models of neurotoxicity. Applicants should have a Ph.D. with training in neuroscience, biochemistry, or molecular biology. This position is an opportunity for advanced training and mechanistic research in cellular and molecular neurotoxicology. The duration of the appointment is one year, with reappointment at annual intervals by mutual consent for a total duration of three years.

These employment opportunities are located in Newark, Delaware, in modern and well-equipped laboratory facilities. Salary commensurate with experience/qualifications.

Please submit curriculum vitae and a cover letter to:

Jeanne S. Armstrong
Administrative Services Coordinator
Haskell Laboratory
E. I. du Pont de Nemours and Company
P.O. Box 50, Elkton Road
Newark, DE 19714

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**ECOLOGISTS/CONSERVATION BIOLOGISTS**

The Wilderness Society, a national environmental organization, is filling three positions in ecology and conservation biology. All require strong technical writing skills. Competitive salaries and excellent benefits.

**Senior Ecologist:** Develop innovative programs, policies, and legislation to protect biological diversity on U.S. federal lands; produce studies on critical U.S. biodiversity issues. Ph.D. in ecology/conservation biology preferred; experience in policy analysis and formulation desirable.

**Forest Ecologist:** Shape Wilderness Society policies on management of federal, state, and private forest lands. Participate in program development of the new Bolle Center for Sustainable Forests. Ph.D. in forest ecology preferred; minimum of 6 years experience in policy analysis or research.

**Southern Appalachians Ecologist:** Participate as a member of a team developing a comprehensive plan to protect the biological diversity and wildlands of the Southern Appalachian Highlands region. Advanced degree in ecology or conservation biology required; knowledge of flora and fauna of southern Appalachians desirable. Position funded for two years.

Send resume and writing samples by September 6, 1991, to:

Dr. Mark Shaffer
The Wilderness Society
900 Seventeenth Street, N.W.
Washington, D.C. 20006-2596

The Wilderness Society is an equal opportunity employer.
Background. For more than 20 years the Agency for International Development (A.I.D.) has supported research in malaria vaccine development. Currently, the primary foci of the Malaria Vaccine Research & Development Project include:

- the identification and characterization of malaria parasite antigens;
- the elucidation of the immune response in humans and relevant animal models to malaria parasites: specifically, the immune response to identified antigens and to B-cell and T-cell epitopes including appraisals of the strain specificity of protective immunity;
- the elucidation of humoral and cellular effector mechanisms of immunity to malaria, especially protection from the pathological consequences of infection, and the development of in vitro correlates of immunity which protect humans from clinical diseases.
- the modification of the structure and/or mode of presentation of demonstrated protective antigens, to increase their ability to induce a protective immune response.

Proposals. The A.I.D. Malaria Vaccine Research and Development Program is currently soliciting proposals from U.S.-based research institutions that describe 3-year research projects with two distinct scopes-of-research. The title and the range of activities requested in each RFA are outlined below:

1. RFA-ST/H-91-001 Blood Stage and Transmission Blocking Vaccine Development ~ This request is limited to studies of blood stage and transmission blocking antigens, there is a special interest in the major merozoite antigen (gp195) and cytoadherence antigens of P. falciparum.

2. RFA-ST/H-91-002 Vaccine Related Ultrastructural Studies of Plasmodia ~ This request is to support a facility which will conduct vaccine related collaborative studies of the ultrastructure of malaria parasites by immunoelectron microscopy and other relevant technologies.

Applications. Proposals must be received by November 1, 1991. Forms and detailed instructions as well as programmatic information are available from:

Project Officer
Malaria Vaccine Research & Development Project
A.I.D. Office of Health (SA-18; Room 705)
Washington, D.C. 20523
Fax: (703) 875-5490

SCIENTISTS AND POSTDOCTORAL FELLOWS
IN NEUROBIOLOGY AND PROTEIN CHEMISTRY

REGENERON PHARMACEUTICALS is making rapid progress in the basic understanding of neuronal growth factors and how these proteins can treat degenerative and traumatic neurological disorders.

Openings now exist in the Neurobiology Department for scientists and research associates with interests and skills in the following areas: (1) kinetics, pharmacology, distribution, and quantitative image analysis of protein and organic radioligand binding to tissue sections or homogenates; (2) in vitro and in vivo analysis of neurochemical changes following central and peripheral growth factor administration; and (3) the use of established tests and development of novel tests for measuring behavioral capacities after peripheral or central neural injury and neurotrophic factor administration.

Scientist and Postdoctoral positions require a Ph.D. and/or M.D. degree and extensive experience and publications in either of these three areas. Experience with animal models of central peripheral nerve disease or traumatic injury, PNS neurophysiology, or neuronal plasticity is also desirable for Scientist positions.

Openings also exist in the Cellular and Molecular Biology Department for scientists and research associates (B.S., M.S., Ph.D.) and postdoctoral fellows with training and/or interest in the chemical and biological characterization of growth factors and their receptors. Experience in protein purification, peptide synthesis, or in primary, secondary and tertiary structural analysis of proteins would be advantageous.

Regeneron’s modern facility is located on an expansive wooded campus in Westchester County, 25 miles north of Manhattan. The highly collaborative and supportive Regeneron community offers considerable scientific and professional growth potential.

Please send your resume and a cover letter indicating the relevant position, the names of 3 or more references, and your immediate career goals to: Ms. Carol Deaken, Bin IV (Neurobiology positions) or Bin CMB (Cellular and Molecular Biology Positions), REGENERON PHARMACEUTICALS, INC. 777 Old Saw Mill River Road Tarrytown, NY 10591-6707

Equal opportunity employer.
Director Biomedical Research

CLEMSON UNIVERSITY and the GREENVILLE HOSPITAL SYSTEM have concluded a unique agreement to foster collaborative biomedical research. The two institutions have committed $10 million to support the first five years’ activities, including renovation and construction of research facilities, addition of faculty and promotion of research. We seek an outstanding individual committed to academic and health care excellence to lead the program. The Director is expected to hold an appointment as professor with tenure in an academic department at Clemson University and a staff appointment at the Greenville Hospital System. Candidates should have a Ph.D. and/or an M.D., an established record of accomplishment and extramural funding in research of biomedical relevance. The successful candidate will be expected to continue an active research program.

Demonstrated administrative ability, leadership and experience in working successfully with scientists and physicians will be essential in serving as a liaison between Clemson University, a land-grant institution, and the Greenville Hospital System, a regional teaching hospital. The Director will determine the priorities and goals of the program and be instrumental in making new appointments. The Director will have senior administrative responsibility for the program budget, staff and assigned facilities, and will report to a Joint Research Council.

Applications, nominations and inquiries should be sent to: Dr. Lewis M. Duncan, Chair, Biomedical Search Committee, Clemson University, College of Sciences, 120 Kinard Lab, Clemson, SC 29634-1901, (803) 656-3472. Initial review of applicants will begin by September 1, 1991, and the position will remain open until filled.

POSTIONS OPEN

CHAIRMAN, DEPARTMENT OF PATHOLOGY
UNIVERSITY OF VERMONT
COLLEGE OF MEDICINE

The University of Vermont and Medical Center Hospital of Vermont (MCHV) seek a full-time chairman of the Department of Pathology. Applicants must be Board-certified in pathology, have administrative experience, strong leadership skills, and an outstanding record of accomplishment in biomedical research; and be interested in fostering programs for patient services, teaching, and scholarship. MCHV is a tertiary care teaching hospital associated with the University of Vermont, College of Medicine. The University of Vermont is an Affirmative Action/Equal Opportunity Employer, and women and people from diverse racial, ethnic, and cultural backgrounds are encouraged to apply. Interested parties should send curriculum vitae to: Kenneth Mann, Chair of Pathology Search Committee, c/o Department of Pathology, Soule Medical Alumni Building, University of Vermont, Burlington, VT 05405. Applications will be accepted until position is filled.

Tenure-track FACULTY POSITION in genetics is available beginning January 1992. Successful candidate is expected to develop courses in areas of specialty and teach courses in microbiology and general biology. Research is encouraged; opportunities exist with nearby USFWS, USDA, and NCNI facilities. Ph.D. is required. With an enrollment of approximately 3600 students, Shepherd College, located on the banks of the Potomac River approximately 65 miles from Washington and Baltimore, is a baccalaureate institution in the West Virginia State College system. Application deadline is 1 January 1991. Women are encouraged to apply. Send summary and arrange for at least three letters of reference to: Dr. Phillip Simpson, Department of Biology, Shepherd College, Shepherdstown, WV.

AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER.

BIOCHEMISTRY

MOLECULAR BIOLOGY
TEXAS A&M UNIVERSITY

The Department of Biochemistry and Biophysics is seeking applications for FACULTY POSITIONS. These are 12-month, tenure-track positions to be filled by September 1992. Academic rank is open and dependent upon experience and qualifications. Outstanding individuals having research interests addressing the molecular aspects of regulation, structure, mechanism, or function in microbial, animal, or plant systems are sought. In addition to research, participation in the department's undergraduate and graduate teaching programs will be required. A Ph.D. in either biochemistry or a related field, plus appropriate postdoctoral experience, is required.

Applicants should send curriculum vitae, list of publications, a brief description of current and future research directions, and have three letters of reference sent to: Dr. Robert D. Wells, Department of Biochemistry and Biophysics, Texas A&M University, College Station, TX 77843-2128.

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

TOO POSTDOCTORAL POSITIONS AVAILABLE immediately for studies in one of two areas: (i) cellular regulation of epithelial chloride channels (normal and in CF) and (ii) hormonal and cysotekinesial regulation of intestinal Na,K-ATPase (normal and in diabetes). Indicate area of interest and send curriculum vitae and names and addresses of three references to: Michael Field, M.D., Ph.D., 10-508, College of Physicians and Surgeons, Columbia University, 630 West 168th Street, New York, NY 10032.

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POSITIONS OPEN

FACULTY POSITION IN BIOCHEMISTRY

The Department of Biochemistry at Case Western Reserve University (CWRU) invites applications and nominations for a tenure-track position. The strengths of the department are represented in the areas of protein chemistry, protein/nucleic acid interactions, regulation of gene expression, and metabolism. An individual who will add to any of these areas and provide active interactions with the members of the department is preferred. Applicants should have a vigorous and well-established research program. Applicants should send curriculum vitae, a statement of research interests, and arrange for the submission of three letters of reference to: Dr. Muckhand S. Patel, Chair of Search Committee, Department of Biochemistry, Case Western Reserve University School of Medicine, Cleveland, OH 44106-4935.

CWRU is an Equal Opportunity/Affirmative Action Employer and encourages the applications of qualified women and minorities.

POSTDOCTORAL POSITION to study DNA repair in chromatin and its correlation with gene expression in mammalian cells and yeast minichromosomes (e.g., see Biochemistry 29, 4773 and 7501 (1990); Cell 61, 675 (1990); JBC 264, 11026 (1989). Training in biochemistry, biophysics, molecular biology, molecular genetics, and/or electron microscopy is preferred. Send resume and names of three references to: Dr. Michael J. Smerdon, Department of Biochemistry and Biophysics, Washington State University (WSU), Pullman, WA 99164-4660. FAX: 509-354-9688. WSU is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN MOLECULAR NEUROBIOLOGY. Position available to participate in two NIH-funded, multidisciplinary research projects: the regulation of tachykinin neuropeptide and neuropeptide receptor gene expression and the cloning and characterization of various neurotransmitter transporters. Experience in cellular or molecular biology desirable. Send curriculum vitae, a statement of research interests, and the names of three references to: Dr. Michael J. Bannon, Department of Psychiatry, Wayne State University School of Medicine. Mailing address: Center for Cell Biology, Sinai Hospital, 6767 West Outer Drive, Detroit, MI 48235. Wayne State University is an Equal Opportunity/Affirmative Action Employer.

NIH TRAINING PROGRAM

POSTDOCTORAL POSITIONS IN CARDIOVASCULAR PHYSIOLOGY

The Department of Physiology at Jefferson Medical College, Thomas Jefferson University, offers a postdoctoral training program in physiology and pathophysiology of cardiovascular disorders. Research areas include studies on myocardial ischemia-reperfusion injury; the role of phospholipids and eicosanoids in regulation of endothelial cell function; regulation of and the molecular basis of smooth muscle contraction; characterization of spinal visceral reflexes to kidney and heart, pain research, endothelial injury, neutrophil migration, and the interaction of neutrophil, leukocytes and endothelial cells in circulatory disorders. Emphasis will be placed on cellular and molecular approaches to these problems. We have a 3-year training grant to fund two postdoctoral trainees per year. Faculty participating in this NIH training program include Drs. K. H. Albertine, W. S. Ammons, T. M. Butler, J. T. Flynn, M. H. Gee, A. M. Lefer, and M. J. Siegman. Interested candidates are invited to apply to: Dr. Allan M. Lefer, Professor and Chairman, Department of Physiology, Jefferson Medical College, 1620 Locust Street, Philadelphia, PA 19107-6799.

An Equal Opportunity/Affirmative Action Employer.

PREDOCTORAL POSITION. At University of California, San Francisco. Position available immediately to study molecular biology of hormone expression and action: (i) molecular basis of signal transduction by the parathyroid hormone receptor, (ii) PTH-related protein (PTHrP) as a differentiation factor, and (iii) regulation of PTHrP gene expression in tumor cells. Prefer experience in molecular biology, e.g., mammalian cell expression or transcrption. Please send curriculum vitae with names/telephone numbers of three references to: R. A. Nissenson, Ph.D., or G. J. Streveler, M.D., Endocrine Unit (111N), VA Medical Center, 4150 Clement Street, San Francisco, CA 94121. An Equal Opportunity/Affirmative Action Employer.

26 JULY 1991
POSTDOCTORAL FELLOWSHIPS

DNAX Research Institute, located near Stanford University, carries out basic research in Immunology and Molecular Biology in an open, academic environment. We are looking for several individuals to work as Postdoctoral Fellows for a period of 2-3 years, who can contribute to our enthusiastic and productive research program.

Fellowships available immediately include the following areas:

- Structural and functional analysis of membrane receptors involved in triggering cell-mediated cytotoxicity.
- Identification and characterization of NK cell surface structure involved in signal transduction and adhesion
- Investigation of the ontogeny of human and murine NK cells
- The role of T cells and cytokines in the regulation of IgE switching in human B cells

Additional fellowships in molecular biology and protein chemistry are also available.

Qualified applicants should send a curriculum vitae, statement of research interests, and the names of three references to DNAX Research Institute of Molecular and Cellular Biology, 901 California Avenue, Palo Alto, California 94304-1104. An equal opportunity employer, m/f/h.

DNAX Research Institute

PHARMAGENESIS

Pharmagenesis, a young, dynamic, growing drug discovery company, is seeking highly motivated individuals to join research programs spanning from natural product drug screening to molecular biology. Pharmagenesis is developing programs in bone metabolism, haematology and immunology.

BS / MS / PhD Scientists: If you have relevant laboratory experience and a strong theoretical knowledge, take advantage to join teams in one of the following areas:

Organic Chemistry: Develop techniques for the extraction of drugs from natural product / plant sources. Develop HPLC techniques for fractionation and identification of active substances. Synthesize lead compounds and analogues.

Bioassay Systems: Develop in vivo and in vitro bioassay systems involving enzymology and molecular biology methodologies.

Pharmagenesis offers a competitive salary and a comprehensive benefits package. Please send full resume to Dr. D. R. Henderson, Vice President, R & D, Pharmagenesis, 3183 Porter Drive, Palo Alto, CA 94304.

PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH
FELLOWSHIP IN MOLECULAR NEUROBIOLOGY

The laboratory of Neurosciences, at the National Institute on Aging, Bethesda, Maryland invites applicants for a Fellowship position to study molecular biological aspects of the brain in relation to development and aging, neuroplasticity and Alzheimer's disease. The successful candidate will be expected to apply techniques of recombinant DNA and/or in situ hybridization to address differences in gene expression in health and disease.

Applications are invited from individuals having a Ph.D., M.D., or combined degrees. NIH is an equal opportunity employer and applications from women and minorities are invited. Interested candidates should submit their Curriculum Vitae to: Stanley I. Rapoport, M.D., Chief, Laboratory of Neurosciences, National Institute on Aging, NIH, 9000 Rockville Pike, Building 10, Room 6C103, Bethesda, MD 20892.

PHARMACOLOGISTS

Amylin Corporation is developing novel therapeutic and diagnostic agents for metabolic disorders based upon the discovery of the pancreatic hormone amylin (see Cooper et al., BBA, 1014: 247-258, 1989). The Pharmacology Department has the following openings:

Staff Scientist with demonstrated expertise in immunochemistry especially relating to peptide hormones. This position requires knowledge of autoradiography, tissue sectioning and histochemical procedures, and computer-assisted image and data analysis. Experience with receptor characterization, in situ hybridization methods and protein purification is desirable. Level of appointment and supervisory responsibilities are dependent upon candidate's qualifications and record of accomplishments.

Research Associate with interest in cellular function assays and measurement of receptor-linked second messengers in cells and tissues. This position requires a B.S./M.S. degree and experience with cell culture, immunoassays, and computerized data analysis. Knowledge of laboratory automation and database/statistical packages is desirable. Prior industry experience is advantageous.

Amylin Corporation offers a stimulating and challenging opportunity to participate in a new area of biomedical science, as well as an excellent benefits package which includes equity ownership participation. Please send your curriculum vitae and names and addresses of three references to: Ms. Audrey McGovern, Human Resources Administrator, Amylin Corporation, 9373 Towne Centre Drive, Suite 250, San Diego, CA 92121 or Fax (619) 552-2212. Amylin Corporation is an Equal Opportunity Employer.
Senior Research Scientist
Vascular Cell Biology

An opening exists for a highly motivated individual who will probe basic cellular and molecular mechanisms which govern growth control in the vessel wall. The ultimate goal will be the development of novel smooth muscle cell anti-proliferative agents. This position offers an unequalled opportunity to transfer knowledge gained from basic research to the clinical setting. Publication of results is strongly encouraged.

A background in growth factors, signal transduction mechanisms, vascular cell biology, or in vivo models of restenosis is desirable. Requirements for the position include an M.D. degree or a Ph.D. in Biochemistry or related discipline with related post doctoral training. Other highly accomplished individuals with an M.S. degree and experience in a related area will also be considered.

Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia.

Postdoctoral Scientist
Molecular Immunology

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has an opportunity available for a Postdoctoral Scientist. As part of a collaborative team, the selected individual will study alternative pathways of T-cell activation and will elucidate molecular events involved in gene transcription, lymphokine production and proliferation. Qualified candidates will have a Ph.D. in Immunology, Molecular Immunology or a related discipline. It is essential to have a working knowledge of immunology, publications in peer-reviewed journals and good communication skills. Previous postdoctoral experience and experience with molecular biology techniques is desired.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive compensation/benefits/relocation package as well as a stimulating and challenging work environment. For prompt consideration, please submit your C.V. and the names of three references to: Nancy Hasson, Employment Administrator, 800180, SmithKline Beecham Pharmaceuticals, P.O. Box 1359, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer M/F/H/V.

Senior Ecotoxicologist

EBSI has an immediate opening for a qualified individual specializing in Environmental Toxicology and Risk Assessment. The successful candidate will have a Ph.D. in Environmental Toxicology or a related field and 1-2 years of experience in environmental risk assessment, site remediation, and environmental fate and effect studies.

Both successful candidates will act as consultants to our affiliates on matters pertaining to the assessment of environmental hazards associated with products, effluents, hazardous wastes, site remediation, etc. Client interactions are an important aspect of our work, and thus, we are seeking individuals who have excellent communication skills as well as the ability to manage small to large projects.

Mammalian Toxicologist

The successful candidate will have a Ph.D. in Toxicology with 3-5 years of experience with the ability to identify, develop, market, and manage the delivery of major human health/product toxicology studies. Desirable attributes include: an undergraduate degree in a related hard science field, e.g., environmental engineering, chemistry, etc.; experience in evaluation of human risk related to contaminated sites, workplace, product exposure; capabilities in computer modeling/analysis, e.g., PBPK, predictive models, risk assessment models; and working knowledge of U.S., European, and Canadian regulations. The position requires extensive consulting with Exxon Affiliates worldwide. Client interactions are an important aspect of our work, and thus, we are seeking an individual who possesses excellent communication skills.

We offer a competitive salary, attractive benefits, and a chance to join a dynamic organization in a position with opportunities for career growth. Please send resume to Franeeen T. Cohen, Human Resources.

Exxon Biomedical Sciences, Inc.
Metters Road, CN 2350
East Millstone, NJ 08875-2350
Equal Opportunity Employer M/F/H/V
POSITION OPEN

A POSTDOCTORAL POSITION at the University of Florida is available beginning September 1991 to collaborate on studies examining the mechanisms by which reactive O2 species cause injury in pulmonary endothelial cells. Work will involve measuring reactive O2 species (O2−, H2O2, ·OH) in hypoxic and hypocoric cells, assessing the response of cellular antioxidants and repair processes, and quantitating injury. A background in oxidant biochemistry and experience with tissue culture are desired. Send curriculum vitae and names and telephone numbers of three references to: Dr. Edward R. Block, J. Hills Miller Health Center, Box J-225, University of Florida, Gainesville, FL 32610. Telephone: 904-374-6069.

POSTDOCTORAL POSITION, DEVELOPMENTAL BIOLOGY. August 1991. The laboratory studies morphogenesis and specification of Drosophila imaginal discs, including aspects of neuronal development and axon guidance, at cellular and molecular levels. Send inquiries to: Dr. Seth Blair, Department of Zoology, University of Wisconsin, 250 North Mills Street, Madison, WI 53706. Telephone: 608-262-1345; SBLAIR@wiscmacc.bitnet. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Position available to study changes in gene expression that occur in the progression of normal cells to cancer. The project uses primarily molecular genetic methods to identify and characterize the genes involved. Other research areas involved in the project include cell biology and immunology. Experience in recombinant DNA technology (cloning of differentially expressed genes, DNA sequencing, expression vector construction, Northern and Southern analysis, PCR cloning, work with Gen-Bank) is preferred. Applicants with a desire to learn the above techniques and exceptional backgrounds will also be considered. Send curriculum vitae and the names of three references to: Dr. William C. Raschke, La Jolla Biological Laboratories, Salk Institute, P.O. Box 885300, San Diego, CA 92186. Equal Opportunity Employer, M/F/H/L.

POSTDOCTORAL FELLOW

Available position to study structural, functional, and inhibitory properties of secreted proteases purified from human mast cells. Background in biochemistry and interest in proteases and protease inhibitors desirable. Please send curriculum vitae and names of references to: Dr. Florence B. Sherman, Department of Dermatology, University of Pennsylvania, Clinical Research Building, 422 Curie Boulevard, Philadelphia, PA 19104. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW

Two-year research program in fundamental molecular and cellular cancer biology. NIH training grant funded for U.S. citizens only. Available immediately. Contact: John Craighead, M.D., Department of Pathology, University of Vermont, Burlington, VT 05405. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW

Position available Fall 1991 to investigate mutational mechanisms regulating catecholamine secretion in fetal adrenal medulla. Includes study of neurotransmitter receptors, signal transduction mechanisms, and regulation of gene expression of catecholamine biosynthetic enzymes. Experience in molecular biology is required. Candidate should be U.S. citizen or permanent resident. Applicants submit letter stating interest, curriculum vitae, and names of three references to: C. Y. Cheung, Department of Reproductive Medicine (0802), University of California, San Diego (UCSD), La Jolla, CA 92039-0802. UCSD is an Affirmative Action/Equal Opportunity Employer. Salary related to rank and step of appointment is within the established salary schedule of the UCSD School of Medicine.

FREE PROCTED INFORMATION SERVICE

Send a letter stating the specifics about your new laboratory and Science will put you in touch with the vendors whose products you will need. Write to: SCIENCE New Lab Service Department, 1515 Broadway, New York, NY 10036.

POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE

MOLECULAR BASIS OF PROSTATE CANCER

Positions available to study the molecular basis of prostate cancer development and metastasis in humans. Consider approaches involving development of a novel transfection/expression system to transfer and identify new human tumor inducing genes and to develop monoclonal antibodies specific for tumor-associated antigens. Experience in current molecular biological techniques, such as cDNA cloning, library screening, and PCR required. To apply, send curriculum vitae, statement of research goals, and three letters of reference to: Dr. P. B. Fisher, Departments of Pathology and Urology, Columbia University, College of Physicians and Surgeons, 650 West 168th Street, New York, NY 10032. FAX: 212-305-5498. Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE. To investigate mutations at the human MUT locus in fibroblasts from patients with methylnalonic acidemia by cloning and sequencing cDNAs, to study structure-function relationships in methylnalonic acidemia, and to develop the basic reagents and techniques for future attempts at gene therapy in this disease. The position requires an M.D. (or equivalent) degree, including a minimum of 2 years of postgraduate fellowship training in human genetics, 1 year of proven experience in human genetic disease, particularly metabolic disease. A minimum of 1 year of proven experience is also required in current techniques in molecular biology, including the polymerase chain reaction, cDNA cloning and sequencing, and Southern blotting, in mammalian cell culture and transfection techniques, and in protein biochemistry and characterization in addition to knowledge of biochemical pathways and genomics. Full-time position with annual salary of $32,500. Interested applicants should mail their resumes to: Leon E. Rosenberg, M.D., Yale University School of Medicine, Department of Genetics, 333 Cedar Street, New Haven, CT 06510.

Postdoctoral Training
Toxicology and Carcinogenesis

Positions are available for studies in various aspects of cancer research and toxicology in the Center in Molecular Toxicology through the Departments of Biochemistry, Chemistry, Pharmacology, and Pathology. Areas of investigation relating to toxicology and carcinogenesis are: 1) metals, 2) enzymatic oxidation, 3) thiol and selenides, 4) DNA damage and repair, 5) natural products, 6) molecular recognition, and 7) development of analytical methods. Salaries are negotiable.

Faculty

Ian A. Blair
Robert C. Briggs
Raymond F. Burk
Peter Gettins
F. Peter Guengerich

Applicants should submit curriculum vitae and three letters of recommendation to Dr. F. Peter Guengerich, Director, Center in Molecular Toxicology, Vanderbilt University, School of Medicine, Nashville, TN 37232-0146

An Affirmative Action/Affirmative Action Employer

Research Scientist

SyStemix, an exciting new biotechnology company, is developing revolutionary technology for the study of human disease processes and treatments. We are currently seeking a Research Scientist to supervise the development of a PCR/molecular biology assay.

The successful candidate will design and supervise experiments focusing on assay development to be incorporated into our contract testing service. The position requires an MS or Ph.D. with specialized training in molecular biology and assay development, in addition to 2 to 5 years experience. Preferably, the candidate will have had direct experience with state-of-the-art assays (e.g., PCR and other amplification systems).

We offer a stimulating environment and the opportunity to work with a premier scientific research team, in addition to a very attractive compensation and benefits package. Please send your resume to: Human Resources, SyStemix, Inc., 3400 McCarthy Boulevard, Palo Alto, CA 94303, or fax your resume to 415-856-4919.
Senior Scientist/ Junior Scientist/ Postdoctoral Fellow

The Department of Immunology Research has openings for four individuals to join a group studying diverse aspects of lymphocyte signal transduction in a multidisciplinary setting. The overall goal of the group is to utilize cutting-edge science to develop novel therapeutic agents for the treatment of transplantation and autoimmune diseases.

SENIOR SCIENTIST – This individual will join a growing team of biochemists, electrophysiologists, and immunologists studying the role of ion channels in lymphocyte activation. The position requires a Ph.D. or M.D., with at least 4 years of postdoctoral experience and a record of research accomplishments in biochemical and cell biological aspects of lymphocyte signal transduction.

SENIOR SCIENTIST – This individual will initiate a new program in lymphocyte signal transduction. The successful candidate should have a proven record of creative original research in which molecular biological and biochemical tools have been employed to solve biological problems. An interest and background in signal transduction along with a Ph.D. or M.D. and two years postdoctoral experience will be favorably considered.

JUNIOR SCIENTIST – Applicants should have a B.S./M.S. with substantial laboratory experience. Preference will be given to candidates with a strong background in culturing of human and murine T cells with emphasis on the biochemistry and molecular biology of the activation process.

POSTDOCTORAL FELLOW – This individual will participate in our highly successful multidisciplinary program on elucidation of the mechanism of action of the immunosuppressive agents cyclosporin and FK-506. Preference will be given to candidates with a strong background in molecular biology with emphasis on cloning, mutagenesis, and expression, or in biochemistry with emphasis on protein purification and characterization.

An information booklet containing details of the post, the Department of Anatomy, the Faculty of Medicine and the University is available from the Staff Office.

Equal Employment Opportunity and a Smoke-Free Working Environment in Shared Workplaces are University Policy.

UNIVERSITY OF TASMANIA
Australia

CHAIR OF ANATOMY
(Ref: 68/91)

Applications are invited for appointment to the position of Professor of Anatomy in the Faculty of Medicine. The person appointed to this position will be required to provide general academic leadership in the Department of Anatomy with respect to its research and teaching activities, including postgraduate training in research, and to assume the headship of the Department for at least the first five years of office. The appointee will also be expected to provide leadership in devising and implementing new undergraduate courses in health-related disciplines that involve anatomical studies. Such initiatives are presently under consideration.

The University is seeking to appoint an individual with an outstanding record of achievement in research in a recognised anatomical sub-discipline who is committed to continuing her/his research and who is also committed to pursuing excellence in teaching. A registerable primary medical qualification would be considered a distinct advantage.

The Department of Anatomy has responsibility for the teaching of Anatomy in the Faculty's undergraduate programs in medicine and pharmacy and offers units in neurobiology for undergraduate students of psychology and science. The current research of the Department is broadly directed at neuroscience and includes studies of hypothalamic/hypothalamic brainstem involvement in SIDS, visual system and somatosensory system structure and development in mammals, avian neuroendocrinology, and acetylcholine mediated pathways. Excellent facilities are available for light and electron microscopy (TEM and SEM), microphotometry, computer-assisted analysis, tissue culture and molecular biology.

An information booklet containing details of the post, the Department of Anatomy, the Faculty of Medicine and the University is available from the Staff Office.

Enquiries about academic aspects of the post should be directed to the HEAD of the Department of Anatomy, Dr. W. L. Weller (tel. 61 02) 20 2665.

The Professoral salary is A$67,812 per annum (currently under review), with a clinical loading for a medically or dentally qualified appointee of between A$66,037 and A$12,058, depending on the extent of clinical responsibilities undertaken.

Position information and application forms are available from Appointments (39574), Association of Commonwealth Universities, 36 Gordon Square, London WC1H OPF, or from the Staff Officersecretary at the University (tel. 61 02) 20 310). Applications quoting ref. no. should reach the Staff Officer, University of Tasmania, G.P.O. Box 252C, Hobart, Tasmania 7001, Australia by 30 September 1991.

Equal Employment Opportunity and a Smoke-Free Working Environment in Shared Workplaces are University Policy.

Senior Vice President-Research and Development:
Supervise and direct a staff of 50 senior scientists and researchers in all aspects of nutritional product research and development activities; participate with regulatory affairs professionals in obtaining governmental approval of new products from government agencies; hire, and promote senior chemical research personnel; formulate and implement all research and development management policies.

Ph.D degree in Food Science and Technology required. 2 years experience in the position or 2 years experience as a Managing Director required. Ph.D level research must include research in Photosynthetic Regeneration of ATP using Bacterial chromatoophores; experience as a Managing Director must include primary authority over research and development functions for manufacture of biotechnology and/or medical products. 40 hrs./wk.; 9 a.m. - 5 p.m.; $120,000.00 year. Must have proof of legal authority to work permanently in the U.S.

Send resumes to Illinois Job Service, 401 South State Street, 3 South, Chicago, Illinois 60605. Attn: Len Boksa #V-IL-2445-B. NO CALLS. AN EMPLOYER PAID AD.
Purdue University
Showalter Distinguished Professor of Bioengineering

Due to the retirement of the current Showalter distinguished Professor of Bioengineering, the Schools of Engineering at Purdue University seek nominations and applications for the endowed Showalter Distinguished Professor of Bioengineering. This position is tenured in one of the eight Schools of Engineering and is associated with the interdisciplinary Hillenbrand Biomedical Engineering Center. The Hillenbrand Biomedical Engineering Center is composed of faculty and graduate students from engineering and life sciences who seek to improve the practice of medicine using engineering. The Center has clinical collaboration with Methodist Hospital and Indiana University Medical School. Purdue also has a joint M.D./Ph.D. program with Indiana University.

Purdue University is the state-supported, land grant institution in Indiana. The Schools of Engineering have over 275 faculty members, grant 1,150 or more B.S. degrees annually, enroll 1,800 graduate students and rank fifth nationally in the number of Ph.D. degrees granted annually.

Applicants should be a recognized leader in bioengineering with a strong commitment to graduate education. The successful applicant will be expected to establish a research program in the frontiers of biomedical engineering and may also become a candidate for the position of Director of the Hillenbrand Biomedical Research Center, a position that will also be vacated by the retirement of the current Showalter Professor.

Nominations and applications should be sent to:
Dr. W.G. Tiederman, Chairman
Showalter Distinguished Professor Search Committee
1280 Engineering Administration Building
Purdue University, West Lafayette, IN 47907-1280
(317) 494-5341 or FAX (317) 494-9321

Every effort will be made to respect requests of confidentiality. This position is available July 1, 1991. Screening of applications will begin September 1, 1991 and continue until the position is filled.

Purdue University is an Equal Opportunity, Affirmative Action Employer.

CORTECH, INC.

Cortech is a Denver based pharmaceutical research and development company working in the areas of inflammation and immunology. Cortech offers a stimulating environment where a multidisciplinary approach is used to develop new therapies for human disease.

We are currently recruiting for positions in the following areas:

PEPTIDE CHEMISTRY

We are seeking Ph.D. level candidates in peptide chemistry or bio-organic chemistry with significant peptide chemistry experience and a minimum of 1-3 years postdoctoral experience. Research experience should include solution and solid phase peptide synthesis, purification, characterization and structure determination. Additional experience in the following areas would be helpful: stereoselective/stereospecific synthesis of novel amino acids, biochemistry, molecular modeling and HPLC.

MOLECULAR BIOLOGY

This position requires a Ph.D. and one or more years of postdoctoral training. Expertise with standard recombinant DNA methodology is expected. In addition, familiarity with one of the following areas is required: construction and immuno/receptor screening of single-stranded bacteriophage libraries, epitope mapping of proteins or characterization of proteins using immunological techniques.

DRUG DISPOSITION AND METABOLISM

We are seeking a senior scientist with experience in the design and conduct of ADME studies for the evaluation of novel chemical entities. The position requires extensive knowledge of FDA regulations and experience in the preparation of IND, NDA and/or PLA documents.

Qualified candidates must have a Ph.D. in Pharmacology or Toxicology and 3-5 years experience. Experience in an industrial situation is preferred and excellent team building, communications and written skills are required.

BIOPHYSICAL/ANALYTICAL CHEMISTRY

Applicants for this position should have a minimum of a Ph.D. and at least 2-3 years of post-doctoral experience in biophysical and/or analytical chemistry. Familiarity with the analysis of peptides, bio-organic constructs and other macromolecules is essential. The applicant should be skilled in some or all of the following techniques: peptide content and sequence analysis, CD spectroscopy of peptides, mass-spectroscopy of macromolecules, molecular modeling, 2-D/3-D NMR and/or mass analysis based on low angle light scattering.

RESEARCH ASSISTANTS

We are also seeking research assistants in the above areas and in immunology and biochemistry. Candidates will have a B.S. or M.S. and one or more years of experience in general laboratory techniques. Experience in tissue culture, ELISA, HPLC, enzyme assays and peptide and protein chemistry would be an advantage.

Successful applicants must be able to work independently in a multidisciplinary research group. Cortech offers competitive salary and benefits packages including stock options. Please send resumes to: Personnel, Cortech, Inc., 6840 No. Broadway, Denver, Colorado 80221.
Seeing Beyond the Boundaries

At Berlex Biosciences, we are committed to the discovery of therapeutic products through research in oncology and cardiovascular disease. By recently adding two San Francisco Bay Area-based biotechnology organizations, Codon (in South San Francisco) and Triton Biosciences (in Alameda) to the Berlex family, Berlex is emerging as a major force in biotechnology research.

Currently, we have an exceptional opportunity in our Receptor Biochemistry group, located at our Alameda, California facility. In this position, you will work independently as well as in the dynamics of a team.

ASSOCIATE SCIENTIST

Your primary responsibilities will involve the biochemical characterization of peptide receptors and their mechanisms of signal transduction. Your qualifications must include a BS/MS degree and 4 years of relevant experience with receptor systems, protein purification and characterization, or membrane biochemistry, or a recent Ph.D. in a related field.

As a U.S. subsidiary of an international Fortune 500 company, we provide a competitive salary with a full complement of benefits, plus a rapid growth environment that fosters and rewards innovation. For consideration, please send your resume to: Berlex Biosciences, Human Resources, 213 E. Grand Avenue, South San Francisco 94080. We are an equal opportunity employer.

BERLEX

The BEST IS YET TO COME

Research Scientist
Protein Physical Chemistry

Join ALZA and participate in some of the most exciting breakthroughs in pharmaceutical therapy. We're a leading manufacturer and developer of innovative drug delivery systems and currently have an opportunity available for a Research Scientist to work in our Palo Alto, California headquarters.

As a member of our growing team, you will contribute to the research and development of techniques to administer peptides and proteins. This research includes a variety of chemical, physical and biological approaches that will lead to successful commercial products.

Qualified applicants must have a Ph.D. in Biochemistry or Physical Chemistry with a strong emphasis on protein physical chemistry along with 3-6 years of post-doctoral experience.

For immediate consideration, please call Darlene Markovich at (415) 494-5214 or send your resume to ALZA, Employment Dept., 950 Page Mill Rd., P.O. Box 10950, Palo Alto, CA 94303-0950. EOE.

Associate Dean for Research, College of Agriculture and Assistant Director of the Minnesota Agricultural Experiment Station

The University of Minnesota invites nominations and applications for the position of Associate Dean for Research in the College of Agriculture and Assistant Director of the Minnesota Agricultural Experiment Station. This 12-month position assists the Dean of the College of Agriculture, who also holds the position of Associate Director of the Experiment Station, in managing and coordinating research activities across the eleven College of Agriculture departments and the Agricultural Experiment Station, and has primary responsibility and authority for administering six Branch Stations. In cooperation with the Dean and Associate Director and other administrators, the person in this key position will establish research priorities, review and evaluate faculty performance, advise in hiring new faculty and arrange for their start-up funding. The Associate Dean and Assistant Director reports directly the Dean, College of Agriculture and Assoc. Director of the Experiment Station. The person in this position shall be appointed to an initial 3-year academic administrative term. Reappointment to annual terms is dependent upon continued satisfactory performance evaluations. Academic rank and tenure are dependent upon recommendations of peer faculty in an appropriate department.

The College of Agriculture and the Minnesota Agricultural Experiment Station are part of the Twin Cities Campus of the University of Minnesota, a large land-grant university located in a metropolitan area of about 2.2 million people. Faculty members of the College divide their time among the functions of resident teaching, research and extension and are nationally and internationally known for their disciplinary and interdisciplinary programs that have contributed significantly to the land-grant mission of the University.

Qualifications: an earned doctoral degree in an agricultural, biological or food-related field and 5 years of professional, post-doctorate research experience.

Send nomination(s) or an indication of interest to: Dr. James P. Houck, Chair, Search Advisory Committee, 277 Coffey Hall, 1420 Eckles Avenue, St. Paul, MN 55108-1030. Application materials will be forwarded. Telephone: 612-625-0231. Completed applications must be postmarked by October 1, 1991.

The University of Minnesota is an equal opportunity educator and employer.

E N V I R O N M E N T A L  T O X I C O L O G I S T

The Dow Chemical Company, a recognized leader in Industrial Toxicology, has an opportunity for an Environmental Toxicologist. This person will provide leadership in the invertebrate toxicity area. Our Environmental Toxicology and Chemistry Research Laboratory located in Midland, Michigan.

We are seeking an individual with a strong background in aquatic toxicology, with an emphasis in acute and chronic aquatic invertebrate test methods. Knowledge of NPDES test methods and/or sediment toxicity experience is desirable. Strong communication skills, both written and oral, as well as excellent interpersonal skills, are required to interact effectively in a team/work environment.

The Dow Chemical Company provides a stimulating and challenging scientific environment which allows for both scientific and professional growth. In addition, we offer a competitive salary and benefits package. Please send your resume to: Technical Recruiting, Department ET-2, The Dow Chemical Company, 1801 Building, Midland, MI 48674. An Equal Opportunity Employer M/F/H/V.
**POSITIONS OPEN**

**POSTDOCTORAL RESEARCH ASSOCIATE**

Position immediately available in molecular neurobiology. Ph.D. or training in molecular biology essential for studies of molecular mechanism of functional recovery after traumatic brain injury or stroke/injury models. Please send curriculum vitae and three letters of recommendation to: C. York, M.D., Ph.D., Division of Restorative Neurology, Beth Israel Deaconess Medical Center, 330 Brookline Ave., Boston, MA 02215. We are an Equal Opportunity/Affirmative Action Employer.

**MOLECULAR ONCOLOGIST/VIROLOGIST**

Ph.D. with at least 5 years of experience in studying oncogenes and retrovirus in growth and muscle differentiation. Experience in constructing, cloning, and sequencing of genomic clones and CDNA molecules, and in the generation of transgenic mice using oncogenes and their analogs with respect to effects on muscle growth and differentiation. Hands on experience with avian and mammalian cell culture transformation, transfection of infections using retroviruses and retroviral vectors. A proven record of publication in international scientific journals and excellent verbal communication skills necessary for the position. Salary commensurate with experience. Send resume and evidence of qualifications to: ABL Basic Science Research Institute—Fredrick Cancer Research and Development Center, Box B, Building 428, Frederick, MD 21702. We are an Equal Opportunity/Affirmative Action Employer.

**RESEARCH ASSOCIATE**

The University of California, San Francisco (UCSF), seeks an information specialist to design and implement a hardware and software system for data processing. Applicants need an M.S. in computer science; a track record of producing working systems, and extravegative experience in data management, systems, and local area network design; software engineering including use of TCP/IP Ethernet, UNIX, X11, workstations (i.e., Sun and Mac), and client-server relational database systems. Applicants need a strong interest in the application of computer science to molecular biology. The person will contribute intellectually to the biological research program of the unit. Applicants should have M.D. or Ph.D., or Ph.D. or M.D. degree, and supervisory one to three programmer/analysts. Send résumé and names of three references to: Dr. Richard M. Myers, UCSF, Division of Pathology, University of California, San Francisco, CA 94143. The University of California is an Equal Opportunity/Affirmative Action Employer.

**RESEARCH INVESTIGATOR**

The Molecular and Cell Biology Division of Searle Research Laboratories (located in Searle Research Park in Chicago, Illinois), is seeking a research investigator to join an interdisciplinary team focused on the discovery of novel therapeutic modalities for the treatment of human inflammatory diseases. The selected candidate will be responsible for planning and supervising an independent research program in the identification and evaluation of potential molecular targets for the control of human pathogens. Candidates should have a Ph.D. degree and 2 to 4 years of relevant postdoctoral experience in cell biology or molecular biology and virology. Searle, a wholly owned subsidiary of Monsanto Company, offers competitive salary and benefits packages. Qualified applicants should send résumé to:

Research Investigator, Attention: BBE4 SEABLE
700 Chesterfield Village Parkway
St. Louis, MO 63198
An Equal Opportunity Employer.

**ASSISTANT/ASSOCIATE RESEARCH MOLECULAR BIOLOGIST**

Program in transplant immunology is offering a position for a molecular biologist/molecular immunologist. Position involves studies of HLA gene regulation, DNA binding proteins, and HLA allele definition utilizing a multiple approach utilizing understanding of antigen presentation and tolerance induction. Candidates should have Ph.D. degree with at least 2 years of postdoctoral experience and be $64,000 depending on experience and qualifications. Send curriculum vitae and references to: Dr. Marvin G. Radovick, University of San Francisco (UCSF), 520 Health Sciences East, Third Floor, San Francisco, CA 94143-0508. UCSF is an Affirmative Action/Equal Opportunity Employer.

**PLATFAIR NEUROSCIENCE UNIT THE TORONTO HOSPITAL RESEARCH SCIENTIST**

The Playfair Neuroscience Unit is seeking a neurobiologist with research expertise in: signal transduction/cellular second messengers. Candidates with research interests focusing on ion channels, biochemistry of signal transduction and mechanisms of ion channel function are particularly encouraged to apply. The Playfair Neuroscience Unit is a dynamic multidisciplinary unit comprising over 20 laboratories situated in a major teaching hospital of the University of Toronto, having close interactions with other major units throughout the university. Strong cell biology and immunology frame also the unit. Successful candidates will have university appointments and are expected to develop long-term independent research programs. Applicants must have a Ph.D. or equivalent, with at least 3 years of postdoctoral experience. Salary range will be within the range of $41,600 to $45,100. Send curriculum vitae, a summary of research interests, and the names of three references should be sent to: Dr. Peter L. M. St George, Director, Playfair Unit, Toronto Western Hospital, 399 Bathurst Street, Toronto, Ontario, M5T 2C8, Canada. Both men and women are encouraged to apply. In accordance with Canadian immigration guidelines, priority will be given to Canadian citizens and landed immigrants.

**ASSISTANT RESEARCH BIOCHEMIST**

The Cardiovascular Research Institute, University of California at San Francisco, invites applications for an appointment as an assistant research biochemist to carry out ongoing research on structure-function relationships on proteins of the plasma membrane. The successful candidate will join a group of investigators studying the molecular and cellular basis of atherosclerosis. Applicants must have at least 3 years of postdoctoral research experience in postdoctoral research and a strong background in transduction of signal and expression of mutant enzymes in mammalian cell systems. Experience of activity- and structure-function studies would be an advantage. Salary will be within the range of $41,600 to $45,100. Curriculum vitae, a summary of research interests, and the names of three references should be sent to: Dr. Christopher J. Fielding, Cardiovascular Research Institute, Box 0130, University of California Medical Center, San Francisco, CA 94143. Telephone: 415-476-4397. The University of California, San Francisco, is an Equal Opportunity/Affirmative Action Employer. Minority, women, handicapped, and veteran candidates are encouraged to apply.

**HENRY FORD HEALTH SCIENCES CENTER AND RESEARCH INSTITUTE**

**BIOMEDICAL RESEARCH SCIENTIST/BIOCHEMICAL PHARMACOLOGIST**, Henry Ford Health Sciences Center, Department of Anesthesiology and Research Institute, invites applications for senior level scientist position. This is a stable position for investigations of the pharmacodynamics of anesthetic agents and other drugs, at the cellular level. Applicants should have a Ph.D. or M.D., with a minimum of 3 years of postdoctoral experience in cellular/molecular biology and demonstrated ability to develop a strong independent program involving investigation of new mechanisms. Applicants should have sufficient training and experience as principal investigator in the field of molecular and cellular biology to allow effective competition for research and academic appointments. Excellent compensation and benefits with opportunities for joint academic appointment and teaching at university graduate level. Send curriculum vitae, description of research interests and experience, and names and addresses of three references to: Dr. Robert R. T. Tancer, M.D., Henry Ford Hospital, 2799 West Grand Boulevard, Detroit, MI 48202, or FAX: 313-876-0188. Priority will be given to M.D. and/or Ph.D. Graduates.

**SCIENCE, VOL. 253**

**ASSISTANT/ASSOCIATE RESEARCH MOLECULAR BIOLOGIST**

Position in plant immunology is offering a position for a molecular biologist/molecular immunologist. Position involves studies of HLA gene regulation, DNA binding proteins, and HLA allele definition utilizing a multiple approach utilizing understanding of antigen presentation and tolerance induction. Candidates should have Ph.D. degree with at least 2 years of postdoctoral experience and be $64,000 depending on experience and qualifications. Send curriculum vitae and references to: Dr. Marvin G. Radovick, University of San Francisco (UCSF), 520 Health Sciences East, Third Floor, San Francisco, CA 94143-0508. UCSF is an Affirmative Action/Equal Opportunity Employer.
Applications and nominations are invited for the position of Chair, Department of Biological Chemistry, The Pennsylvania State University College of Medicine. The Department has a tradition of excellence in research as well as teaching, and the individual research programs of the faculty are currently well supported by extramural funding. Current research strengths represented in the Department include: molecular genetics, biochemistry of cell surfaces, and protein-nucleic acid interactions. The Department offers courses covering various aspects of biochemistry, genetics, and molecular biology for medical and graduate students. The faculty directs its own departmental graduate program and also participates in three interdepartmental graduate programs and a College of Medicine M.D./Ph.D. program. Unique opportunities are available for departmental growth and development in a rapidly expanding academic medical center.

Candidates should be established investigators with a well-funded active research program, an outstanding record of scholarly contributions, and an active record of participation in appropriate professional organizations. Candidates should also have proven leadership skills and should be experienced in teaching and administration. The successful candidate is expected to provide imaginative leadership for current and future programs and to promote the national and international stature of the Department.

The deadline for application is October 31, 1991.

Applications with curriculum vitae and the names and addresses of three or more references should be addressed to:

Leonard S. Jefferson, Ph.D.
and Richard J. Courtney, Ph.D.
Co-Chairs, Biological Chemistry
Search Committee
The Pennsylvania State University
College of Medicine
P.O. Box 850, Drawer S
Hershey, Pennsylvania 17033

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**POSITIONS OPEN**

**RESEARCH INVESTIGATOR.** The employee will conduct sinusoidal analyses and ATP hydrolysis rate measurements on single muscle fibers and analyze the results by using linear algebra on computers, as well as conduct biochemical analysis of the muscle fibers. The applicant must have experience in microdissection of muscle fibers from skeletal, cardiac, and smooth muscles; and experience in biochemistry, including the use of column chromatography, SDS-PAGE, HPLC, spectroscopy, and ELISA. Knowledge in histology and also an advanced degree related to chemistry is essential. An M.D., Ph.D., or equivalent is required. This is a non tenure-track position with a yearly salary of $27,500. Women and minorities are encouraged to apply. Send curriculum vitae and three current references to: Dr. M. Kawai, Department of Anatomy, University of Iowa, Iowa City, IA 52242. The University of Iowa is an Equal Employment Opportunity/Affirmative Action Employer.

**TOXICOLOGIST.** The University of Nebraska Medical Center seeks an experienced Ph.D. toxicologist to develop a collaborative program to study the direct and interactive health effects of nitrates, pesticides, and other ground water contaminants, in both animal models and humans. The appointee will be expected to develop a strong research program complementing ongoing research activities, seek extramural funding, supervise graduate students, and teach undergraduate and graduate-level courses in toxicology and water-related teaching and research activities. Academic rank and salary in this tenure-lead position are dependent on qualifications and experience. Please send curriculum vitae, a summary of current research, and the names of three references to: Dennis D. Weisenburger, M.D., Chairman, Water Toxicologist Search Committee, University of Nebraska Medical Center, 601 South 42nd Street, Omaha, NE 68198-3135. An Equal Opportunity/Affirmative Action Employer.

**MARINE SCIENTIST SENIOR (#113)**

Grade 12. Entry salary: $27,538. Starting salary may be higher depending upon experience or exceptional qualifications and previous salary level of appointee. This is a restricted appointment with funding which is subject to renewal 30 June 1992. Some evening and weekend work will be required. The successful applicant will develop, coordinate, and implement research and monitoring projects at CBNERRS-VA sites. Trains volunteers, serves as staff scientist to research advisory committee, and performs other related duties. Qualifications—Ability to perform strenuous work outdoors in a variety of weather conditions required. Master's degree in cell biology or related field required. Demonstrated familiarity with the design and conduct of field research projects, statistical analysis, and advanced microscopy techniques. Experience in marine biology, including knowledge of the Chesapeake Bay ecosystem, National Estuarine Research Reserve System, and National Marine Sanctuary Program required. Strong communication and interpersonal skills required. Ph.D. degree in marine science or a related field or an equivalent combination of experience and training preferred. Location—Virginia Institute of Marine Science (Dean/Director's office).

A Commonwealth of Virginia application must be received not later than 9 August 1991 in the Office of Personnel Services, College of William and Mary, Thimmes House, Williamsburg, VA 23185. The College of William and Mary is an Equal Opportunity/Affirmative Action Employer.

**MOLECULAR BIOLOGIST/BIOCHEMIST**

The Molecular Biology Department of Northrup King Co. is recruiting an M.S. level molecular biologist/biochemist to initiate a new research program in transformation. Experience with molecular biological techniques including analytical blotting (Northern, Southern, and Western) is required with PCR knowledge a plus. The position will be located at the Northrup King Research Center, Stantons, Minnesota, and candidates will be expected to cooperate extensively with transformation research groups at Stantons, Minnesota and Palo Alto, California. Please send résumé along with names, addresses, and telephone numbers of three references to:

Kate Schweich
Northrup King Co.
Highway 19
Stanton, MN 55018-9662
An Equal Opportunity Employer.

**POSITIONS OPEN**

**BIOCHEMICAL PHARMACOLOGIST** To supervise and conduct studies of the absorption, distribution, metabolism, excretion, and bioavailability of chemicals in laboratory animals; develop and apply analytical procedures for endotoxins; and participate in the development of biologics in biological fluids and tissues to assess pharmacokinetic properties; establish and maintain a research program in the area of experimental drug abuse; prepare and submit proposals and reports for various government and industrial clients. A Ph.D. in biochemistry, pharmacology, or closely related discipline with 3 to 5 years of postdoctoral training or industrial experience is required. A good publications record (e.g., several as a senior author) is necessary to demonstrate competence and experience. Salary: $40,000 to $55,000 depending on experience. Send résumé to: C. T. Sisson, AA210, SRI International, 335 Ravenswood Avenue, Menlo Park, CA 94025. An Equal Opportunity Employer.

**SRI International**

**PALEOECOLOGISTS**

The Harvard Forest LTER program is investigating the history of vegetation, environmental change, and human impact on the natural environment in central and northeastern New England. We are seeking two individuals (one Ph.D., one M.S. or B.S.) to join an interdisciplinary research group to complement our current paleoecologists. Research will involve fine resolution pollen and charcoal analysis and quantitative integration of modern, historical, and paleoecological data. Funding is available for a two year period. Please send in current curriculum vitae, three letters of support, and relevant publications to: Dr. David R. Foster, Harvard Forest, Harvard University, Petersham, MA 01366, by 30 August 1991.

Harvard University is an Equal Opportunity Employer and applications from women and minorities are strongly encouraged.

**PSYCHOLOGIST/BIOMEDICAL SCIENTIST**

The National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control, is seeking a CHIEF for the Applied Psychology and Ergonomics Branch, Division of Biomedical and Behavioral Science, in Cincinnati, Ohio. The successful candidate will manage NIOSH's principal research program addressing occupational exposure to behavioral, psychological, and ergonomic factors for worker health and well being. Candidate should have research expertise and publications in one or more of these areas as well as experience in research program development and management. The position may be filled as a commissioned officer in the PHS or in the career civil service (GM-14 or GM-15); salary range: $52,400 to $80,138 depending on qualifications. Interested parties should send an application (U.S. standard form 171) and curriculum vitae to: Ms. Nancy Bryant, NIOSH-DHBS, M.S C-22, 4676 Columbia Parkway, Cincinnati, OH 45226. Telephone: 513-533-8465. NIOSH is an Equal Opportunity Employer and offers a smoke-free environment.

**BIOCHEMISTRY/Cardiovascular Drug Research**

Searle, a wholly owned subsidiary of Monsanto Company and a world leader in pharmaceutical research, is seeking a RESEARCH BIOLOGIST to conduct experiments directed toward the discovery of new cardiovascular drugs. The successful candidate should have a B.S., in biological sciences, with an M.S. in biochemistry or pharmacology preferred. A minimum of 3 years of laboratory experience in several of the following areas is desirable: enzyme assays, immunology, receptors, receptor binding, molecular biology, chromatography, and cell culture. Strong communication skills are necessary. Searle offers a competitive salary and benefit package. Qualified candidates should send their résumés in confidence to:

Research Biologist
Attention: K. Ritter—BB4E

SEARLE
700 Chesterfield Village Parkway
St. Louis, MO 63198
An Equal Opportunity Employer.

**ANNOUNCEMENTS**

**REQUEST FOR PROPOSALS.** The Colorado Department of Health is requesting proposals for a Risk Characterization Study and a Risk Communication Plan for the Rocky Flats Nuclear Weapons Plant near Denver. These projects are follow-ups to the current Toxicologic Review and Dose Reconstruction. Interested bidders must contact Kathleen Bogert by 9 August 1991, telephone: 303-331-6736, 4210 East 11th Avenue, Denver, CO 80220 to receive information and bidder requirements on the two projects.

**AMERICAN HEALTH ASSISTANCE FOUNDATION**

**RESEARCH GRANTS**

The American Health Assistance Foundation invites applications for the following programs:

- **Alzheimer's Disease Research:** grant awards of up to $100,000 per year for up to 2 years (renewable) for research into the causes and treatment of Alzheimer's disease. Application deadline: 31 October 1991.
- **Glaucoma Research:** grant awards of up to $25,000 per year for 1 year (renewable) for research into the causes and treatment of glaucoma. Application deadline: 30 November 1991.
- **Coronary Heart Disease Research:** starter grants up to $15,000 per year for 1 year (renewable) for research into the cause and treatment of coronary heart disease. To qualify for a starter grant, the investigator must be an assistant professor (or equivalent) beginning his research career. Application deadline: 31 October 1991.

For information and application forms, contact:

Research Grants Manager
American Health Assistance Foundation
15825 Shady Grove Road, Suite 140
Rockville, MD 20850
Telephone: 301-948-3244

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**SCIENCE, VOL. 253**
ANhTIBODY ENGINEERING BY THE INNOVATORS

Cambridge Antibody Technology are co-inventors of the phage antibody system, which has been used successfully to express functional Fab, Fv and VH antibody fragments, to isolate new antibodies, and to separate high and low affinity antibodies to the same antigen.

Licenses covering the commercial use of the phage antibody system are now obtainable. In addition, Cambridge Antibody Technology’s expertise in other licensed key technologies is now available on contract in the following areas:

Humanising key rodent monoclonal antibodies for therapeutic use

CDR grafting\(^2\) can be used to produce human antibodies with binding properties equivalent to the murine monoclonals you have invested so much effort in identifying. Phage antibody technology can significantly improve the efficiency of this process.

Improvement of existing monoclonals - don’t lose your valuable antibodies!

Unstable human and mouse hybridomas can be rescued by accessing the antibody genes directly\(^3,4\), producing stable mammalian or bacterial cell lines. Furthermore, increases in affinity and specificity and other modifications can be engineered. Cambridge Antibody Technology’s methodology can be used to switch to substantially cheaper bacterial production systems.

The isolation of new human (and murine) antibody specificities - best in a thousand or one in a million?

Cambridge Antibody Technology’s system of displaying and selecting antibodies on phage particles allows the prompt and efficient isolation of human and mouse antibodies from vast libraries, selecting the best from 10 million or more candidates. This is compared with the few thousand screened in a traditional hybridoma fusion or the few hundred from the best human mAb isolation systems. Affinity selection by chromatography or patented filter techniques is available\(^5\).

The Company’s expertise is reinforced by a scientific advisory board comprised of world-leaders in antibody engineering. For more information on Cambridge Antibody Technology’s expertise in molecular biology, contact David Chiswell on Cambridge (0223) 837526.
Introducing TopCount™ Microplate Scintillation Counter: Eliminates cocktail and counts twelve times faster.

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